

H7 HEATHROW AIRPORT LICENCE MODIFICATION APPEALS

Final Determinations

17 October 2023

© Crown copyright 2023

You may reuse this information (not including logos) free of charge in any format or medium, under the terms of the Open Government Licence.

To view this licence, visit www.nationalarchives.gov.uk/doc/open-government-licence/ or write to the Information Policy Team, The National Archives, Kew, London TW9 4DU, or email: psi@nationalarchives.gov.uk.

Website: www.gov.uk/cma

**Members of the Competition and Markets Authority
who conducted these appeals**

Kirstin Baker (Chair of the Group)

Juliet Lazarus

Paul Muysert

Chief Executive of the Competition and Markets Authority

Sarah Cardell

The Competition and Markets Authority has excluded from publication information which the group considers should be excluded having regard to section 29 of the Civil Aviation Act 2012. The omissions are indicated by [✂].

Contents

1.	Introduction.....	11
	Structure of our determinations	12
	Introductory chapters	13
	Assessment of the issues for determination.....	13
	Determinations by appellant.....	13
	Relief 14	
	Other documents which are part of the determinations	14
2.	Background to the parties to the appeal and the regulation of Heathrow Airport	15
	The parties to the appeal.....	15
	Heathrow Airport Limited (HAL)	15
	BA, Delta and VAA.....	16
	The Civil Aviation Authority	16
	Regulation of Heathrow Airport	17
	The regulatory framework	17
	HAL's price controls and charges.....	17
	The H7 price control	19
	Context to H7 price control	20
	COVID-19.....	20
	Changing UK economic outlook.....	22
	Review of Heathrow third runway.....	22
3.	Legal framework.....	23
	The decision under appeal	23
	The CAA's statutory duties	24
	The appeal regime	25
	The legal test on appeal	27
	Meaning of wrong.....	28
	Materiality.....	32
	Interlinkages.....	34
	Precedents.....	34
	The CMA's powers on determination of the appeals	34
4.	The appeals, and conduct of the appeals.....	36
	Introduction.....	36
	The Notices of Appeal	36
	HAL's grounds of appeal	36
	BA's grounds of appeal	36
	Delta's grounds of appeal	37
	VAA's grounds of appeal.....	37
	Permissions to appeal	37
	Appointment of the Group	38
	Applications for permission to intervene.....	38
	HAL's application to intervene.....	38

BA's and Delta's applications to intervene	39
Permissions to intervene	39
CAA response	39
HAL reply.....	39
Conduct of the appeals	39
Timetable	39
Site visit and teach-in	40
Confidentiality Ring	40
Clarification of issues to be determined	40
Hearings.....	40
Requests for information	41
Closing statements.....	41
Provisional determinations	41
Final determinations and Order.....	41
5. Ground A: RAB Adjustment.....	42
Introduction.....	42
Background	42
HAL's appeal	43
Error 1 – Was the CAA wrong – in law and/or in the exercise of a discretion – to allocate catastrophic passenger risk to HAL?.....	45
Error 2 – Was the CAA wrong – in law and/or in the exercise of a discretion – in failing to make a RAB adjustment calibrated to compensate for depreciation of the RAB during the pandemic?	46
CAA Response	48
Intervenors' submissions	50
Assessment: HAL's Error 1	50
Summary of our approach and conclusions	51
Background to CAA decision on this matter	53
Consideration of subsidiary questions.....	56
Related arguments made by HAL under Error 2	81
Conclusions.....	83
HAL's Error 2.....	83
CAA Response.....	83
Intervenors' submissions.....	84
Assessment: HAL's Error 2	85
Summary of our approach and conclusions	85
Assessment: HAL's Error 2	85
Airlines' appeals	93
The RAB Adjustment Error	95
Summary of our approach and conclusions: subsidiary questions – the RAB Adjustment Error.....	95
Airlines' submissions: the RAB Adjustment Error.....	98
CAA response to the RAB Adjustment Error	105

	Intervener’s submissions.....	106
	Assessment: the RAB Adjustment Error	107
	The Failure to Review Error.....	120
	Summary of our approach and conclusions: subsidiary questions – the Failure to Review Error.....	120
	Airlines’ submissions on the Failure to Review Error	122
	CAA Response.....	126
	Intervener submissions	128
	Responses to our Provisional Determination	129
	Assessment: Failure to Review Error	129
	Findings and conclusions on the Failure to Review Error	136
	Overall determination on Ground A	139
6.	Ground B1: Asset beta	140
	Introduction.....	140
	Background	140
	Cost of capital	140
	Asset beta	141
	Final Proposals.....	142
	Stage 1: baseline beta	142
	Stage 2: COVID-19 adjustment.....	143
	Stage 3: the TRS adjustment	144
	Summary of CAA’s estimates.....	145
	Final Decision.....	146
	Overview of HAL’s and the Airlines’ appeals	146
	Questions for determination	147
	HAL’s appeal.....	147
	Airlines’ appeals	149
	Section A: stage 1 and stage 2 (pre- and post-pandemic asset beta).....	152
	Summary of our conclusions (stage 1 and stage 2)	152
	HAL’s appeal on stage 1 and stage 2	154
	Airlines’ appeals on stage 1 and stage 2.....	165
	Our assessment – Airlines’ appeals and remaining HAL grounds.....	170
	Section B: stage 3 (the TRS adjustment)	184
	The CAA’s Final Decision	184
	The Parties’ submissions	184
	Our assessment – TRS	198
	Section C: HAL’s additional submissions	209
	Determinations on asset beta.....	220
7.	Ground B2: Cost of debt.....	221
	Introduction.....	221
	Background	221
	The Final Decision on cost of debt.....	221
	The cost of embedded debt	222

The cost of new debt.....	223
Grounds of appeal and issues for determination	223
HAL’s appeal.....	223
Airlines’ appeal.....	225
Structure of this chapter	229
Summary of our approach and conclusions	229
Section A: The use of ‘short-term’ inflation forecasts	231
HAL’s submissions.....	231
CAA Response.....	234
Interveners’ submissions.....	235
Our assessment of the CAA’s decision to use short-term inflation forecasts	236
Section B: Nominal cost of embedded debt.....	261
HAL’s submissions on the nominal cost of embedded debt	261
CAA response on the nominal cost of embedded debt	263
Interveners’ submissions on the nominal cost of embedded debt.....	265
Our assessment on the nominal cost of embedded debt	266
Section C: Index-linked premium.....	280
Airlines’ submissions on index-linked premium	280
CAA response on index-linked premium	282
Intervener’s submissions on index-linked premium.....	283
Responses to our Provisional Determination	283
Our assessment on index-linked premium	284
Conclusion on index-linked premium	291
Determinations on cost of debt.....	292
8. Ground B3: Point estimate	293
Introduction.....	293
Background	293
Final Decision on point estimate.....	293
Grounds of appeal.....	295
Issues for determination	296
Overall statutory question for determination.....	296
Subsidiary questions for determination	296
Parties’ submissions.....	298
Overview	298
Asymmetry of costs and benefits	299
Asymmetry of pandemic events	301
Information asymmetries between HAL and the CAA	302
Effect of distortions created by the outer band of the TRS	304
Other relevant factors which support the case for aiming down.....	306
Material harm to consumers.....	307
Summary of our approach and final determination.....	307
Our assessment	308
Asymmetry of costs and benefits	308

	Asymmetry of pandemic events	310
	Asymmetries of information between the CAA and HAL	315
	Asymmetries caused by the TRS outer band	316
	Asymmetries caused by other factors	318
	CAA’s decision not to ‘aim down’ is harmful.....	319
	Determinations on point estimate	320
9.	Ground C: Passenger forecast	321
	Introduction.....	321
	Background	321
	Relevance of the H7 passenger forecast	321
	Impact of COVID-19 on the CAA’s passenger forecasting exercise.....	321
	Outline of how the CAA set the H7 passenger forecast	322
	Overview of the issues for determination	329
	The HAL Model Procedural Errors	329
	Summary of our approach and overall conclusion on alleged HAL Model Procedural Errors	329
	The Parties’ submissions on the HAL Model Procedural Errors.....	331
	Legal framework – HAL Model Procedural Errors	334
	Our assessment – HAL Model Procedural Errors	337
	Overall conclusions on the HAL Model Procedural Errors	350
	HAL Model Substantive Errors	353
	Summary of our approach and overall conclusion on the alleged HAL Model Substantive Errors	353
	The Parties’ submissions	355
	Our assessment of the alleged HAL Model Substantive Errors.....	357
	Overall conclusions on the HAL Model Substantive Errors	363
	The 4-Step Errors.....	364
	Summary of our approach and overall conclusion on the alleged 4-Step Errors.....	364
	Preliminary matter - admissibility of actual passenger data post-dating the Final Decision.....	366
	Step 1 – use of 2022 actuals.....	368
	Step 1 – 2023 forecast	372
	Step 1 – notional capacity of the airport	385
	Step 2 – GDP adjustment	387
	Step 3 – external forecasts	390
	Step 4 – Shock Factor.....	394
	Overall conclusions on the 4-Step Errors.....	403
	Asymmetric Risk Allowance Error	404
	Overall assessment of passenger forecast.....	405
10.	Ground D: AK factor	407
	Introduction.....	407
	Background to the standard K factor	407
	Development capex (Dt) adjustment.....	408

Business rates (BRt) adjustment.....	408
Passenger mix adjustment.....	409
Issues to determine	412
Overall statutory question for determination.....	412
Subsidiary questions for determination	412
Parties' submissions.....	413
HAL's submissions.....	413
CAA Response.....	415
Intervenors' submissions.....	418
Our assessment	421
Summary of our approach and conclusions	422
General considerations about the AK factor.....	423
The development capex Dt adjustment.....	429
The adjustment for over-recovery of business rates	434
The adjustment for over-recovery of passenger mix charges.....	437
Determination of the overall statutory question	438
11. Ground E: Capex incentives.....	440
Introduction.....	440
Background	440
Final Decision.....	440
Grounds of appeal.....	441
Issues to determine	442
Overall statutory question for determination.....	442
Subsidiary questions for determination	442
Summary of our approach and determination	443
Our assessment	443
Overview of Parties' submissions.....	444
Inefficiency of the H7 regime compared with the existing Q6 framework	445
CAA prioritising commercial interests of airlines over the interest of users of air transport services	467
H7 regime is unnecessary.....	473
H7 regime decision not proportionate	475
H7 regime not transparent or accountable	484
H7 regime is inconsistent with regulatory precedent/other areas of the price control	488
Other matters	492
Determination of the overall statutory question	492
12. Determination of appeal from HAL	494
Introduction.....	494
Grounds pleaded by HAL	494
HAL ground 1: RAB adjustment	494
HAL ground 2: cost of equity	494
HAL ground 3: cost of debt.....	494

HAL ground 4: the AK factor.....	494
HAL ground 5: capex incentives.....	495
13. Determination of appeal from BA	496
Introduction.....	496
Grounds pleaded by BA	496
BA ground 1: Passenger forecasting.....	496
BA ground 2: the RAB Adjustment	496
BA ground 3: WACC	496
14. Determination of appeal from Delta.....	498
Introduction.....	498
Grounds pleaded by Delta.....	498
Delta ground 1: Passenger forecast.....	498
Delta ground 2: the WACC.....	498
Delta ground 3: the RAB adjustment.....	498
15. Determination of appeal from VAA.....	499
Introduction.....	499
Grounds pleaded by VAA.....	499
VAA ground 1: Passenger forecast	499
VAA ground 2: the WACC	499
VAA ground 3: the RAB adjustment	499
16. Relief	500
Introduction.....	500
The approach to relief set out in our Provisional Determination.....	501
Ground B Remedy Aim	502
Ground C Remedy Aim	503
Ground D Remedy Aim	503
Consequences of the proposed remittals.....	504
Parties' general submissions on relief	504
CAA's submissions	504
Airlines' submissions.....	504
HAL's submissions.....	505
Approach to implementation of relief	505
Conduct of the remittals	507

Appendix A: Cost of debt regulatory precedents

Glossary

Order

1. Introduction

- 1.1 The Civil Aviation Authority (**CAA**) is responsible for the regulation of aviation safety in the UK, determining policy for the use of airspace, the economic regulation of Heathrow, Gatwick and Stansted airports, the licensing and financial fitness of airlines and the management of the ATOL financial protection scheme for holidaymakers.¹
- 1.2 The CAA regulates service standards and the maximum amount airlines are charged to use airports at airports that have significant market power. This currently applies to Heathrow, with additional formal airport charge and service monitoring in place for Gatwick.
- 1.3 Heathrow Airport Ltd (**HAL**), as the operator of an airport designated as a dominant airport by the CAA, is subject to a price control on the amount which it can charge users for the facilities. This charge is decided by the CAA and normally reviewed every 5 years. The latest price control, for the period known as H7, is the decision made by the CAA under section 22 of the Civil Aviation Act 2012 (the **Act**) which sets the price control and associated regulatory framework that applies to HAL during the H7 price control period (1 January 2022 until 31 December 2026). This Final Decision with the required licence modifications to implement the H7 charge control was published on 8 March 2023 (the **Final Decision**).²
- 1.4 On 17 April 2023, HAL sought permission from the CMA to appeal against the Final Decision pursuant to section 25 of the Act which provides that an appeal lies to the CMA against a decision taken by the CAA to modify a condition of its licence under the Act.³
- 1.5 On 18 April 2023, the following airlines sought permission to appeal against the Final Decision, pursuant to section 25 of the Act as providers of air transport services whose interests are materially affected by the decision (together, the **Airlines**).
 - (a) British Airways plc (**BA**);⁴

¹ <https://www.gov.uk/government/organisations/civil-aviation-authority>.

² Economic regulation of Heathrow Airport: H7 Final Decision', CAP2524, March 2023 (see: [Final and Initial proposals for H7 price control | Civil Aviation Authority](#)), (**Final Decision**). The CAA published its Final Decision in volumes CAP2524A–H. 'Section 1 on the Regulatory Framework' CAP2524B comprised Chapters 1–3: [Final Decision, Section 1 \(Section 1\)](#). 'Section 2 on the key price control 'building blocks'' CAP2425C comprised Chapters 4–8: [Final Decision, Section 2 \(Section 2\)](#). Section 3 'Financial issues and implementation', comprised Chapters 9–14 and implementation: [Final Decision, Section 3 \(Section 3\)](#). Where we cite the Final Decision below, we do so with reference to the paragraph numbers within the Final Decision.

³ [HAL Notice of Appeal \(HAL NoA\)](#), 17 April 2023.

⁴ [BA Notice of Appeal \(BA NoA\)](#), 18 April 2023.

- (b) Delta Air Lines Inc (**Delta**);⁵ and
- (c) Virgin Atlantic Airways Ltd (**VAA**).⁶
- 1.6 On 11 May 2023, the CMA granted permission to appeal to all appellants, on all the grounds requested. This is discussed further in chapter 4.
- 1.7 On 22 May 2023, the CMA received applications for permission to intervene in the appeals from BA, Delta, and HAL. On 5 June 2023, the CMA granted permission to all interveners to intervene on grounds raised by other parties' appeals. This is discussed further in chapter 4.
- 1.8 On 8 September 2023, we issued our provisional determinations (**Provisional Determination**) of the appeals to the parties and invited comment. We published a short summary of the Provisional Determination for transparency.⁷
- 1.9 This document sets out the reasoning for our determinations of the appeals, as set out in the Order (together, the **Final Determination**). A non-sensitive version of this document and the Order will be published on the CMA case page as soon as practicable.⁸ We have also published a short summary of the Final Determination for transparency.
- 1.10 In reaching our determinations, we have considered the appellants' Notices of Appeal (**NoAs**) and related documents, the CAA's response to the appellants' NoAs (the **CAA Response**),⁹ the responses to the Provisional Determination and other written submissions and responses to various requests for information (**RFIs**) from the appellants and the CAA. We have also considered submissions from interveners¹⁰ and have held hearings with the appellants, interveners and the CAA (together the **Parties** to the appeals).
- 1.11 Under the statutory framework for the appeals process, the CMA was required to reach its determinations by 17 October 2023.¹¹

Structure of our determinations

- 1.12 Our determinations are structured as follows.

⁵ [Delta Notice of Appeal \(Delta NoA\)](#), 18 April 2023.

⁶ [VAA Notice of Appeal \(Virgin NoA\)](#), 18 April 2023

⁷ [H7 Heathrow Airport Licence Modification Appeals, Summary of provisional determinations](#), 8 September 2023

⁸ CMA case page: [H7 Heathrow Airport Licence modification appeals](#)

⁹ [CAA Response to Notices of appeal, \(CAA Response\)](#), 31 May 2023.

¹⁰ [BA, Application for permission to intervene and Notice of Intervention \(BA Nol\)](#), 22 May 2023; [Delta, Application for permission to intervene and Notice of Intervention \(Delta Nol\)](#), 22 May 2023; and [HAL, Application for permission to intervene and Notice of Intervention \(HAL Nol\)](#), 22 May 2023

¹¹ The CMA decided on 16 May 2023 to extend the period for the determination of the appeals by eight weeks to 17 October 2023 (see [CMA case page, Notice of Extension of Time Limit for Determination of Appeals Under Section 28 of the Civil Aviation Act 2012 and Notice of Extension of Period for Civil Aviation Authority to Submit Representations to The CMA Under Paragraph 19 of Schedule 2 Civil Aviation Act 2012](#), 16 May 2023).

Introductory chapters

- 1.13 We first set out the background to the appeals before considering the substance of each ground of appeal in detail in later chapters.
- (a) Chapter 1: we provide an introduction to the appeals.
 - (b) Chapter 2: we provide an overview of the Parties to the appeals, a brief introduction to the regulation of Heathrow, and an overview of the context in which the price control was being set,
 - (c) Chapter 3: we set out the legal framework for the appeal.
 - (d) Chapter 4: we set out the conduct of the appeals, including key events and activities during the appeal process. The chapter also sets out how the grounds of appeal of all appellants were grouped into topics for consideration by the CMA (referred to in this document as Grounds A to E).

Assessment of the issues for determination

- 1.14 Chapters 5 to 11 address each of the grounds A to E in turn, setting out the issues for determination, summarising the relevant main submissions and supporting evidence put forward by the parties, and interveners to each ground before turning to our assessment and determination.
- (a) Chapter 5: Ground A – Regulatory Asset Base (**RAB**) adjustment.
 - (b) Chapter 6: Ground B1 – Asset beta.
 - (c) Chapter 7: Ground B2 – Cost of debt.
 - (d) Chapter 8: Ground B3 – Point estimate.
 - (e) Chapter 9: Ground C – Passenger forecast.
 - (f) Chapter 10: Ground D – AK factor.
 - (g) Chapter 11: Ground E – Capex incentives.

Determinations by appellant

- 1.15 Chapters 12 to 15 summarise the determination by appellant, referring to the grounds of appeal pleaded by each appellant.
- (a) Chapter 12: HAL.
 - (b) Chapter 13: BA.

(c) Chapter 14: Delta.

(d) Chapter 15: VAA.

Relief

1.16 For those grounds, or parts of grounds, where we have found for the appellants, in chapter 16 we provide our determination on the appropriate relief which is implemented by the Order.

Other documents which are part of the determinations

1.17 As mentioned above, our determinations consist of the Order and this document which provides the reasoning for our determinations.

1.18 To support our assessment of Ground B2: cost of debt (set out in chapter 7) we provide an overview of regulatory precedent in approaches to inflation in appendix A.

1.19 We also provide a glossary of the terms used in the determinations.

2. Background to the parties to the appeal and the regulation of Heathrow Airport

The parties to the appeal

Heathrow Airport Limited (HAL)

- 2.1 HAL is a private limited company registered in the UK, ultimately controlled by FGP Topco Limited. The holding company of HAL is Heathrow (AH) Limited, which is in turn owned by Heathrow (SP) Limited. A number of other holding and funding companies are in the ownership chain between Heathrow (SP) Limited and the ultimate controlling company, FGP Topco Limited. This group of companies together form the Heathrow (AH) Limited group. The Heathrow (AH) Limited group is owned by a consortium of investors who hold shares in FGP Topco Limited.^{12,13}
- 2.2 HAL operates the UK's largest airport, typically handling (pre COVID-19 pandemic) around 476,000 air transport movements (**ATM**), around 81 million passengers and around 1.6 million metric tonnes of cargo a year.¹⁴ HAL's revenue for 2022 was £2,913 million.¹⁵ In 2022: £1,879 million (65%) of revenue was aeronautical revenue; £564 million (19%) was retail revenue; and £470 million (16%) was other revenue (such as Heathrow Express).¹⁶
- 2.3 The CAA determined that HAL had met the market power test in the Act in January 2014 (see paragraph 2.14 and chapter 3), and since 2014 HAL has been subject to an airport economic licence which includes conditions on price controls, specifying the quality of the services the airport operator must deliver and how much HAL can charge for them.¹⁷ A brief overview of the CAA's price regulation of HAL and the timeline of the H7 price control¹⁸ is at paragraph 2.21.

¹² As at 31 December 2022, there are seven international investors that own the shares of FGP Topco Limited. These are: Ferrovial (25%); Qatar Holding LLC (20%); Caisse de dépôt et placement du Québec (12.6%); GIC (11.2%); Alinda (11.2%); China Investment Corporation (10%), and Universities Superannuation Scheme (10%). Annual Report, 2002, Heathrow (SP) Limited, (See, [Investor centre | Heathrow, Heathrow SP 2022 ARA.pdf](#)), page 87. (Accessed on 15 August 2023).

¹³ Annual Report, 2002, Heathrow (SP) Limited, (See, [Investor centre | Heathrow, Heathrow SP 2022 ARA.pdf](#)), pages 57, 86 and 87. (Accessed on 15 August 2023)

¹⁴ See: [Investor centre | Heathrow, June2023 Monthly Traffic Statistics.xlsx \(live.com\)](#) (Accessed on 15 August 2023), data for 2019

¹⁵ Annual Report, 2022, Heathrow (SP) Limited, (See, [Investor centre | Heathrow, Heathrow SP 2022 ARA.pdf](#)), page 136. Note that ATM, passenger numbers and cargo volumes were less than in 2019.

¹⁶ Annual Report, 2022, Heathrow (SP) Limited, (See, [Investor centre | Heathrow, Heathrow SP 2022 ARA.pdf](#)), page 163.

¹⁷ [H7 overview | Civil Aviation Authority \(caa.co.uk\)](#), (See: <https://www.caa.co.uk/commercial-industry/airports/economic-regulation/h7/h7-overview/>) (Accessed on 15 August 2023)

¹⁸ 'Q6' was the price control for the period from 2014 to 2018, the approach to which was successively extended to cover 2019 and 2020 to 2021.

BA, Delta and VAA

- 2.4 British Airways plc (**BA**) is a global airline and the largest subsidiary in the International Airlines Group (**IAG**). IAG is a Spanish registered company with shares traded on the London Stock Exchange and Spanish Stock Exchanges. In 2022, BA had a total revenue of £11,030 million.¹⁹ BA operates from a number of UK airports, but considers Heathrow Terminal 5 as the ‘home of British Airways’.²⁰ BA owns over 50% (52%) of the slots available at Heathrow.²¹ BA is a UK carrier and is a member of the OneWorld Alliance.
- 2.5 Delta Air Lines, Inc (**Delta**), is a company quoted on the New York Stock Exchange and is based in Atlanta. Amongst other holdings, Delta owns 49% of the equity of VAA. In 2022, Delta had a total revenue of \$50,582 million.²² Delta owns less than 5% (1.8%) of the slots available at Heathrow.²³
- 2.6 Virgin Atlantic Airways Ltd (**VAA**), is a private limited company registered in the UK. VAA is the ultimate controller of a number of companies within the Virgin Atlantic Ltd Group.²⁴ VAA is owned by Virgin Group (51%) and Delta Air Lines Inc. (49%).²⁵ In 2022, VAA had a total revenue of £2,854 million. VAA owns less than 5% (4.3%) of the slots available at Heathrow.²⁶ Both VAA and Delta are members of the SkyTeam Alliance.
- 2.7 BA, Delta and VAA (together, **the Airlines**) are airlines that operate worldwide. In particular, the Airlines operate a significant number of flights out of Heathrow.

The Civil Aviation Authority

- 2.8 The Civil Aviation Authority (the **CAA**) is responsible for the regulation of aviation safety in the UK, and is a public corporation of the Department for Transport.²⁷ The CAA is the respondent in the H7 Appeals.^{28,29}
- 2.9 Amongst other responsibilities, the CAA has powers under the Civil Aviation Act 2012 (the **Act**) for the economic regulation of airport operators that meet the

¹⁹ See [IAG – International Airlines Group – Results and reports \(iargroup.com\)](#), [British Airways Plc, Annual Report and Accounts, Year ended 31 December 2022](#), page 5. (Accessed on 22 August).

²⁰ See [Welcome to London Heathrow \(britishairways.com\)](#) (Accessed on 22 August).

²¹ See [Airport Coordination Limited website: Microsoft Power BI](#) (Accessed on 22 August).

²² [Annual Report pursuant to Section 13 or 15\(d\) of the Securities Exchange Act of 1934. For the fiscal year ended December 31, 2022, or, Transition Report pursuant to Section 13 or 15\(d\) of the Securities Exchange Act of 1934 commission file number 001-5424, Delta Air Lines, Inc.](#), page 33.

²³ See [Airport Coordination Limited website: Microsoft Power BI](#) (Accessed on 22 August).

²⁴ See [Virgin Atlantic Website: Virgin Atlantic Annual Report 2022](#), page 88.

²⁵ See [Virgin Atlantic Website: Virgin Atlantic Annual Report 2022](#), page 81.

²⁶ See [Airport Coordination Limited website: Microsoft Power BI](#) (Accessed on 22 August).

²⁷ [Civil Aviation Authority - GOV.UK \(www.gov.uk\)](#) (see: <https://www.gov.uk/government/organisations/civil-aviation-authority>), (accessed on 15 August 2023).

²⁸ See [CMA case page: H7 Heathrow Airport Licence modification appeals – GOV.UK \(www.gov.uk\)](#).

²⁹ ‘H7’ is the price control period for Heathrow from 1 January 2022 until 31 December 2026.

market power test in the Act.³⁰ Section 6 of the Act sets out the market power test used to identify airports with substantial market power (**SMP**).³¹

- 2.10 More details of the statutory duties of the CAA are set out in the Legal Framework in chapter 3.

Regulation of Heathrow Airport

The regulatory framework

- 2.11 Under the Act the CAA's general duty is that the CAA must carry out its functions under the Act in a manner which it considers will further the interests of users of air transport services regarding the range, availability, continuity, cost and quality of airport operation services. The CAA must do so, where appropriate, by carrying out the functions in a manner which it considers will promote competition in the provision of airport operation services. (See paragraphs 3.8 to 3.13 for a more detailed description of the CAA's duties).³²
- 2.12 The Act does not place any obligations on licence holders such as HAL (unlike licensees in some other sectors (eg gas and electricity networks, air navigation services)). HAL's obligations flow from its licence (the **Licence**).³³ The Act gives the CAA the power to include conditions in licences, both generally, and in relation to price controls.³⁴
- 2.13 The Act permits economic regulation of an airport operator and the granting of a licence by the CAA if all three components of the market power test set out in section 6 of the Act³⁵ are satisfied.
- 2.14 In January 2014, the CAA determined that the operators of Heathrow (HAL) met the market power test set out in the Act and therefore required a licence to recover charges for its services.

HAL's price controls and charges

- 2.15 The charges applied by HAL to airlines are set in compliance with its Licence³⁶ and the Airport Charges Regulations 2011.

³⁰ [H7 overview | Civil Aviation Authority \(caa.co.uk\)](https://www.caa.co.uk/commercial-industry/airports/economic-regulation/h7/h7-overview/) (See: <https://www.caa.co.uk/commercial-industry/airports/economic-regulation/h7/h7-overview/>), (Accessed on 15 August 2023).

³¹ [Section 6](#) of the Act.

³² Teach-in slides, 6 June 2023, slide 26. The contents of the teach-in slides were agreed by all Parties.

³³ Economic licensing of Heathrow Airport | Civil Aviation Authority (caa.co.uk) (see: <https://www.caa.co.uk/commercial-industry/airports/economic-regulation/licensing-and-price-control/economic-licensing-of-heathrow-airport/>) the Licence (Accessed on 14 October 2023).

³⁴ [Sections 18 and 19](#) of the Act.

³⁵ [Section 6](#) of the Act. See chapter 3 for more details.

³⁶ (see <https://www.caa.co.uk/media/tmzmc45t/heathrow-licence-01may2023.pdf>)

HAL's Licence

- 2.16 HAL's Licence sets out a Price Control Condition which HAL is required to follow and which sets out the overall maximum amount that can be recovered from airlines, expressed on a per passenger basis. The Price Control Condition has a prescribed formula that is applied annually which updates the maximum allowable yield.

Airport Charges Regulations 2011

- 2.17 The Airport Charges Regulations 2011 (**ACR 2011**)³⁷ established a common framework by which airports consult their airline customers about airport charges, service level agreements and major infrastructure projects.
- 2.18 The ACR 2011 require airports to:
- (a) consult airlines about airport charges annually;
 - (b) give at least four months' notice of proposed changes to airport charges (unless there are exceptional circumstances);
 - (c) provide specific information to airlines on how airport charges are calculated;
 - (d) (if practicable) announce decisions on changes to airport charges at least two months before they come into effect, and
 - (e) consult airlines on major infrastructure projects.
- 2.19 The Regulations also contain provisions about airlines providing information to airports, the basis for airports providing differentiated services and discrimination.³⁸

Process for applying airport charges

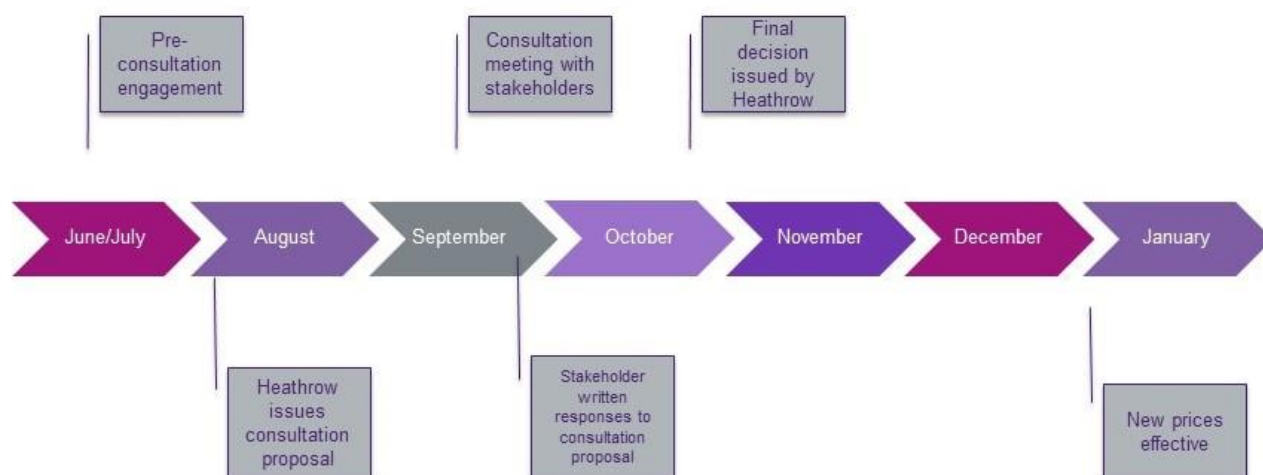
- 2.20 Airport charges are set each year through a consultation process in which HAL consults on the level of the overall airport charge on a per passenger basis and how that charge is recovered through the structure of tariffs.³⁹ HAL follows a similar process each year to set airport charges (see Figure 2.1).

³⁷ (see <https://www.legislation.gov.uk/uksi/2011/2491/contents/made>)

³⁸ Teach-in slides, 6 June 2023, slide 39.

³⁹ Teach-in slides, 6 June 2023, slide 39.

Figure 2.1: Annual consultation process that HAL follows to set airport charges for airlines



Source: Teach-in slides, 6 June 2023, slide 40.

The H7 price control

2.21 The CAA started price regulating airports in 1986 and has completed six price control reviews covering the operation of Heathrow. In February 2014, the CAA granted a licence to HAL which came into force on 1 April 2014.^{40, 41} The Licence for HAL included a price control on airport charges for the period 1 April 2014 to 31 December 2018 (referred to as Q6).⁴²

- (a) The CAA extended the Q6 price control by one year to 31 December 2019 to take account of the uncertainty surrounding the Government's October 2016 announcement on the location of capacity expansion in the South East of England.⁴³
- (b) The CAA put in place a two-year interim price cap, up to 31 December 2021 so that the main price control timetable could be better aligned with that of the wider programme for capacity expansion at Heathrow. This was referred to as an interim price cap (iH7).
- (c) Due to the unusual circumstances of the COVID-19 pandemic, the CAA was unable to make a final decision on the main price control and therefore

⁴⁰ [Economic licensing and price control overview | Civil Aviation Authority \(caa.co.uk\)](https://www.caa.co.uk/Commercial-industry/Airports/Economic-regulation/Licensing-and-price-control/Economic-licensing-and-price-control/), (See: <https://www.caa.co.uk/Commercial-industry/Airports/Economic-regulation/Licensing-and-price-control/Economic-licensing-and-price-control/>), (Accessed on 15 August 2023).

⁴¹ CAA, [Licence granted to HEATHROW AIRPORT LIMITED by the Civil Aviation Authority under section 15 of the Civil Aviation Act 2012](#), 13 February 2014.

⁴² [Economic licensing and price control overview | Civil Aviation Authority \(caa.co.uk\)](https://www.caa.co.uk/Commercial-industry/Airports/Economic-regulation/Licensing-and-price-control/Economic-licensing-and-price-control/), (See: [Economic licensing and price control overview | Civil Aviation Authority \(caa.co.uk\)](https://www.caa.co.uk/Commercial-industry/Airports/Economic-regulation/Licensing-and-price-control/Economic-licensing-and-price-control/)), (Accessed 15 August 2023).

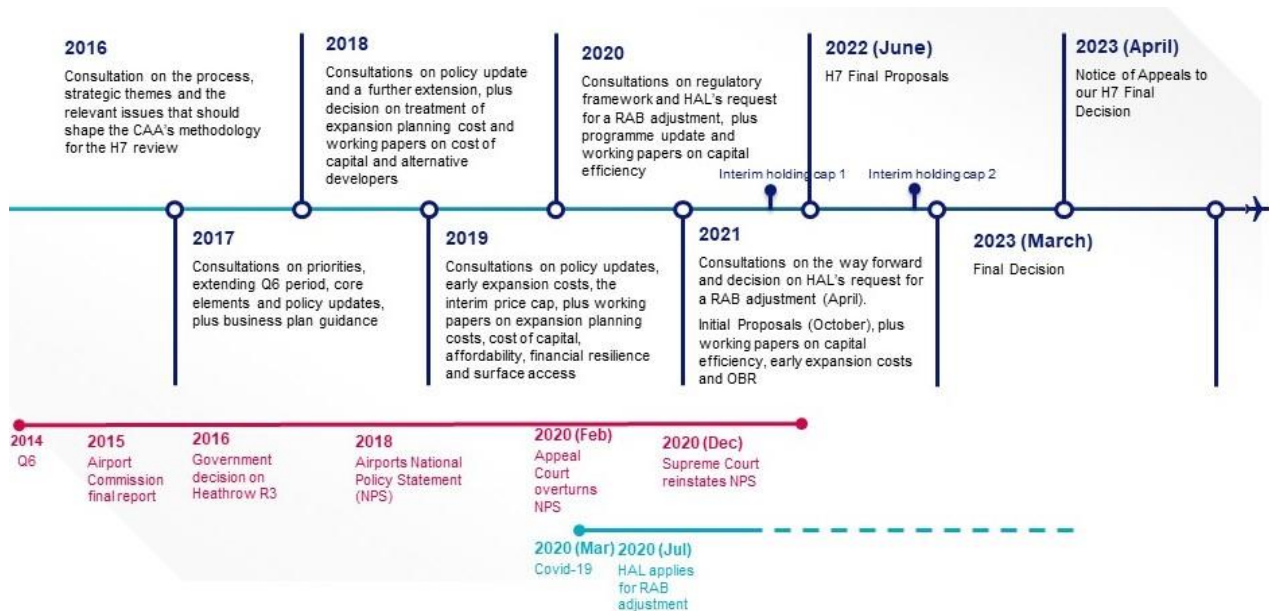
⁴³ [Economic licensing of Heathrow Airport | Civil Aviation Authority \(caa.co.uk\)](https://www.caa.co.uk/Commercial-industry/airports/economic-regulation/licensing-and-price-control/economic-licensing-of-heathrow-airport/), (See: <https://www.caa.co.uk/Commercial-industry/airports/economic-regulation/licensing-and-price-control/economic-licensing-of-heathrow-airport/>), (Accessed on 15 August 2023).

introduced holding price caps for the 2022 and 2023 regulatory years which form part of the H7 period.

- (d) The CAA’s H7 price control review is effective from 1 January 2024 through to 31 December 2026, though it covers the period 2022 to 2026.⁴⁴

2.22 The timeline for the H7 price control is shown in Figure 2.2.

Figure 2.2: H7 Regulatory timeline: Key dates



Source: Teach-in slides, 6 June 2023, slide 5.

Context to H7 price control

COVID-19

2.23 The COVID-19 pandemic resulted in rapidly changing government restrictions to which Heathrow and airlines had to respond with very little notice. HAL had to ensure safe operations continued while also preserving cash flow as ‘income stopped very swiftly’. The uncertainty resulting from the restrictions and evolution of the virus meant it was not possible for HAL, or airlines, to have a clear long-term plan for the return to fully operational status. Major process changes were often required with little to no notice, sometimes overnight. This applied both during the onset of COVID-19 and as it eased.⁴⁵

2.24 HAL explained that the DfT rules on how many slots airlines had to fly in order to maintain historic rights were amended from 80 flown/20 not flown against the airlines’ full slot allocation to 70 flown/30 not flown in summer 2022. This was a

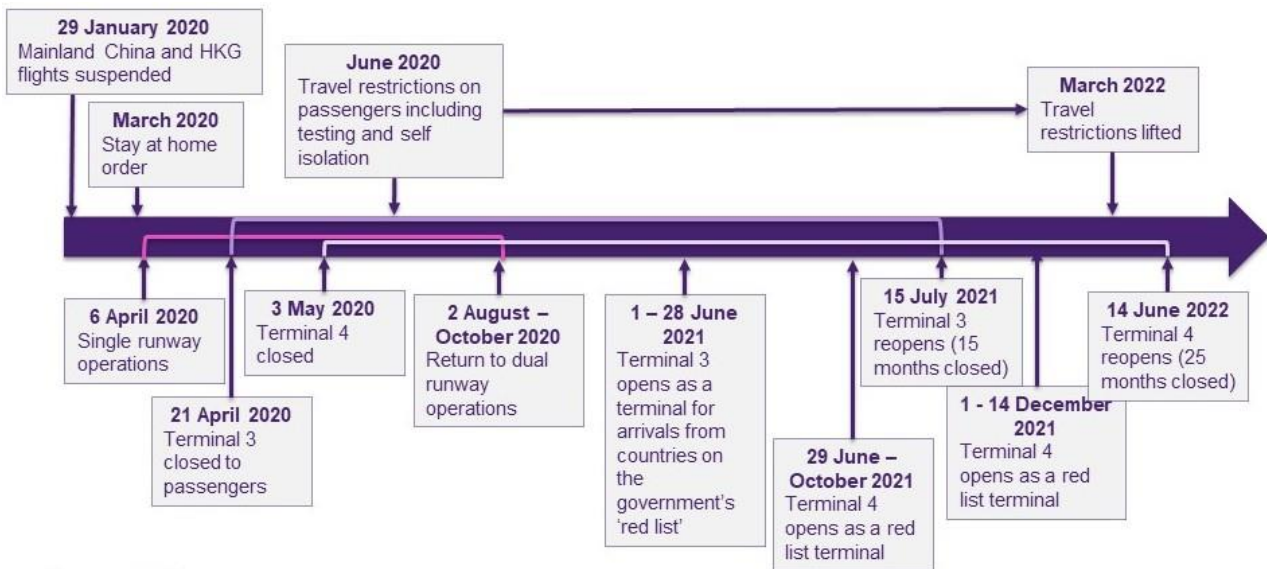
⁴⁴ Teach-in slides, 6 June 2023, slides 6 and 50.

⁴⁵ Teach-in slides, 6 June 2023, slide 50.

major change for all involved and compounded the uncertainty around how many flights would be operating.⁴⁶

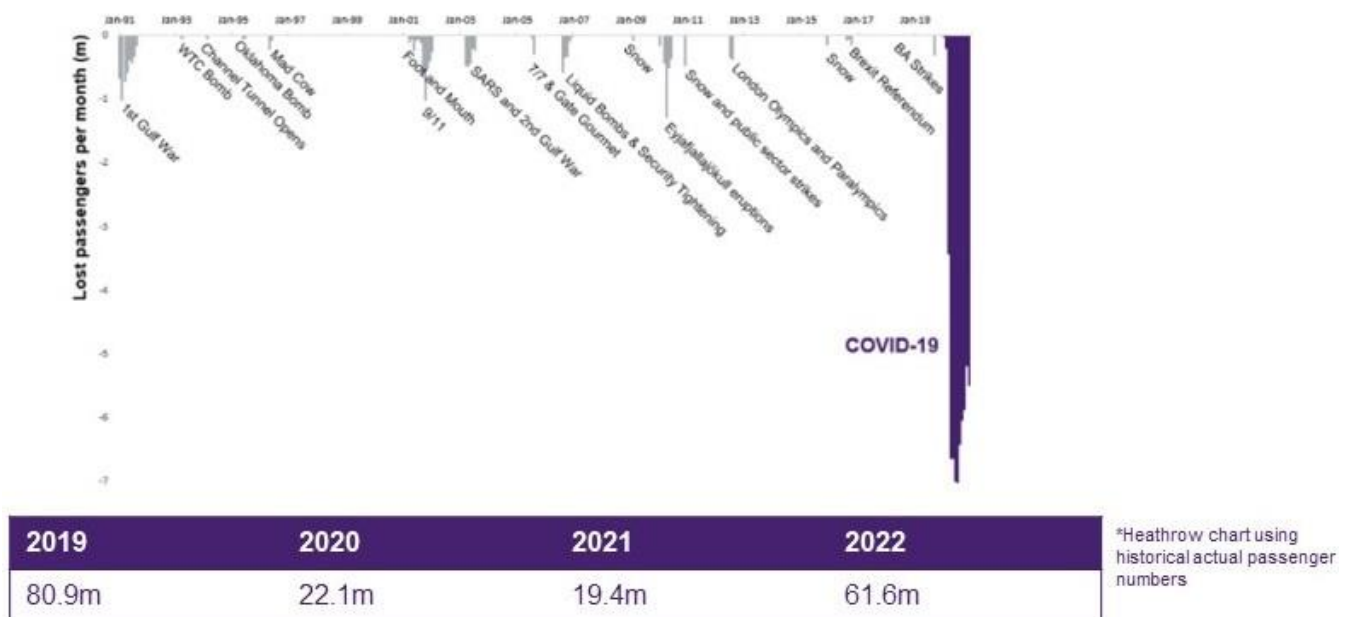
2.25 HAL further explained how the UK Government's restrictions directly affected its operations at Heathrow airport (see Figure 2.3). This had a very severe impact on passenger numbers, compared to other historic drops in passenger numbers following other incidents (see Figure 2.4).

Figure 2.3: Impact on Heathrow airport operations of UK Government restrictions due to COVID-19



Source: Teach-in slides, 6 June 2023, slide 51.

Figure 2.4: Impact of COVID-19 on Heathrow airport passenger numbers



Source: Teach-in slides, 6 June 2023, slide 52.

⁴⁶ Teach-in slides, 6 June 2023, slide 50.

- 2.26 The CAA continued to apply the Q6 price control during the period of disruption of flights caused by the UK lockdowns as a result of the COVID-19 pandemic. During the iH7 period, when interim price caps applied in 2020 and 2021, HAL's passenger numbers fell significantly as a result of the travel restrictions imposed, for example passenger numbers fell to 22 million in 2020 and 19 million in 2021.
- 2.27 The CAA replaced the Q6 price control condition with interim price controls for both 2020 and 2021, which formed the basis of iH7.⁴⁷ The price control condition remained in force with Heathrow required to adhere to a maximum yield per passenger. For 2022 and 2023 the condition itself was replaced with 'holding caps' – a single fixed price as opposed to the more complex formula of previous years.⁴⁸

Changing UK economic outlook

- 2.28 In the autumn of 2022, the macro-economic outlook for the UK had significantly worsened since the CAA had published its Final Proposals in June 2022. UK inflation and interest rates had risen significantly and the Office for Budget Responsibility had issued updated forecasts for the UK in mid-November 2022.⁴⁹
- 2.29 On 8 December 2022, CAA published a notice stating that 'developments in the wider economy since we published the Final Proposals have given rise to a degree of volatility in forecasts of inflation and interest rates'⁵⁰ and that it would postpone its Final Decision in order to take account of the latest information on passenger numbers as well as these changes.⁵¹

Review of Heathrow third runway

- 2.30 Heathrow's business plan changed significantly during the H7 price control process, with many external factors influencing this. HAL's Initial Business Plan in December 2019 was based on capacity expansion at Heathrow (including building a third runway), and HAL submitted a Revised Business Plan in December 2020 to reflect its existing 2-runway airport (as well as the impact of COVID-19)

⁴⁷ 'Economic regulation of Heathrow Airport: H7 Final Decision', CAP2524, March 2023 (see: [Final and Initial proposals for H7 price control | Civil Aviation Authority](#), [Final and Initial proposals for H7 price control | Civil Aviation Authority \(caa.co.uk\)](#)), (Final Decision), paragraph 10.

⁴⁸ Teach-in slides, 6 June 2023, slide 60.

⁴⁹ See OBR website, <https://obr.uk/efo/economic-and-fiscal-outlook-november-2022/> (plus various PDFs – main one is <https://obr.uk/download/economic-and-fiscal-outlook-november-2022/?tmstv=1693431976>).

⁵⁰ See CAA website, [Final and Initial proposals for H7 price control | Civil Aviation Authority \(caa.co.uk\)](#), <https://publicapps.caa.co.uk/docs/33/CAP2488.pdf>, paragraph 11.

⁵¹ See CAA website, [Final and Initial proposals for H7 price control | Civil Aviation Authority \(caa.co.uk\)](#), <https://publicapps.caa.co.uk/docs/33/CAP2488.pdf>, paragraph 1.5

3. Legal framework

The decision under appeal

- 3.1 Under the Act, the CAA regulates an airport operator by means of an economic licence if that operator has been found to have substantial market power and the other elements of the 'market power test' as set out in section 6 of the Act are met.⁵²
- 3.2 On 10 January 2014, the CAA made a market power determination in respect of HAL under section 7 of the Act,⁵³ with the result that HAL requires a licence to levy charges for airport operation services at Heathrow Airport.⁵⁴ In February 2014, the CAA granted a licence to HAL (the **Licence**) under section 15 of the Act which includes price control conditions on airport charges at Heathrow Airport.
- 3.3 The H7 price control follows on from the earlier Q6 price control which originally covered the years 2014 to 2018 but was later extended to apply to 2019 as well.
- 3.4 The H7 price control review sets the airport charges that HAL may impose on airlines that operate passenger services to and from Heathrow Airport. These airport charges apply on a per passenger basis.
- 3.5 The introduction of the H7 price control was delayed on several occasions, initially to accommodate work resulting from the Government's decision that Heathrow was the preferred location for the development of a new runway in the southeast of England and later due to the impact of the COVID-19 pandemic.
- 3.6 The years 2020 and 2021 were covered by an interim price cap (referred to as **iH7** by the CAA) which was followed by a holding cap in 2022 and a further interim cap for 2023 while the H7 price control was being finalised.
- 3.7 The appeals concern the decision made by the CAA to modify the conditions of HAL's Licence to give effect to the CAA's Final Decision for the H7 price control review, which will operate from 1 January 2022 to 31 December 2026, and which were contained in a notice under section 22(6) of the Act published on 8 March 2023 (the **Final Decision**).

⁵² Section 6 of the Act is here: [Civil Aviation Act 2012 \(legislation.gov.uk\)](https://www.legislation.gov.uk/ukpga/2012/26/section/6)

⁵³ The CAA determined that HAL is the operator of a dominant airport area at a dominant airport.

⁵⁴ Airport operation services are defined in section 68 of the Act as services provided at an airport for the purposes of: (a) the landing and taking off of aircraft; (b) the manoeuvring, parking or servicing of aircraft; (c) the arrival or departure of passengers and their baggage; (d) the arrival and departure of cargo; (e) the processing of passengers, baggage or cargo between their arrival and departure; or (f) the arrival or departure of persons who work at the airport. They include, in particular, the provision of airport ground-handling services, facilities for car parking, and facilities for shops and other retail businesses. They do not include airport transport services, air traffic services or services provided in shops or as part of other retail businesses.

The CAA's statutory duties

- 3.8 Section 1 of the Act⁵⁵ sets out the CAA's general duty. The CAA's primary duty is established in section 1(1) of the Act which provides that the CAA must carry out its functions in a manner which it considers will further the interests of users of air transport services regarding the range, availability, continuity, cost and quality of airport operation services.
- 3.9 Section 1(2) of the Act provides that, in performing its duty under section 1(1), the CAA must do so, where appropriate, by carrying out the functions in a manner which it considers will promote competition in the provision of airport operation services.
- 3.10 Section 1(3) of the Act further provides that, in performing its duties under subsections (1) and (2), the CAA must have regard to:
- (a) the need to secure that each holder of a licence under this Chapter⁵⁶ is able to finance its provision of airport operation services in the area for which the licence is granted,
 - (b) the need to secure that all reasonable demands for airport operation services are met,
 - (c) the need to promote economy and efficiency on the part of each holder of a licence under this Chapter in its provision of airport operation services at the airport to which the licence relates,
 - (d) the need to secure that each holder of a licence under this Chapter is able to take reasonable measures to reduce, control or mitigate the adverse environmental effects of the airport to which the licence relates, facilities used or intended to be used in connection with that airport and aircraft using that airport,
 - (e) any guidance issued to the CAA by the Secretary of State for the purposes of this Chapter,
 - (f) any international obligation of the United Kingdom notified to the CAA by the Secretary of State for the purposes of this Chapter, and
 - (g) the principles in subsection (4) which are that:
 - (i) regulatory activities should be carried out in a way which is transparent, accountable, proportionate and consistent, and

⁵⁵ [Civil Aviation Act 2012 \(legislation.gov.uk\)](#).

⁵⁶ Within the Act, [Chapter 1](#) Regulation of operators of dominant airports.

- (ii) regulatory activities should be targeted only at cases in which action is needed.

3.11 In broad terms, the duty (to have regard to the specified matters) in section 1(3) requires that the CAA takes the relevant matter properly and conscientiously into account, and weighs it in the balance, in performing its functions.⁵⁷

3.12 Section 1(5) of the Act then confers a discretion on the CAA as to how it should manage conflicts arising from its duties by providing that:

If, in a particular case, the CAA considers that there is a conflict-

- (a) between the interests of different classes of user of air transport services, or
- (b) between the interests of users of air transport services in different matters mentioned in subsection (1),

its duty under subsection (1) is to carry out the functions in a manner which it considers will further such of those interests as it thinks best.

3.13 The CAA, as a public body, is also bound by the ordinary requirements of public law, including as to its standards of consultation, the duty of enquiry and the taking into account of relevant considerations.

The appeal regime

3.14 The CAA's Final Decision is subject to a specific appellate regime established by the Act.

3.15 The Airport Licence Condition Appeal regime is governed by provisions contained in sections 24 to 30 and Schedule 2 of the Act and rules and guidance produced pursuant to the Act:

- (a) the Airport Licence Condition Appeal Rules (CMA172) (the **Rules**);⁵⁸ and
- (b) the Airport Licence Condition Appeal Guide (CMA173) (the **Guide**).⁵⁹

3.16 The overriding objective of the Rules is to enable the CMA to dispose of appeals fairly, efficiently and at proportionate cost within the time limits prescribed by the

⁵⁷ This formulation was adopted in R (British Gas Limited) v The Gas and Electricity Markets Authority [2019] EWHC 3048 (Admin), paragraph 14.

⁵⁸ [The Rules \(CMA172\)](#).

⁵⁹ [The Guide \(CMA173\)](#).

Act and the CMA will apply the Rules to give effect to the overriding objective.⁶⁰ All parties to an application or appeal must assist the CMA to further this objective.⁶¹

- 3.17 The present appeals have been brought pursuant to section 25 of the Act which provides that an appeal lies to the CMA against a decision taken by the CAA to modify a condition of a licence under the Act.
- 3.18 Subject to its granting of permission for the appeals under section 24 of the Act, the CMA has jurisdiction to hear the appellants' appeals pursuant to section 25 which provides (so far as relevant):
- (1) An appeal lies to the Competition and Markets Authority against a decision by the CAA to modify a licence condition under section 22.
 - (2) An appeal may be brought under this section only by –
 - (a) the holder of the licence, or
 - (b) a provider of air transport services whose interests are materially affected by the decision.
- 3.19 On 17 April 2023, the CMA received notices of appeal from HAL on the basis that it was the holder of the licence subject to the Final Decision and, on 18 April 2023, from BA, Delta and VAA as providers of air transport services whose interests are materially affected by the decision. The CMA granted permission to appeal to all Parties on 11 May 2023.
- 3.20 Section 30(4) of the Act provides that the functions of the CMA in an appeal under section 25 are to be carried out on its behalf by a group constituted for the purpose by the CMA's Chair. Such a group (the **Group**) has been constituted for this appeal.
- 3.21 Section 28(1) of the Act provides that the CMA (in the form of the group acting on its behalf) must determine an appeal under section 25 against a decision in respect of a licence within the period of 24 weeks beginning with the day on which the CAA published the relevant notice. The period within which the CMA was to have determined the appeals was due to expire on 22 August 2023.
- 3.22 The Group decided to extend the period within which the CMA must determine the appeals by 8 weeks as provided for under section 28(3) of the Act.⁶² The revised deadline for the CMA's determination of the appeals is 17 October 2023.

⁶⁰ [CMA172](#), paragraph 4.1.

⁶¹ [CMA172](#), paragraph 4.2.

⁶² See, [CMA case page](#), [Notice of Extension](#).

The legal test on appeal

3.23 Section 26 of the Act provides:

The Competition and Markets Authority may allow an appeal under section 24 or section 25 only to the extent that it is satisfied that the decision appealed against was wrong on one or more of the following grounds –

- (a) that the decision was based on an error of fact;
- (b) that the decision was wrong in law;
- (c) that an error was made in the exercise of a discretion.

3.24 The question for the CMA to determine is therefore whether the Final Decision was **wrong**. In determining that question, the CMA is not limited to reviewing the Final Decision on traditional judicial review grounds nor is it a full rehearing of the merits of the Final Decision (or a *de novo* hearing).^{63, 64}

3.25 Section 30 of the Act further provides that in determining an appeal under sections 24 or 25, the CMA itself must have regard to the matters in respect of which duties are imposed on the CAA by section 1 of the Act.

3.26 In a regulatory appeal, the burden of proof is borne by the appellant who seeks to establish that the regulator has erred in its decision. The usual civil standard of proof will apply when assessing evidence and finding facts, namely the balance of probabilities.⁶⁵

3.27 Schedule 2 paragraph 23 of the Act⁶⁶ deals with the powers of the CMA to consider matters which are only raised by parties at the appeal stage. For example, paragraph 23(3) provides that:⁶⁷

The member or group must not have regard to any matter, information or evidence raised or provided by a person other than the CAA if it was not considered by the CAA in making the decision that is the subject of the application or appeal, unless the member or group considers that –

⁶³ In other words, a new hearing of the matters that are the subject of the decision and in which the appellant has a 'second bite of the cherry.' Nor is the CMA tasked under the Act with a redetermination of the H7 price control more widely.

⁶⁴ See [British Telecommunications v Office of Communications \(BT v Ofcom\) \[2010\], CAT 17](#) at paragraph 76 and [Energy Licence Modification Appeals 2021 \(ELMA2021\)](#) at paragraph 3.29.

⁶⁵ [BT v Ofcom \[2017\], CAT 25](#), paragraph 70.

⁶⁶ [Schedule 2, paragraph 23](#) of the Act.

⁶⁷ [Schedule 2, paragraph 23\(2\)](#) of the Act contains equivalent provisions relating to new matters, information or evidence only raised or provided by the CAA at the appeal stage.

- (a) the person or a relevant connected person could not reasonably have raised the matter with the CAA, or provided the information or evidence to the CAA, during the period in which the CAA was making that decision, and
- (b) the matter, information or evidence is likely to have an important effect on the outcome of the application or appeal, either by itself or taken together with other matters, information or evidence.

Meaning of wrong

3.28 While the CMA is able to decide whether a fact or inference is wrong, it cannot substitute its judgment for that of the regulator simply because it would have taken a different view.⁶⁸ Further, it is not sufficient:

- (a) that the CMA or a party is able to identify an alternative approach, unless that approach is ‘clearly superior’;⁶⁹
- (b) for the CMA to identify some defect in reasoning. It is only if the decision cannot be supported on any basis (whether or not relied upon by the CAA) that it will be ‘wrong’,⁷⁰ or
- (c) for the CMA to identify some procedural deficiency. Such a deficiency will render the decision ‘wrong’ only if it is ‘so serious that [the CMA] cannot be assured that the Decision was not wrong’.⁷¹

3.29 A decision will be ‘wrong’ if it is based on unreliable data or fails to take account of the relevant evidence.⁷²

3.30 Further, the CMA’s *ELMA2021* decision recognised the importance of the ‘margin of appreciation’ in deciding whether a decision is ‘wrong’ (save that no such margin is available in respect of certain alleged errors of primary fact and certain errors of law – see further below).

Error of fact

3.31 The CMA’s starting point is that, as regards findings of primary fact, we will show a degree of deference to the CAA, as the specialist regulator, but we have a clear

⁶⁸ [ELMA2021](#) paragraph 3.36.

⁶⁹ [ELMA2021](#) paragraphs 3.40-3.43 and 3.77.

⁷⁰ [ELMA2021](#) paragraph 3.51.

⁷¹ [ELMA2021](#) paragraph 3.54.

⁷² [ELMA2021](#) paragraph 3.47.

jurisdiction in respect of factual errors, and the CMA will exercise that jurisdiction where we conclude that the CAA has based its decision on a plain error of fact.

3.32 As stated by the Competition Commission (the **CC**) in *E.ON*:⁷³

GEMA, as the specialist regulator may well have an advantage over the CC in finding the relevant primary facts. [...] GEMA [...] has an advantage of experience, and will often have the benefit of having conducted a consultation with the industry [...] For these reasons, the CC will be slow to impugn GEMA's findings of fact. Nevertheless, the CC has a clear jurisdiction in respect of factual errors, and we will exercise that jurisdiction where we conclude that GEMA has based its decision on a plain error of fact.⁷⁴

3.33 This principle extends to the correctness or otherwise of any inference drawn from primary fact, although where we may be in as good a position as the CAA to determine some questions of primary fact, we should do so. In *Assicurazioni Generali Spa v Arab Insurance Group*, the Court of Appeal noted that:

In appeals against conclusions of primary fact the approach of an appellate court will depend upon the weight to be attached to the findings of the judge and that weight will depend upon the extent to which, as the trial judge, the judge has an advantage over the appellate court; the greater that advantage the more reluctant the appellate court should be to interfere.⁷⁵

3.34 This reflects the prior judgment in *Todd v Adam*, in which the court stated that:

Where the correctness of a finding of primary fact or of inference is in issue, it cannot be a matter of simple discretion how an appellate court approaches the matter. Once the appellant has shown a real prospect [...] that a finding or inference is wrong, the role of an appellate court is to determine whether or not this is so, giving full weight of course to the advantages enjoyed by any judge of first instance who has heard oral evidence. In the present case, therefore, I consider that (a) it is for us if necessary to make up our own mind about the correctness or otherwise of any findings of primary fact or inference from primary fact that the judge made or drew and which the claimants challenge while (b) reminding ourselves that, so far as the appeal raises issues of judgment on unchallenged primary findings and inferences, this court ought not to interfere unless it is satisfied that the judge's conclusion lay

⁷³ *E.ON UK plc v GEMA (E.ON)*: energy code modification appeal, 10 July 2007.

⁷⁴ *E.ON*, paragraph 5.16, cited in *ELMA2021*, paragraph 3.73.

⁷⁵ *Assicurazioni Generali Spa v Arab Insurance Group* [2003] 1 All ER (Comm) 140, paragraph 15.

outside the bounds within which reasonable disagreement is possible. In relation to (a) we must, as stated, bear in mind the important and well recognised reluctance of this court to interfere with a trial judge on any finding of primary fact based on the credibility or reliability of oral evidence.⁷⁶

3.35 When the exercise of judgement in relation to primary fact or inference is engaged in relation to the statutory ground of error of fact, the CMA's position is as follows.⁷⁷

3.36 Where the alleged error lies in the CAA's judgement in relation to unchallenged primary fact or inference, we ought not to interfere unless we are satisfied that the CAA's conclusion lay outside the bounds within which reasonable disagreement is possible (see paragraph 3.34 above).

3.37 Moreover, the CMA should not substitute its own judgement simply because it would have taken a different view had we been in the position of the regulator. As stated in *SONI*,⁷⁸ having referred to *Assicurazioni*, the CMA concluded that:

when applying the five statutory tests [...] we consider that there is an important difference between the CMA making up our own mind about the correctness or otherwise of any findings of primary fact, or inference from primary fact, made in the Price Control Decision, which is permissible, and the CMA substituting our judgment for that of the regulator simply on the basis that we would have taken a different view of the matter, had we been the regulator, which is not permissible.

3.38 Where conclusions of fact are, however, not conclusions of primary fact themselves but where the alleged error relates to an evaluation of the facts by the CAA or 'an assessment of a number of different factors that have to be weighed against each other', then, as set out in *Assicurazioni*, we should approach such evaluations in the same way that we approach the exercise of a discretion.⁷⁹

Wrong in law

3.39 The concept of 'wrong in law' is not defined in the Act. In other statutory contexts, however, appeals on a 'point of law' or a 'question of law' have been held to include matters of legal interpretation and also the full range of issues which would otherwise be the subject of an application to the High Court for judicial review.⁸⁰

⁷⁶ [Todd v Adam](#) [2002] EWCA Civ 509, [2002] 2 All ER (Comm) 1, paragraph 129.

⁷⁷ We also take a similar position in relation to the ground of wrong in law.

⁷⁸ [SONI Limited v Northern Ireland Authority for Utility Regulation \(SONI\)](#), Final determination, 10 November 2017.

⁷⁹ [Assicurazioni Generali Spa v Arab Insurance Group](#) [2003] 1 All ER (Comm) 140, paragraph 16.

⁸⁰ See, for example, [E v Secretary of State for the Home Department \[2004\] EWCA Civ 49](#), paragraph 42; [Mohamoud v Birmingham City Council \[2014\] EWCA Civ 227](#), paragraph 23.

These include challenges on grounds of procedural error, irrationality, inadequacy of reasons, having regard to irrelevant matters, and failing to have regard to relevant matters.⁸¹

- 3.40 The language and context of section 26 of the Act are different from the legislation at issue in the case law cited in the previous paragraph. Nevertheless, we consider that this case law provides useful guidance as to the kinds of error that may render a decision ‘wrong in law’ for the purposes of section 26 of the Act.
- 3.41 Accordingly, we consider that the CAA’s decision will be wrong in law where the CAA has misdirected itself as to the law. For example, a decision will be wrong in law where the CAA has misdirected itself as to its general duty and related statutory duties, but also more broadly as to any other applicable legal provisions, when making its decision that is the subject of an appeal under sections 24 or 25 of the Act.
- 3.42 As regards the adequacy of the CAA’s reasoning, in line with the statement of principle summarised in *Firmus Energy*,⁸² an appeal is against the decision, not the reasons for the decision. Therefore, it is not enough for an appellant to identify some error of reasoning; an appeal can only succeed if the decision cannot stand in light of that error. If the decision can be supported on a basis other than that on which the regulator relied, then the appellant will not have shown that the decision was wrong and will fail.⁸³ Accordingly, we consider that the CAA’s decision will be wrong in law if it is based on irrelevant considerations or is otherwise irrational and the decision cannot be supported on any other basis.
- 3.43 The CAA’s decision may also be wrong in law on the basis of a procedural deficiency. Consistent with the statement of principle summarised in *Firmus Energy*, the decision will be wrong in law only where the procedural deficiency (including a flawed consultation process) was so serious that the CMA cannot be assured that the decision was not wrong.

Error in the exercise of a discretion

- 3.44 As set out in *ELMA2021*, the CMA’s starting point:

[...] will be to consider the adequacy of GEMA’s chosen approach rather than considering which approach we ourselves might have chosen had we been in GEMA’s position. [I]n considering whether GEMA’s chosen approach discloses an error, we will consider its inherent merits including by comparing its merits with those of any

⁸¹ [RB \(Algeria\) v Secretary of State for the Home Department \[2008\] EWCA Civ 290](#), paragraphs 62, 73; [James v Hertsmere Borough Council \[2020\] EWCA Civ 489](#), paragraph 31.

⁸² [Firmus Energy \(Distribution\) Limited v Northern Ireland Authority for Utility Regulation: Final determination \(publishing.service.gov.uk\) \(Firmus Energy\)](#).

⁸³ [ELMA2021](#), paragraphs 3.50 (citing [Firmus Energy](#), paragraph 3.20(h)) and 3.51.

reasonable alternatives advanced by the appellants. If, out of the alternatives available, we conclude that some alternatives clearly had greater merit than the solution chosen by GEMA, then we are more likely to be persuaded that GEMA has erred.⁸⁴

- 3.45 However, the CMA will allow a sector regulator a margin of appreciation in the exercise of its duties and in particular in the exercise of a discretion provided for under statute.
- 3.46 Applying the reasoning of the CMA in *ELMA2021* to the appeal against the CAA's Final Decision, where the appellants have pleaded an error in the exercise of a discretion on the part of the CAA, they will succeed if it is clear that the CAA has made one choice, albeit a rational choice, where another available choice would clearly have been superior in light of the CAA's regulatory duties and all the relevant circumstances.

Materiality

- 3.47 It is common ground that the CMA should only interfere with the CAA's Final Decision if we consider that the error identified is material, and this is consistent with the approach the CMA has adopted in previous cases.
- 3.48 We have taken the same approach in determining the present appeal. We summarise below the key principles from past CMA determinations, which we have adopted for present purposes.
- 3.49 In *ELMA2021*, the CMA adopted the approach that 'an error will not be a material error where it has an insignificant or negligible impact on the overall level of price control set by GEMA'.⁸⁵
- 3.50 Offering a non-exhaustive list of criteria that the CMA may take into account in determining materiality, in *ELMA2021* it was stated:

Whether an error is material must be decided on a case-by-case basis taking into account the particular circumstances of each case. Relevant factors would include the impact of the error on the overall price control, whether the cost of addressing the error would be disproportionate to the value of the error, whether the error is likely to have an effect on future price controls, and

⁸⁴ [ELMA2021](#), paragraph 3.43.

⁸⁵ Adopting the approach in [British Gas Trading Limited v The Gas and Electricity Markets Authority \(BGTL v GEMA\)](#), paragraph 3.60 and Northern Powergrid (Northeast) Limited and Northern Powergrid (Yorkshire) plc v the Gas and Electricity Markets Authority ([NPg v GEMA](#)), paragraph 3.58, cited in [ELMA2021](#), paragraph 3.91.

whether the error relates to a matter of economic or regulatory principle.⁸⁶

- 3.51 In *Firmus Energy*, the CMA noted that in the context of a telecoms appeal, its predecessor, the Competition Commission (CC), has stated that where the impact of the error as a percentage of the charge control is below 0.1%, the error is unlikely to be capable of producing a material effect on the charge control. The CMA noted further that this is ‘not intended to be a “bright–line test”’; it is but one factor in an overall assessment based on all the circumstances of the case’.⁸⁷
- 3.52 As regards the potential aggregation of several errors, we acknowledge that, in principle, we should determine whether each alleged error is material in itself. However, we note that in *Firmus Energy* the CMA, quoting the CC’s approach, did not exclude the possibility that in certain cases an aggregation of immaterial errors could amount to a material error:
- No formal general approach has been identified that would determine when, if at all, immaterial errors should be aggregated. The CC was mindful that to aggregate immaterial errors would have the effect of converting an error that was in and of itself immaterial into a material error through its combination with other immaterial errors. Those other errors may be unrelated and may lie in different and discrete aspects of the price control.
- 3.53 The CC did not rule out the possibility that there may be cases in which such aggregation was justifiable where the cumulative effect of discrete errors had a highly significant impact on the price control set by the regulator.
- 3.54 However, as a general approach, the CC stated it would be cautious about elevating the immaterial into the material. It observed that aggregation might encourage a scattergun approach on the part of appellants, which was not the purpose of the appeal process.⁸⁸
- 3.55 We note also that in *ELMA2021*, the CMA stated, following its reference to the above principles, that it had considered, where appropriate, whether the cumulative effect of immaterial errors could have a highly significant impact on the price control.⁸⁹

⁸⁶ Adopting the approach in [BGTL v GEMA](#), paragraph 3.61 and [NPg v GEMA](#), paragraph 3.58, cited in [ELMA2021](#), paragraph 3.92.

⁸⁷ [Firmus Energy](#), paragraph 3.24, cited in [ELMA2021](#), paragraph 3.93.

⁸⁸ [Firmus Energy](#), paragraph 3.26 (citing [The Carphone Warehouse Group plc v Office of Communications](#), paragraph 1.64), cited in [ELMA2021](#), paragraph 3.96.

⁸⁹ [ELMA2021](#), paragraph 3.97.

Interlinkages

- 3.56 The CAA submitted that the CMA should seek to avoid the appellants being able to ‘cherry pick’ issues, while also following its practice in previous cases by not taking an ‘in the round’ view of the price control decision that is not viewed through the lens of the specific errors alleged.⁹⁰
- 3.57 In adopting the approach taken in *ELMA2021*, the CMA has sought to balance its role as an appeal body and recognising that price control decisions are complex and will, as appropriate, consider any interlinkages on a case-by-case basis in the particular circumstances of the H7 price control.⁹¹

Precedents

- 3.58 We would note that each case turns on its own facts and past decisions taken by the CMA in other regulatory appeals do not set binding precedent. This means that we are not required to ensure that our decision in the present appeal mirrors assessments made and conclusions reached by the CMA in other regulatory appeals.⁹²

The CMA’s powers on determination of the appeals

- 3.59 Section 27 of the Act provides (so far as relevant):
- (1) Where it does not allow an appeal under section 24 or 25, the Competition and Markets Authority must confirm the decision appealed against.
 - (2) Where it allows an appeal under section 24 or 25, the Competition and Markets Authority must do one or more of the following –
 - (a) quash the decision appealed against;
 - (b) remit the matter that is the subject of the decision appealed against to the CAA for reconsideration and decision in accordance with this Chapter and any directions given by the Competition and Markets Authority;
 - (c) substitute its own decision for that of the CAA.
 - (3) Where it allows only part of an appeal under section 24 or 25 –

⁹⁰ [CAA, Response to applications for permission to appeal \(CAA Response\)](#), 31 May 2023, paragraph 38.

⁹¹ [ELMA2021](#), paragraph 3.86.

⁹² [ELMA2021](#), paragraph 3.87.

- (a) subsection (2) applies in relation to the part of the decision appealed against in respect of which the appeal is allowed, and
 - (b) subsection (1) applies in relation to the rest of that decision.
- (4) Where the Competition and Markets Authority substitutes its own decision for that of the CAA, the Competition and Markets Authority may give directions to –
- (a) the CAA, and
 - (b) the holder of the licence.

4. The appeals, and conduct of the appeals

Introduction

4.1 This chapter sets out an overview of the grounds of appeal, the key events of the appeals process and the conduct of the appeals.

The Notices of Appeal

4.2 The Civil Aviation Authority (**CAA**) issued its Final Decision on the H7 price control for the period 2022 to 2026 on 8 March 2023. The deadline for parties eligible to apply for permission to appeal was six weeks following this date, that is 18 April 2023.

4.3 Heathrow Airport Limited (**HAL**) applied to the CMA for permission to appeal the Final Decision on 17 April 2023.⁹³ British Airways plc (**BA**), Delta Air Lines, Inc (**Delta**) and Virgin Atlantic Airways Ltd (**VAA**) (together the **Airlines**) each applied to the CMA for permission to appeal the Final Decision on 18 April 2023.⁹⁴ These applications were therefore submitted within the statutory time limit.

HAL's grounds of appeal

4.4 HAL sought permission to appeal on five grounds concerning the following:

- (a) Ground 1, the RAB adjustment;
- (b) Ground 2, the cost of equity;
- (c) Ground 3, the cost of debt;
- (d) Ground 4, the AK factor;⁹⁵ and
- (e) Ground 5, Capex incentives.

BA's grounds of appeal

4.5 BA sought permission to appeal on three grounds concerning the following:

- (a) Ground 1, passenger forecasting;
- (b) Ground 2, the RAB adjustment; and

⁹³ [HAL, Notice of Appeal \(HAL NoA\)](#), 17 April 2023.

⁹⁴ [BA, Notice of Appeal \(BA NoA\)](#), 18 April 2023, [Delta, Notice of Appeal \(Delta NoA\)](#), 18 April 2023, and [VAA, Notice of Appeal \(VAA NoA\)](#), 18 April 2023.

⁹⁵ See chapter 10 for an explanation of the AK factor.

- (c) Ground 3, the weighted average cost of capital (**WACC**).

Delta's grounds of appeal

4.6 Delta sought permission to appeal on three grounds concerning the following:

- (a) Ground 1, passenger forecast;
- (b) Ground 2, WACC; and
- (c) Ground 3, the RAB adjustment.

VAA's grounds of appeal

4.7 VAA sought permission to appeal on three grounds concerning the following:

- (a) Ground 1, passenger forecast;
- (b) Ground 2, WACC; and
- (c) Ground 3, the RAB adjustment.

Permissions to appeal

4.8 The CMA considered the applications and, after consulting with the Parties, gave permission to appeal to all the applicants on 11 May 2023.⁹⁶ The permissions were granted on condition that certain of the grounds raised in each application be considered together with related grounds raised by other applicants.

4.9 The various grounds were grouped for the purpose of determining the appeals as set out in Table 4.1.

Table 4.1: Grounds heard together in determining the appeals

	<i>HAL ground</i>	<i>BA ground</i>	<i>Delta ground</i>	<i>VAA ground</i>	<i>Allocation for this determination</i>
RAB adjustment	Ground 1	Ground 2	Ground 3	Ground 3	Ground A
Cost of Capital	Ground 2 (Cost of equity – Equity beta)	Ground 3 (WACC)	Ground 2 (WACC)	Ground 2 (WACC)	Ground B
	Ground 3 (Cost of debt - embedded debt)				
Passenger forecast / forecasting	-N/A-	Ground 1	Ground 1	Ground 1	Ground C

Source: *Permission decisions by the CMA* (see [case page](#)).

4.10 HAL's Ground 4 and Ground 5 were heard as 'Ground D' and 'Ground E'.

⁹⁶ [BA decision on permission to appeal](#), [Delta decision on permission to appeal](#), [HAL decision on permission to appeal](#), and [VAA decision on permission to appeal](#), all 11 May 2023.

4.11 At the time of submitting their applications for permission to appeal, the three airlines each requested that their grounds of appeal be heard together, should permission be granted.⁹⁷ Each of the Airlines made its own appeal, and we have determined each appeal separately (see chapters 13, 14 and 15). However, noting that the NoAs of the Airlines were similar, their grounds of appeal were considered together with the similar grounds of appeal pleaded by the other applicants (as outlined in Table 4.1 above), the Airlines were encouraged to coordinate their responses in written and oral submissions where possible.

Appointment of the Group

4.12 On 12 May 2023, the CMA Panel Chair appointed three members of the Panel to determine the appeals (the **Group**):

- Kirstin Baker, Chair of the Group;
- Juliet Lazarus; and
- Paul Muysert.

Applications for permission to intervene

4.13 On 22 May 2023, we received applications for permission to intervene in the appeals from BA, Delta, and HAL.⁹⁸

HAL's application to intervene

4.14 HAL sought permission to intervene on three grounds raised by the Airlines:

- (a) the passenger forecasting ground, Ground C;
- (b) the RAB adjustment in 2021, which was raised as a ground by the three airline appellants and was to be taken together with HAL's appeal in relation to the RAB as Ground A; and
- (c) the WACC grounds raised by the Airlines and to be taken together with HAL's cost of equity and cost of debt grounds as Ground B.⁹⁹

⁹⁷ [BA NoA](#), paragraph 1.5, [Delta NoA](#), paragraph 1.24 and [VAA NoA](#), paragraphs 1.23 and 1.24.

⁹⁸ [BA, Application for permission to intervene and Notice of Intervention \(BA NoI\)](#), 22 May 2023; [Delta, Application for permission to intervene and Notice of Intervention \(Delta NoI\)](#), 22 May 2023 and [HAL, Application for permission to intervene and Notice of Intervention \(HAL NoI\)](#), 22 May 2023.

⁹⁹ [HAL NoI](#), paragraph 2.

BA's and Delta's applications to intervene

- 4.15 Both BA and Delta sought permission to intervene on four grounds raised by HAL:
- (a) The failure to make an adjustment to the RAB, which was to be taken together with the Airlines' grounds on the 2021 RAB adjustment as Ground A;
 - (b) The cost of equity and cost of debt grounds, to be taken together with the Airlines' WACC grounds as Ground B;
 - (c) HAL's AK factor ground, taken in the CMA determination of the appeals as Ground D; and
 - (d) HAL's Capex incentives ground, taken in the CMA determination of the appeals as Ground E.¹⁰⁰

Permissions to intervene

- 4.16 We granted HAL, BA and Delta permission to intervene on the grounds in their applications on 5 June 2023.¹⁰¹

CAA response

- 4.17 The CAA provided its response to the Notices of Appeal on 31 May 2023 (**CAA Response**).¹⁰²

HAL reply

- 4.18 HAL requested permission to submit a reply to the CAA Response. On 8 June 2023, we granted permission to HAL to submit a focused reply.
- 4.19 HAL submitted its Reply on 14 June 2023.¹⁰³

Conduct of the appeals

Timetable

- 4.20 Following consideration of representations made by the parties, the administrative timetable for the appeals was published on 26 June 2023, as required by Rule 10

¹⁰⁰ [BA Nol](#), paragraphs 1.1.3–1.1.5; [Delta Nol](#), paragraphs 1.3–1.5.

¹⁰¹ CMA, [Permission to HAL to intervene in the H7 Appeals](#); CMA, [Permission to BA and Delta to intervene in the H7 Appeals](#), both 5 June 2023.

¹⁰² [CAA Response to Notices of Appeal \(CAA Response\)](#), 31 May 2023.

¹⁰³ HAL Reply to CAA Response, ([HAL Reply to CAA Response](#)), 14 June 2023.

of the Airport Licence Condition Appeals: Competition and Markets Authority Rules (CMA172).¹⁰⁴

Site visit and teach-in

4.21 The Group and staff team members attended a site visit to Heathrow airport on 6 June 2023.¹⁰⁵ The site visit was combined with a teach-in, with slides agreed and presented by all parties to the appeals.¹⁰⁶

Confidentiality Ring

4.22 Following discussions with the Parties, a confidentiality ring was established. The purpose of this was to allow advisers to the Parties, each of whom had given undertakings on the treatment of information, access to information that was considered confidential to one or more Parties but was part of the evidence that the Group would consider.

Clarification of issues to be determined

4.23 In order to ensure clear understanding by all Parties of the issues to be determined, in July 2023 we shared a series of documents with summaries of our understanding of the key questions for determining the appeals brought on the each of the grounds and sub-grounds raised in the appeals.

4.24 The relevant appellants were invited to provide confirmation or comments on these documents. For the purpose of clarifying the issues, the Airlines agreed to coordinate between themselves on a single response.

4.25 Following correspondence with the relevant appellant(s), they were finalised during July and August 2023 and provide the basis of the 'Issues to be Determined' in the chapters of these determinations dealing with each ground or subground.¹⁰⁷

Hearings

4.26 The Group held hearings in July 2023, organised by Ground, which all Parties were invited to attend, either as appellants, respondent, intervener or observer.

4.27 The Airlines agreed to coordinate their appearance at the hearings, nominating one or more lead speakers between them.

¹⁰⁴ [The Rules \(CMA172\)](#), 27 October 2022.

¹⁰⁵ Some staff team members attended remotely.

¹⁰⁶ Teach-in slides, 6 June 2023.

¹⁰⁷ Referred to in this document as 'Agreed Issues for Determination'.

4.28 In order to enable the Airlines to discuss and consider together their joint responses at the hearings, we circulated an indicative list of questions to all Parties. For Ground D and Ground E, we circulated a list of topics in advance of the hearings that the Group might wish to cover to assist the Parties in preparing for the hearings and ensuring the appropriate representatives attended the hearings. The hearings were an opportunity for the Group to ask such questions as it considered necessary in order to make the findings in its determinations.¹⁰⁸

Requests for information

4.29 Before and after the hearings, we made a series of requests for information (**RFIs**) from the parties. RFIs and non-sensitive responses were shared with all Parties. Versions and parts of responses containing confidential information were shared within the Confidentiality Ring.

Closing statements

4.30 The Parties were invited to submit written closing statements, following completion of all hearings.¹⁰⁹ The Airlines submitted a combined closing statement. Both HAL and the CAA were also given the opportunity to submit short commentaries on a presentation given by the Airlines at the Ground C hearing on 18 July 2023.

4.31 These statements were submitted on 2 August 2023.¹¹⁰

Provisional determinations

4.32 On 8 September 2023 our Provisional Determination was issued to the Parties for comment, and a high-level summary was published on our case page for transparency.¹¹¹

4.33 Submissions in response to the Provisional Determination were received on 22 September 2023 from HAL, the CAA and jointly from the Airlines.

Final determinations and Order

4.34 After reviewing and taking into account the Parties' responses to the Provisional Determination, on 17 October 2023 we issued our Final Determination (including this document and the Order) to the Parties and published a high-level summary and news story on our case page. A non-sensitive version of the this document and the Order will be published as soon as practicable on our case page.

¹⁰⁸ [CMA173](#), paragraph 4.44.

¹⁰⁹ These were subject to restrictions on page length.

¹¹⁰ CAA Closing Submissions, (**CAA Closing Statement**), 2 August 2023; HAL H7 closing statement, (**HAL Closing Statement**) 2 August 2023; Airlines' closing statement, (**Airlines Closing Statement**) 2 August 2023.

¹¹¹ CMA, 'Summary of provisional determinations', 8 September 2023 (see [Summary of provisional determinations](#))

5. Ground A: RAB Adjustment

Introduction

- 5.1 The COVID-19 pandemic had a significant impact on HAL and the aviation sector. This chapter deals with the alleged errors in how the CAA responded to the impact of the pandemic. Specifically, the CAA adjusted HAL's RAB, increasing it by £300 million. Such an increase has the effect of allowing HAL to increase charges in future as a result of the RAB being the basis for setting allowances for depreciation and allowed returns in HAL's price controls.
- 5.2 In broad terms, HAL argued that the CAA should have increased the RAB further to compensate for losses during the pandemic to maintain investor confidence. In contrast, the Airlines argued that the CAA should have removed or reduced the RAB adjustment as the increase was not justified. Below we first deal with the errors HAL alleged before then addressing the errors alleged by the Airlines.

Background

- 5.3 In the Final Decision, the CAA set out how it calculated the value of HAL's RAB for the H7 price control period, building on its assessment in the Final Proposals. In the Final Proposals, the CAA explained that its calculations built on the practice established in previous price controls and were designed to provide 'an appropriate degree of certainty about the calculation of the RAB'.¹¹²
- 5.4 However, the exceptional circumstances of the COVID-19 pandemic raised new issues that had not been faced before. In particular, the fall in passenger numbers during 2020 and 2021¹¹³ meant that HAL was able to recover much less revenue from airport charges than it had in previous years (ie pre-pandemic).
- 5.5 In July 2020, HAL approached the CAA to request an adjustment to the RAB to address the shortfall in revenue it expected to experience in 2020 and 2021.
- 5.6 In April 2021, the CAA decided that the best way to further the interests of consumers, consistent with its primary duty under the Act, in response to the issues raised by HAL's request would be to make a targeted and focused regulatory intervention ahead of the H7 price review. The CAA decided that a RAB adjustment to increase it by £300 million (in 2018 prices) 'represented a

¹¹² 'Economic regulation of Heathrow Airport Limited: H7 Final Proposals', CAP2365, June 2022, (See: [Final and Initial proposals for H7 price control | Civil Aviation Authority](#)), (Final Proposals), [Section 3](#), CAP2365, paragraph 10.3.

¹¹³ See chapter 2, paragraphs 2.23–2.25, Figure 2.4.

transparent and proportionate intervention that was needed at the time to further the interests of consumers'.¹¹⁴

5.7 The CAA stated in its April 2021 decision 'Economic regulation of Heathrow Airport Limited: response to its request for a covid-19 related RAB adjustment.' CAP2140, 4 May 2021 (the **2021 RAB Adjustment Decision**) that the adjustment would further the interests of consumers, 'particularly by:

- (a) signalling to HAL the importance of maintaining appropriate investment and service quality levels ahead of the start of H7;
- (b) providing stronger incentives and financial capacity for HAL to be proactive in planning for potentially higher than expected traffic levels from the summer of 2021; and
- (c) facilitating HAL in being able to continue to access investment grade debt to finance its activities, particularly if traffic levels turned out to be lower than expected.'¹¹⁵

5.8 In taking this decision, the CAA 'took note of the weight that credit rating agencies place on their qualitative assessment of the regulatory framework and the possible benefits of signalling support for the notional company being able to access investment grade finance'. The CAA 'also noted that peak notional gearing levels were high relative to certain thresholds used by credit rating agencies'.¹¹⁶

5.9 The CAA maintained the £300 million RAB adjustment in the Final Decision and then set its calculation of the opening RAB for H7 based on a roll-forward of the Q6 opening RAB, 'including the application of an end-of-period adjustment which reflected our proposed RAB adjustment'.¹¹⁷

HAL's appeal

5.10 In its Notice of Appeal (**NoA**), HAL submitted that the CAA erred in law and/or in the exercise of a discretion by failing to make a proper adjustment to HAL's RAB in order to redress the catastrophic shortfall in passenger numbers and revenue resulting from the imposition of Government restrictions in response to the COVID-19 pandemic.¹¹⁸

¹¹⁴ CAA, [Economic regulation of Heathrow Airport Limited: H7 Initial Proposals, October 2021](#), (**Initial Proposals**), [Section 2](#), CAP2265, paragraph 6.8.

¹¹⁵ CAA, Witness statement from Andrew Walker (**A Walker 1**), 31 May 2023, paragraph 9.30 and CAA, [Economic regulation of Heathrow Airport Limited: response to its request for a covid-19 related RAB adjustment, April 2021](#) (CAP 2140) (**2021 RAB Adjustment Decision**), paragraph 24.

¹¹⁶ [Initial Proposals, Section 2](#), paragraph 6.10.

¹¹⁷ [Final Decision, Section 3](#), paragraphs 10.6 and 10.73.

¹¹⁸ [HAL Notice of Appeal \(HAL NoA\)](#), 18 April 2023, paragraph 33.

- 5.11 HAL alleged that the CAA erred as follows:
- (a) first, in refusing to make a RAB adjustment calibrated to redress the catastrophic shortfall in passenger numbers and hence revenue, the CAA fails to respect the terms of the previous regulatory settlement and hence reasonable investor expectations as to the allocation of risk in the current regulatory settlement (**Error 1**);¹¹⁹ and
 - (b) second, and in any event, the CAA erred in failing to make a RAB adjustment calibrated to compensate for depreciation of the RAB during the pandemic (**Error 2**).¹²⁰
- 5.12 HAL contended that, in making the above errors, the CAA acted contrary to its statutory objectives of promoting the interests of current and future consumers, and failed to have any regard, or alternatively proper regard, to the principles of proportionality and consistency and the need to secure that each holder of a licence under Chapter 1 of Part 1 of the Act is able to finance its provision of airport operation services in the area for which the licence is granted.¹²¹
- 5.13 In relation to Error 2, HAL also contended that the second error was a disproportionate and unlawful interference with its property rights for the purposes of Article 1 Protocol 1 of the European Convention on Human Rights (**ECHR**).¹²²
- 5.14 The overall statutory questions for our determination are therefore as follows.
- (a) Was the Final Decision wrong because it was wrong in law, or because the CAA made an error in the exercise of a discretion, in that the CAA refused to make an adjustment to HAL's RAB to redress the shortfall in passenger numbers and revenue?
 - (b) Was the Final Decision wrong because it was wrong in law, or because the CAA made an error in the exercise of a discretion, in failing to make a RAB adjustment calibrated to compensate for depreciation of the RAB during the pandemic?
- 5.15 Taking into account HAL's submissions, in order to determine the overall statutory questions set out at paragraph 5.14 above, we have addressed the following subsidiary questions as to whether the CAA was wrong in law and/or in the exercise of a discretion:

¹¹⁹ [HAL NoA](#), paragraph 40.1.

¹²⁰ [HAL NoA](#), paragraph 40.2.

¹²¹ [HAL NoA](#), paragraph 41.

¹²² [HAL NoA](#), paragraph 100 and [European Convention on Human Rights](#), page 33 (accessed 12 October 2023).

- (a) in allocating passenger traffic risk to HAL: did past regulatory practice give rise to reasonable investor expectations that they would not be expected to carry such risk?
- (b) by failing, when allocating the risk in relation to passenger numbers, to carry out its functions in a way that it considers will further the interests of users of air transport services regarding the range, availability, continuity, cost and quality of airport operation services?
- (c) by failing, when allocating the risk in relation to passenger numbers, to have regard to the principles that regulatory activities should be carried out in a way which is proportionate and consistent?
- (d) by failing, when allocating the risk in relation to passenger numbers, to have regard to the need to secure that each holder of a licence under Chapter 1 of Part 1 of the Act is able to finance its provision of airport operation services in the area for which the licence is granted?
- (e) by failing to make a RAB adjustment calibrated to compensate for depreciation of the RAB during the pandemic, because the RAB is intended to secure that investors receive the return of efficiently invested capital, and COVID-19 restrictions prevented HAL having a fair opportunity to recover the depreciation applied to the RAB by the CAA during the pandemic?

5.16 In support of its appeal, HAL made the following detailed submissions.

Error 1 – Was the CAA wrong – in law and/or in the exercise of a discretion – to allocate catastrophic passenger risk to HAL?

5.17 HAL submitted that the CAA was wrong because:

- (a) It was clear from previous regulatory settlements, that HAL’s investors were not expected to bear the impact of catastrophic events of the scale of the COVID-19 pandemic and were not remunerated under the price control for bearing catastrophic risk.¹²³
- (b) The Q6 settlement ‘embodied a view that, whilst HAL was expected to bear a certain, expected level of passenger volume risk, action could and should have been taken if traffic was significantly at odds with the forecast’.¹²⁴
- (c) The impact of COVID-19 vastly exceeded either the average or the range of shocks that the CAA had regard to in setting the Q6 price control.¹²⁵

¹²³ [HAL NoA](#), paragraphs 74 and 80.4.

¹²⁴ [HAL NoA](#), paragraph 78.

¹²⁵ [HAL NoA](#), paragraph 82.

- (d) To the extent that the impact of the COVID-19 restrictions fell outside the risks allocated to investors under the existing price control settlement, the CAA's statutory duty required it to take effective action substantially to redress the consequent collapse in passenger numbers and revenue, save insofar as Heathrow was able to mitigate it.¹²⁶
- (e) The CAA clearly rejected a policy of non-intervention because 'failing to intervene could create difficulties for Heathrow in financing itself and increase the cost of capital on a forward-looking basis', but its intervention did not go far enough to satisfy its regulatory duties.¹²⁷
- (f) The start and end point of the CAA's statutory duties is the interests of both current and future consumers. Those interests are not always served simply by taking action that directly lowers charge per passenger in the short term, without regard to the impact on prices over the long term.¹²⁸
- (g) Consumers' interests are also required to be considered with reference to the factors in section 1(3) of the Act, including financeability, proportionality and consistency. Those interests are not served by inconsistent regulatory action which undermines confidence in the regulatory scheme and as such is liable to increase the cost of capital and is a risk to financeability. Proportionality requires that the action taken by the CAA should be calibrated to address the fundamental reason for intervention, namely the crystallisation of a catastrophic risk which had not been allocated to investors.¹²⁹
- (h) The CAA's refusal to implement a RAB adjustment which compensates HAL for the occurrence of a catastrophic demand shock, or at least ensures it will achieve the return of its capital, is contrary to the requirements of financeability, proportionality and regulatory consistency, and therefore contrary to the interests of consumers.¹³⁰

Error 2 – Was the CAA wrong – in law and/or in the exercise of a discretion – in failing to make a RAB adjustment calibrated to compensate for depreciation of the RAB during the pandemic?

5.18 HAL submitted that the CAA was wrong because:

¹²⁶ [HAL NoA](#), paragraphs 87–90.

¹²⁷ [HAL NoA](#), paragraphs 59 and 63.

¹²⁸ [HAL NoA](#), paragraph 88.

¹²⁹ [HAL NoA](#), paragraph 89.

¹³⁰ [HAL NoA](#), paragraph 89.

- (a) The RAB reflects HAL’s previous investment in the business – its capital base – and is intended to secure that investors receive the return of efficiently invested capital.¹³¹
- (b) One way the RAB is factored into the price control, helping to provide Heathrow with both return of, and return on, capital invested, is in relation to annual depreciation. The depreciation charge depletes the RAB, and thus reduces HAL’s stock of capital. However, this depreciation is treated as a cost, so Heathrow is compensated for it through the price control, ensuring HAL receives the return ‘of’ the RAB, ie recovery of a proportion of its previously invested capital.¹³²
- (c) Depreciation of the RAB matches an appropriate share of HAL’s accumulated capital investment to the opportunity to earn revenue in a particular year. However, for prolonged periods during the COVID-19 pandemic, HAL had no opportunity to earn revenue from its accumulated asset base.¹³³
- (d) The price control represents a control of use of property, within Article 1 Protocol 1 (**A1P1**) of the European Convention on Human Rights.¹³⁴ The depreciation mechanism is a form of expropriation: the RAB is an asset, representing a stock of invested capital on which HAL earns a return and the depreciation charge removes part of the value of that asset each year. Such expropriation must be proportionate. Normally it is, as the depreciation charge is also used to set the level of the price control, so an equivalent sum is returned to HAL. However, under the Government’s COVID-related restrictions, the operation of the charge control did not permit the return of the RAB. In those circumstances, the operation of the depreciation charge is disproportionate and unlawful. The CAA and CMA are obliged under section 6 Human Rights Act 1998 (**HRA**) to take action to remedy this disproportionate interference with HAL’s rights. Section 3 HRA requires that the provisions of the Act be interpreted, so far as possible, to enable this interference to be remedied.¹³⁵

5.19 We address each of these submissions and the supporting evidence on which HAL has relied in turn in our assessment below.

¹³¹ [HAL NoA](#), paragraphs 40.2 and 93.

¹³² [HAL NoA](#), paragraph 93.

¹³³ [HAL NoA](#), paragraph 96.

¹³⁴ [European Convention on Human Rights](#), page 33.

¹³⁵ [HAL NoA](#), paragraph 100.

CAA Response

- 5.20 In response, the CAA submitted that HAL's argument that because the CAA did not provide specific ex-ante compensation for bearing the risks of the COVID-19 pandemic, then it was incumbent on the CAA to provide that compensation ex-post, was misconceived.¹³⁶
- 5.21 The CAA submitted that it had taken steps in respect of the RAB adjustment, re-opened the price control and made an adjustment appropriate to the circumstances of the COVID-19 pandemic, all of which was consistent with what was envisaged at the Q6 price control in terms of re-opening the control in exceptional circumstances. To go beyond that and apply mechanistic and retrospective compensation 'is unlikely to achieve anything more for consumers'.¹³⁷
- 5.22 In particular, the CAA submitted that it did not consider that a further RAB adjustment was likely to reduce the cost of capital, since it had taken further steps as part of the H7 review to introduce a TRS mechanism and an allowance for asymmetric risk and had also adjusted its approach to estimating the cost of capital. The CAA concluded that HAL's proposal would be very largely a value transfer from consumers to investors and to permit this would not be consistent with the CAA's statutory duties.¹³⁸
- 5.23 As regards HAL's argument that the impact of the COVID-19 pandemic fell outside the risks allocated to investors under the Q6 settlement and that the CAA was therefore required to intervene to respect previous regulatory settlement and investor expectations, the CAA submitted that HAL's submission was misconceived for the following reasons:
- (a) all volume risk was allocated to HAL under Q6 with the only proviso being to re-open the price control in exceptional circumstances, as it did by assessing HAL's request for a COVID-19 related RAB adjustment.
 - (b) further, 'the relevance of the Q5¹³⁹ determination is limited by the fact that it took place over 15 years ago'; and, even if it were relevant, the arguments put forward by HAL did not suggest that the CAA's decision on the RAB adjustment was wrong.¹⁴⁰
- 5.24 The CAA maintained that, under Q6, HAL was to bear all upside and downside volume risk in exchange for the allowed cost of capital and that this was the basis

¹³⁶ [CAA, Response to applications for permission to appeal \(CAA Response\)](#), 31 May 2023, paragraph 72.

¹³⁷ [CAA Response](#), paragraph 72.

¹³⁸ [CAA Response](#), paragraph 72.

¹³⁹ 'Q5' was the price control for the period from 2008 to 2013, the approach to which was subsequently extended to cover January to March 2014.

¹⁴⁰ [CAA Response](#), paragraph 74.

upon which HAL and its shareholders accepted the Q6 price control settlement.¹⁴¹ Although the Q6 settlement made no direct reference to COVID-19 or a similar event, ‘it is not true that the risk of such events was not allocated’; ‘all volume risks were allocated to HAL, save for the proviso that the price control could be re-opened in exceptional circumstances’.¹⁴²

- 5.25 The CAA contended that its approach to considering HAL’s RAB adjustment request was entirely consistent with its approach in the Q6 decision that regulatory intervention was possible, but that no particular (or any) intervention was predetermined at that time. The CAA considered that it had honoured ‘both the letter and the spirit of the Q6 settlement’ by taking as its starting point that HAL bore volume risk, and then responding to HAL’s request by carrying out the review that resulted in the 2021 RAB Adjustment Decision¹⁴³ through the lens of its statutory duties.¹⁴⁴
- 5.26 As regards the fulfilment of its statutory duties, the CAA submitted that its decision to make a £300 million RAB adjustment supported both the interests of consumers and HAL’s financeability. The CAA did not consider it was possible to reconcile HAL’s suggested approach with its duties to protect consumers and act in a proportionate and reasonably consistent way.¹⁴⁵
- 5.27 In turning to HAL’s Error 2, the CAA submitted that HAL is not entitled to recover its invested capital and there was no such regulatory commitment made by the CAA that would entitle HAL to such recovery. The CAA considered that any mismatch between regulatory depreciation and the revenues actually collected by HAL represented ‘nothing more than the crystallisation of the demand risk that HAL bore under the Q6 price control settlement’.¹⁴⁶
- 5.28 On HAL’s suggestion that the depreciation of its RAB amounts to a ‘deprivation’ within the meaning of A1P1, the CAA submitted that ‘that argument is hopeless’. The CAA maintained that the RAB is a regulatory judgement as to the value of the investment in the business and is not itself a ‘possession’ within the meaning of A1P1. It submitted that ‘it is a mechanism to assess the value of other possessions in which HAL has invested and which is then used to impose a price cap. It creates no entitlement or legitimate expectation which could amount to a “possession”’. Further, the CAA contended that it is inherent in the nature of capital investment that the value of that investment depreciates over time and that

¹⁴¹ [CAA Response](#), paragraph 85.

¹⁴² [CAA Response](#), paragraphs 86 and 88.

¹⁴³ [2021 RAB Adjustment Decision](#).

¹⁴⁴ [CAA Response](#), paragraph 88.

¹⁴⁵ [CAA Response](#), paragraph 93.

¹⁴⁶ [CAA Response](#), paragraph 94.

this is ‘neither a deprivation nor a control of use for the RAB calculation to reflect that fact’.¹⁴⁷

Interveners’ submissions

5.29 BA and Delta (the **Airline Interveners**) both intervened in HAL’s appeal. They made the following points:

- (a) First, that a further adjustment of the RAB would undermine the purpose of the RAB and, in consequence, the coherence of the price control as a whole;
- (b) Second, that HAL’s assertions as to the allocation of risk under the Q6 price control are entirely without foundation;
- (c) Third, that the difficulties HAL faced during the COVID-19 pandemic were significantly aggravated by its abnormally high debt ratios, and ought to be disregarded because HAL’s shareholders should bear the risks associated with HAL’s high gearing, not consumers; and
- (d) Finally, that HAL’s alternative case (concerning depreciation) is unprincipled and cannot be supported.¹⁴⁸

5.30 We address each of the CAA’s points and the submissions made by the Airline Interveners in support of the CAA, including relevant supporting evidence, in our assessment below.

Assessment: HAL’s Error 1

5.31 In this section we consider the arguments made by HAL in relation to its Error 1, ie that the impact of the COVID-19 pandemic fell far outside the risks which were allocated to investors under the Q6 settlement, and that the CAA was therefore required to intervene in order to fulfil the risk allocation implied and understood under the Q6 settlement. To avoid duplication, we also consider related arguments made under Error 2 in paragraphs 5.152 to 5.157.

5.32 We begin by setting out a summary of our approach and the conclusions we have reached based on our analysis, followed by a background section summarising key elements of CAA’s decision-making process. We then consider each of the following subsidiary questions:

¹⁴⁷ [CAA Response](#), paragraph 96.

¹⁴⁸ [BA, Application for permission to intervene and Notice of Intervention \(BA Nol\)](#), 22 May 2023, paragraph 2.1.3; and [Delta, Application for permission to intervene and Notice of Intervention \(Delta Nol\)](#), 22 May 2023, paragraph 2.3.

- (a) Whether past regulatory statements and precedent gave rise to reasonable investor expectations that they would not be expected to carry traffic risk for catastrophic events;
- (b) Whether the CAA failed in the allocation of risk in relation to passenger numbers to carry out its functions in a way that it considered furthered the interests of users of air transport services in relevant respects;
- (c) Whether the CAA failed in the allocation of risk in relation to passenger numbers to have regard to the principles that regulatory activities should be carried out in a way that is proportionate and consistent; and
- (d) Whether the CAA failed in the allocation of risk in relation to passenger numbers, to have regard to the need to secure financeability in accordance with its statutory duty.

Summary of our approach and conclusions

- 5.33 We have considered HAL's contentions that the CAA's decision was wrong because it was wrong in law or because the CAA made an error in the exercise of a discretion, in line with the legal framework described in chapter 3. That includes considering whether the CAA was wrong in law because it misdirected itself as to, or otherwise failed to comply with, its statutory duties. Likewise, we considered whether the CAA was wrong in law because it failed to take account of past regulatory practice giving rise to reasonable expectations that investors would not carry the relevant passenger traffic risk, or otherwise committed an error of public law that would be amenable to judicial review in the High Court. Our assessment also includes making a judgement about whether the CAA made an error in the exercise of a discretion because it made a choice, albeit a rational one, where a clearly superior alternative advanced by HAL was available to it.
- 5.34 Following an in-depth review and assessment of the Parties' submissions and supporting evidence, and on the basis of the considerations set out in further detail below, we find that the CAA did not err in law or err in the exercise of a discretion as HAL submitted in respect of Error 1. The CAA did not err by failing to take account of past regulatory practice giving rise to reasonable expectations that investors would not carry the relevant passenger traffic risk because such risk was allocated to HAL's investors. Neither did it err by failing to comply with its statutory duties. Our finding is that the CAA carried out its functions in a way that it properly considered will further the interests of users of air transport services in relevant respects and which had regard to the principles of proportionality and consistency and to the need to secure financeability.
- 5.35 In particular, we find that passenger volume risk generally was allocated to HAL and its investors in the previous, Q6, price control. The CAA also said, as part of

the Q6 settlement that, in exceptional circumstances (for example, the realisation of catastrophic risk), it could re-open the price control and consider the matter in line with its statutory duties. That is what the CAA did in making the £300 million RAB adjustment. It was not a commitment that meant HAL and its investors were relieved of that risk such that they could or should have expected any guaranteed level of compensation for losses arising in such circumstances.

5.36 In response to our Provisional Determination, HAL submitted that our determination would have wider implications for the use of RAB-based regulation in other regulated sectors and that the CMA is missing wider considerations of regulatory consistency, economy, efficiency and broader impacts on the level of investment across all of the regulated infrastructure sectors.¹⁴⁹ We disagree and observe that:

- (a) the appeals that are the subject of this Final Determination concerned the CAA's decision in this particular case, ie the Final Decision, and whether any aspect of that decision was wrong;
- (b) this is a question to be determined in the context of the settlement in Q6 and by reference to what was decided, and on what basis, for H7, taking into account, among other things, the purpose of RAB regulation of HAL;
- (c) we have taken into account that the CAA acted in accordance with the position in the Q6 settlement which placed traffic volume risk generally with HAL, the commitment it made as to re-opening that settlement and with its statutory duties; and
- (d) in that context, we have found that the CAA acted consistently with the RAB regulatory model as it applied in those circumstances.

5.37 Specifically, and partly to reiterate the points in paragraph 5.35 above, the CAA:

- (a) having placed volume risk generally with HAL in Q6, also made provision for the Q6 control to be reopened in exceptional circumstances;
- (b) re-opened the Q6 control in response to a request by HAL, and considered the impact of the pandemic in the light of its statutory duties – in line with the commitment it had made to provide for such a reopening; and
- (c) for H7, preserved its 2021 RAB Adjustment Decision in the Final Decision, given that the tests for not doing so as set in that Decision had not been met.

5.38 In that context, our determination as to whether or not the CAA was wrong in this particular case does not change the approach to the RAB regulatory model more

¹⁴⁹ HAL, Response to PD, 22 September 2023 (**HAL Response to PD**), paragraphs 160 and 198-200.

generally. Nor, in our judgement, does finding that the CAA was not wrong, because it treated risk as it said it would and met the commitments it made, offend against the principle of regulatory consistency.

Background to CAA decision on this matter

- 5.39 We set out below relevant background information on the Q6 and H7 settlements. In response to our Provisional Determination, HAL submitted that the factual background on which we based our assessment was both incomplete and in places inaccurate.¹⁵⁰ We have taken account of these further submissions in this background section as well as in our assessment sections as relevant.
- 5.40 The CAA stated in its Q6 Final Proposals that the risk that the outturn passenger numbers were different from forecast would be borne by the company and its shareholders and that the CAA would therefore allow a higher rate of return for the company than would otherwise be the case to compensate for this risk.¹⁵¹ The CAA also said that HAL could request that its price control be reopened at any time and that the CAA would consider such a request in the light of its statutory duties under the circumstances prevailing at the time.¹⁵² We note that the CAA did not expand in either the Q6 Final Proposals or Q6 Final Decision on the circumstances in which it would reopen the price control and the outcomes that might result from a reopening.
- 5.41 In response to our Provisional Determination, HAL stated that the first of these CAA statements had been taken out of context and that it was clear from the original text that it relates solely to business-as-usual risk and not catastrophic risk.¹⁵³ We have noted that the CAA made this statement in response to submissions on double counting in the application of the shock factor to the traffic forecasts and factors considered in determining the WACC. Nevertheless, we consider the statement to be informative as to where any passenger volume risk lies. We consider in our assessment section, paragraphs 5.64 to 5.94, submissions made on the distinction made between business-as-usual and catastrophic risks.
- 5.42 The CAA said in its Q6 Initial Proposals and Final Proposals that it had asked stakeholders whether there was merit in introducing a traffic risk-sharing mechanism,¹⁵⁴ but given the lack of support for the concept and the parties' preference to handle traffic risk using alternative mechanisms, the CAA had not

¹⁵⁰ HAL Response to PD, paragraph 161.

¹⁵¹ CAA, [Economic regulation at Heathrow from April 2014: final proposals](#) (CAP 1103) (Q6 Final proposals), paragraph 3.14.

¹⁵² CAA, [Q6 Final proposals](#), paragraph 2.11, and CAA, January 2014, [Economic regulation at Heathrow from April 2014: Notice of the proposed licence](#), paragraph A12.

¹⁵³ HAL Response to PD, paragraph 163.

¹⁵⁴ The CAA noted at the time that it had introduced a traffic sharing mechanism for NERL (see [Q6 Final Proposals](#), paragraph 2.58)

pursued this concept.¹⁵⁵ In the Ground A hearing HAL explained that, at the time, it was very much focused on seeking clarity around the treatment of catastrophic risk and that business-as-usual traffic risk-sharing was not something it had modelled in its business plan and did not therefore pursue.¹⁵⁶

- 5.43 In July 2020, HAL requested a re-opening of the Q6 price control asking the CAA to make a RAB Adjustment to compensate for COVID-19 traffic shortfall.¹⁵⁷
- 5.44 In October 2020, the CAA published its initial views on HAL's request. The CAA noted that while it could reopen the Q6 price control to deal with exceptional circumstances, HAL's licence 'did not include a specific mechanism to reopen the price control, or any specific criteria by which any request for such reopening would be assessed'.¹⁵⁸
- 5.45 However, the CAA said that it was very clear that the impact of the pandemic had created exceptional circumstances and that it had recognised the need to consider how the regulatory framework should change in response to these challenges, and that it had started to address issues in its work on the review of HAL's H7 price control. Nonetheless, the starting point for its assessment was 'a long standing system of economic regulation that allocates managing traffic risk to HAL, and that HAL accepted the continuation of these arrangements as part of a licence modification in 2019'.¹⁵⁹
- 5.46 The CAA stated that it had assessed the request in accordance with its statutory duties that included its primary duty to further the interests of consumers, where appropriate by promoting competition and its other duties, including to have regard to HAL's financeability.¹⁶⁰
- 5.47 In its 2021 RAB Adjustment Decision, the CAA set out six key objectives it considered consistent with its statutory duties for determining how it should further the interests of consumers, as follows:
- (a) to protect efficient investment and service quality levels;
 - (b) to promote economy and efficiency, including affordable charges;
 - (c) to protect consumers by avoiding undue increases in the cost of equity finance;

¹⁵⁵ CAA, [Q6 Initial Proposals](#), paragraph 14.17, [Q6 Final proposals](#), paragraphs 2.58–2.61.

¹⁵⁶ Transcript of Hearing – Ground A, 25 July 2023 (**Transcript of Ground A Hearing**), page 48, lines 22–25.

¹⁵⁷ CAA, ['Economic regulation of Heathrow Airport Limited: response to its request for a COVID-19 related RAB adjustment'](#), CAP1966, 9 October 2020, (**CAA October 2020 Consultation**), paragraph 4.

¹⁵⁸ [CAA October 2020 Consultation](#), paragraph 1.

¹⁵⁹ [CAA October 2020 Consultation](#), paragraphs 13 and 14.

¹⁶⁰ [CAA October 2020 Consultation](#), paragraph 13.

- (d) to protect consumers from the consequences of HAL experiencing difficulties with raising debt, including by avoiding undue or inefficient increases in the cost of debt finance;
- (e) to continue to promote competition; and
- (f) to have regard to the 'Better Regulation Principles' set out in the Act (the **Better Regulation Principles**), including proportionality and consistency.¹⁶¹

5.48 The CAA considered that an early regulatory intervention, in the form of a RAB adjustment of £300 million, ahead of the H7 price review was the best way to further the interests of consumers in response to the impact of the COVID-19 pandemic, having regard to both its primary and secondary duties. As we note in the introductory paragraph 5.7 above, it considered that such an intervention would further the interests of consumers, 'particularly by:

- (a) signalling to HAL the importance of maintaining appropriate investment and service quality levels ahead of the start of H7;
- (b) providing stronger incentives and financial capacity for HAL to be proactive in planning for potentially higher than expected traffic levels from the summer of 2021; and
- (c) facilitating HAL in being able to continue to access investment grade debt to finance its activities, particularly if traffic levels turned out to be lower than expected.'¹⁶²

5.49 The CAA also concluded that many important arguments raised by HAL would be best considered as part of the H7 price control review, including the broad issues around the protection of regulatory depreciation, the impact on the cost of capital and the overall balance of risk and reward with traffic risk-sharing.¹⁶³

5.50 The CAA published its Final Proposals in June 2022 and its Final Decision in March 2023. In these documents, the CAA stated that the impact of the COVID-19 pandemic clearly revealed new information on risks that was not available at the time of the Q6 settlement. The CAA also stated that it had taken this new information into account on a forward-looking basis for the H7 period, in particular with the introduction of the TRS mechanism, as well as the allowance for asymmetric risk and its approach to the cost of capital.¹⁶⁴

¹⁶¹ A Walker 1, paragraph 9.27, referring to [2021 RAB Adjustment Decision](#), paragraph 19 and page 23, Figure 1.

¹⁶² A Walker 1, paragraph 9.30 and [2021 RAB Adjustment Decision](#), paragraph 24.

¹⁶³ A Walker 1, paragraph 9.28, referring to [2021 RAB Adjustment Decision](#), paragraphs 21 and 3.33.

¹⁶⁴ [CAA Response](#), paragraph 62.2.

The Traffic Risk-Sharing (TRS) mechanism in H7

- 5.51 The CAA told us that the TRS was introduced in H7 in response to the greater than normal uncertainty about future traffic levels and to provide HAL with greater protection from the impact of future extreme events.¹⁶⁵
- 5.52 The mechanism provides for a 50% sharing of any difference between actual and forecast revenues up to 10% of forecast allowed revenues, and 105% of any difference above 10% of forecast allowed revenues.¹⁶⁶ The CAA estimated that taking into account the expected impact of traffic changes on operating expenditure and commercial revenues, for differences up to 10%, the TRS will protect HAL from 45% of the overall impact on its profits and, for differences of more than 10%, the TRS will protect HAL from 91-94% of the overall impact on its profits.¹⁶⁷
- 5.53 The CAA said that the outer band is ‘intended to provide HAL with a relatively high degree of protection from the impact of extreme events, while still preserving some incentive for it to take action to facilitate traffic growth’.¹⁶⁸
- 5.54 The CAA reduced the asset beta by a range of 0.08-0.09 to take account of the impact of TRS on risk.¹⁶⁹
- 5.55 The CAA concluded that no further adjustment was required to the H7 opening RAB,¹⁷⁰ taking into account that: HAL's investors bore passenger volume risk in Q6; the £300 million RAB adjustment having been made in 2021 for the reasons set out above; and the TRS mechanism having been introduced in respect of future passenger volume risk.

Consideration of subsidiary questions

Regulatory statements and precedent on the allocation of traffic risk

- 5.56 The first subsidiary question (a) to be addressed in HAL’s appeal is whether past regulatory practice gave rise to reasonable investor expectations that they would not be expected to carry traffic risk for catastrophic events.¹⁷¹

¹⁶⁵ Teach-in slides, 6 June 2023 slide 32, first bullet point.

¹⁶⁶ [Final Decision, Section 1](#), paragraph 2.20.

¹⁶⁷ [Final Decision, Section 1](#), paragraph 2.6 and 2.21.

¹⁶⁸ Teach-in slides, 6 June 2023, slide 32. last bullet point.

¹⁶⁹ [Final Proposals, Section 3](#), paragraph 9.145 and Table 9.2.

¹⁷⁰ [Final Proposals, Section 3](#) paragraph 10.100.

¹⁷¹ CMA, Ground A – RAB Adjustment: Issues for Determination Heathrow Airport Limited, Jul 2023 (**Ground A: HAL Agreed Issues for Determination**), paragraph 9(a).

HAL's submissions

5.57 As we note above, HAL made several submissions in support of its position on the allocation of traffic risk in the Q6 price control period including that it was clear that:

- (a) based on previous regulatory settlements and precedent, HAL's investors were not expected to bear the impact of catastrophic events of the scale of the COVID-19 pandemic.¹⁷²
- (b) the Q6 settlement 'embodied a view that, whilst HAL was expected to bear a certain, expected level of passenger volume risk, action could and should have been taken if traffic was significantly at odds with the forecast'.¹⁷³ In particular, that:
 - (i) the impact of COVID-19 'vastly exceeded either the average or the range of shocks that the CAA had regard to in setting the Q6 price control';¹⁷⁴ and
 - (ii) investors were not remunerated under the price control for bearing catastrophic risk.¹⁷⁵

5.58 In response to our Provisional Determination, HAL provided an annex summarising its prior submissions.¹⁷⁶ This provided clear and helpful clarification of HAL's case as set out in those previous submissions.

CAA Response

5.59 We have also noted above that, in response to HAL's NoA submissions, the CAA submitted that:

- (a) the Q6 price control framework clearly allocated all traffic risk to HAL but provided for the possibility of the price control to be re-opened in exceptional circumstances.¹⁷⁷
- (b) under the Q6 settlement, HAL was to bear all upside and downside volume risk in exchange for the allowed cost of capital. This was the basis upon

¹⁷² [HAL NoA](#), paragraphs 74 and 86.

¹⁷³ [HAL NoA](#), paragraph 78.

¹⁷⁴ [HAL NoA](#), paragraph 82.

¹⁷⁵ [HAL NoA](#), paragraph 80.4.

¹⁷⁶ HAL PD Response, Annex A1: 'RAB Diagram – Basis of Rational Investor Expectations at Q6'

¹⁷⁷ [CAA Response](#), paragraphs 62.1 and paragraph 86.

which HAL and its shareholders accepted the Q6 price control settlement.^{178,179}

- (c) the fact that COVID-19 was not foreseen, nor in the range of shocks the CAA had regard to in setting the Q6 price control, does not mean the risk of it was not allocated.¹⁸⁰
- (d) the CAA has honoured ‘both the letter and the spirit of the Q6 settlement by taking as its starting point the position that HAL bore volume risk, and then responding to HAL’s request by carrying out the review that resulted in the April 2021 RAB Adjustment Decision through the lens of its statutory duties’.¹⁸¹
- (e) there is ‘therefore, no merit in HAL’s contention that the CAA was bound, by virtue of previous regulatory settlements, to adopt a particular approach to HAL’s RAB in the light of the COVID-19 pandemic’.¹⁸²

Interveners’ submissions

- 5.60 We have similarly noted above that the Airline Interveners were supportive of the CAA’s position. More specifically, they submitted that it was clear from HAL’s response to the CAA’s H7 Initial Proposals (**Initial Proposals**) that it well understood that it would bear volume risk during the H7 price control period. They referred specifically to HAL welcoming the introduction of the TRS because (amongst other things) the impact of COVID-19 has highlighted that the previous regulatory framework did not have the necessary protections to deal with the asymmetric risk faced by HAL.^{183, 184}
- 5.61 The Airline Interveners submitted that a proposal to introduce volume risk-sharing was shelved even prior to the Initial Proposals stage in Q6,¹⁸⁵ and that a consequence of this was that the Q6 proposals explicitly allocated all volume risks to HAL and its shareholders, allowing a higher rate of return for the company than would otherwise be the case to compensate for that risk.¹⁸⁶

¹⁷⁸ [CAA Response](#), paragraph 85.

¹⁷⁹ The CAA referred to the statement in their Q6 Final Proposals that ‘the risk that the outturn is different is borne by the company and its shareholders. The CAA therefore allows a higher rate of return for the company than would otherwise be the case to compensate for this risk.’ [Q6 Final Proposals](#), paragraphs 3.13 and 3.14.

¹⁸⁰ [CAA Response](#), paragraph 88.

¹⁸¹ [CAA Response](#), paragraph 88.

¹⁸² [CAA Response](#), paragraph 89.

¹⁸³ [HAL Response to CAP2265 Initial Proposals, October 2021](#), paragraph 1.0.1.

¹⁸⁴ [BA Nol](#), paragraph 2.3.2 and [Delta Nol](#), paragraph 2.12.

¹⁸⁵ [BA Nol](#), paragraph 2.3.6(c) and [Delta Nol](#), paragraph 2.16(c).

¹⁸⁶ [BA Nol](#), paragraph 2.3.6(d) and [Delta Nol](#), paragraph 2.16(d).

5.62 They also submitted that while the CAA may have been required to consider a request to revisit the price control it was under no obligation to make any changes.¹⁸⁷

Our assessment

5.63 As set out in paragraph 5.57, HAL made two main arguments in support of its submissions on the allocation of traffic risk in the Q6 price control period. We consider each of these in turn.

Regulatory statements and precedent

5.64 HAL argued that it is clear from statements by the CAA in previous regulatory periods and precedent in the aviation and other sectors that investors were not expected to bear the risks of events such as the COVID-19 pandemic.¹⁸⁸

Previous price control statements

5.65 Our view is that there is no dispute between the CAA and HAL that in previous price control periods the CAA and the CC distinguished between ‘business as usual’ and exceptional or catastrophic risks and that exceptional circumstances could warrant a reopening of the control.^{189, 190}

5.66 We determine, however, that the regulatory statements to which HAL has referred in its NoA do not support its case on the allocation of risk. The CAA, having considered and decided not to adopt a TRS mechanism, confirmed in the Q6 Final Proposals that the ‘risk that the outturn is different is borne by the company and its shareholders’.¹⁹¹ That is, it placed passenger volume risk on HAL and its investors generally. While the CAA stated in the Q6 Final Proposals that HAL may request that the price control be reopened at any time, the CAA made no commitments in these statements in relation to the action it would take in the event of exceptional circumstances arising, beyond that it would consider requests to reopen a price control and to do so in accordance with its statutory duties.¹⁹²

5.67 Given the nature of those statements, they do not provide support for HAL’s position on the compensation that it considers should be paid to investors for the impact of the COVID-19 pandemic on passenger numbers and accordingly on

¹⁸⁷ [BA NoJ](#), paragraph 2.3.9 and [Delta NoJ](#), paragraph 2.19.

¹⁸⁸ [HAL NoA](#), paragraphs 74 and 86.

¹⁸⁹ [CAA Response](#), paragraphs 77.1 and 77.2; referring to Q5 Final Decision, paragraph 3.8. ([Economic regulation of Heathrow and Gatwick airports 2008-2013: CAA decision and Q5 Final Decision](#), paragraph E.70. ([Economic regulation of Heathrow and Gatwick airports 2008-2013: CAA decision](#))).

¹⁹⁰ [CAA Response](#), paragraph 74.2 and [Q6 Final Proposals](#), paragraph 10.27.

¹⁹¹ [Q6 Final Proposals](#), paragraph 3.13.

¹⁹² [Q6 Final Proposals](#), paragraphs 2.11 and 12.114.

HAL's revenue. Nor do these statements support a reasonable expectation that investors would necessarily be compensated for any related losses.

5.68 At the Ground A hearing we asked HAL to point us to any statements in previous price controls that set out the expected outcomes of a decision by the CAA to reopen the Q6 or previous price controls (which would have been consistent with a transfer of the risk away from HAL's investors). We note that in response HAL referred us to the same statements reported in its NoA,¹⁹³ and to a paragraph in the Q6 Initial Proposals that said:

It is important that, once the level of the WACC is set, HAL is able to attain this level of profitability if it meets the other price control assumptions, particularly relating to efficiency and service quality [...]The new licensing framework also enables the CAA to revisit the price control within the five year period, if key assumptions such as traffic are significantly out of line with projections.¹⁹⁴

5.69 That latter statement again, however, is a statement, made at the initial proposal stage of the Q6 process, that reflects the position that would apply in any event (and whether or not the CAA had made such a statement expressly).

5.70 In response to our Provisional Determination HAL said that we had erroneously dismissed the CAA statement 'as setting out a statement that would apply in any event'.¹⁹⁵ HAL submitted that the statement, 'when considered in the context of the basis of the business plan and setting of the WACC being very similar to that in Q5 - was central in setting investor expectations that they would be protected from catastrophic passenger volume risk'.¹⁹⁶ We disagree. Considered alongside the way passenger volume risk was allocated, and other statements the CAA made, as described in paragraphs 5.66 and 5.67 above, that statement does not, in our view, reflect an allocation of risk away from HAL's investors as HAL contends.

5.71 We determine, therefore, that HAL has not demonstrated that statements made by the CAA in previous price control periods created a reasonable expectation that investors would not be expected to bear the risks of catastrophic downside events and we therefore find that the CAA was not wrong, on the basis of past regulatory practice, to act as it did. The most that the CAA had committed to was to consider revisiting the price control under exceptional circumstances, which is, in fact, what it did.

¹⁹³ [HAL NoA](#), paragraphs 74–81; Transcript of Ground A Hearing, page 5, line 9 to page 7, line 2 and page 21, line 16 to page 22, line 6.

¹⁹⁴ [CAA, Economic regulation at Heathrow from April 2014: Initial Proposals](#) (CAP 1027) (Q6 Initial Proposals), paragraph 45.

¹⁹⁵ HAL Response to PD, paragraph 169.

¹⁹⁶ HAL Response to PD, paragraph 169.

Regulatory precedent in aviation and other sectors

- 5.72 HAL acknowledged in its NoA that none of the precedents it cited are precisely the same as the situation in respect of Heathrow and the COVID-19 restrictions or determine the exact form of intervention that the CAA should adopt. Nevertheless, HAL submitted that the precedent established by the CAA itself and other UK regulators showed that infrastructure investors had strong reasons to expect regulatory intervention in the event of a catastrophic exogenous occurrence.¹⁹⁷
- 5.73 We determine that the action taken by the CAA in response to HAL's request in July 2020 – that the CAA change its approach to the calculation of its RAB to take account of the actual and expected impact of the COVID-19 pandemic – was consistent with what the CAA said it would do in previous price controls (Q4 through to Q6) were it to receive a request from HAL to reopen a price control. In particular, as set out in paragraphs 5.43 to 5.48, the CAA considered HAL's request, reopened the price control, consulted on a range of intervention options and intervened.
- 5.74 We also note that the precedents cited by HAL in its NoA are limited to:
- (a) the January 2022 recommendation by the Thessaloniki Forum of Airport Charges regulators that the risk of the COVID-19 pandemic was to be regarded as an exceptional risk rather than an ordinary business risk which is compensated through the ordinary operation of charge controls; and
 - (b) KPMG's analysis of regulatory precedent on a reasonable threshold for significant risk-sharing.¹⁹⁸
- 5.75 Based on the extract reproduced in the NoA, the Thessaloniki recommendation makes no mention of the intervention that might be expected in event of exceptional risks crystallising. Moreover, HAL acknowledged in the Ground A hearing that care is required in making comparisons with other airports given the differences in ownership structures, regulatory frameworks and concession models,¹⁹⁹ and we note that the Thessaloniki report stated the following:
- In practice the treatment of financial losses of course will depend on the (legal provisions of) the regulation model in force: (a) in models in which airport operators are assumed to bear traffic risk, for example some price cap regimes, there is unlikely to be a policy to recover losses from any crises; (b) in cost-based regulation

¹⁹⁷ [HAL NoA](#), paragraph 86; HAL, Witness Statement from Cuchra, (**Cuchra 1**), paragraph 117.

¹⁹⁸ [HAL NoA](#), paragraphs 82–86, Cuchra 1, Section 3.

¹⁹⁹ Transcript of Ground A Hearing, page 26 lines 21-24.

regimes, it could be necessary to introduce a compensation mechanism during a certain period of time.²⁰⁰

5.76 We also consider that the KPMG analysis does not provide evidence of a precedent on a reasonable threshold for significant risk-sharing. Rather the precedents to which KPMG referred are concerned with the definition of normal business risk, with the conclusions drawn limited to the following:

- (a) the level at which traffic risk can be assumed to change from normal business risk to a 'significant' deviation would be at a level where traffic deviates from forecast by around 10% or more; and
- (b) the risk allocation changes from normal business risk to significant/ catastrophic risk would plausibly have been identified by investors to be at a level of a traffic reduction of around 10%.²⁰¹

5.77 We determine, therefore, that HAL has not demonstrated that precedent in the aviation sector, or other sectors, creates a reasonable expectation that investors would not be expected to bear the risks of catastrophic downside events, nor that the CAA erred in not so treating those precedents. That is particularly so when those precedents are considered alongside what the CAA had said (in Q6) it would do in respect of Heathrow.

Allocation of risks in the Q6 settlement

5.78 HAL argued that the intended allocation of risk in Q6 is clear in that the settlement explicitly did not remunerate investors for bearing the risks of demand shocks of the scale of the COVID-19 pandemic.²⁰²

5.79 HAL submitted that the CAA set the Q6 price control to account for an expected level of demand shocks which were to be taken into account in traffic forecasts, with 'variations around this expected level' to be dealt with through the cost of capital. HAL considered that the approach taken to setting the cost of capital is 'completely incapable' of taking account of the kind of volume risk to which HAL was exposed as a result of the COVID-19 restrictions.²⁰³ HAL also submitted that the Competition Commission (CC) had said in 2007 that catastrophic risks cannot be compensated through WACC.²⁰⁴

5.80 The CAA responded that the Q6 WACC was set on the basis of the market risks as assessed at the time, whereas COVID-19 has subsequently provided new

²⁰⁰ [Thessaloniki Forum of Airport Charges Regulators, Airport charges in times of crisis](#), 27 January 2022, paragraph 4.7. Submitted within Exhibit LS1 to Witness statement of Lucy Squire (**Squire 1**). (accessed 12 October 2023).

²⁰¹ Cuchra 1, paragraphs 195 and 201.

²⁰² [HAL NoA](#), paragraph 81.

²⁰³ [HAL NoA](#), paragraphs 78–81.

²⁰⁴ Competition Commission, [BAA Ltd Report on the economic regulation of the London airports companies \(September 2007\), Appendix F: Cost of Capital](#), paragraph 145.

information on the extent of volume risk in the aviation sector. The CAA added that this does not mean that the risk had not been allocated to HAL: rather that, with hindsight, HAL considered the allocation of risk which it accepted for Q6 constituted a bad deal. The CAA also submitted that the Q6 WACC was an estimate and not a guarantee.²⁰⁵

5.81 In response to our Provisional Determination, HAL said that it was common ground between the CAA and HAL that in Q6 HAL was not compensated ex ante to bear catastrophic risk.²⁰⁶

5.82 We have considered the CAA's and CC's statements carefully. Our assessment is that they do not provide the support claimed for HAL's position in relation to the allocation of risk for the reasons set out below.

5.83 First, the CC said in 2007 that:

We consider that the cost of capital cannot capture the risks associated with truly catastrophic events, for example a terrorist event which rendered much of Heathrow unusable for a significant amount of time. In the event of a truly catastrophic event we consider it to be outside the framework of economic regulation. We expect that the CAA would intervene and a recovery plan would be agreed between the CAA, BAA, airlines and probably the Government.²⁰⁷

5.84 We note that this statement was limited to a category of 'truly catastrophic events,' although we consider it likely that an event of the scale of COVID-19 would have been considered to fall into this category. More importantly, the CC's expectation, were such an event to happen, was that the CAA would intervene and that a recovery plan would be agreed with stakeholders. The CC did not say that it would expect the CAA to compensate investors for their losses.

5.85 Second, the CAA's submission referenced by HAL stated as follows:

It is common ground between the CAA and HAL that the Q6 settlement did not provide specific (or quantified) ex ante compensation for bearing the risk associated with events of the magnitude of the COVID-19 pandemic. In fact, it would have been irrational for the CAA to have done so, since the evidentiary basis for any such compensation would have been absent.²⁰⁸

²⁰⁵ [CAA Response](#), paragraph 87.1.

²⁰⁶ HAL Response to PD, paragraph 164 referring to CAA, Witness Statement of Jayant Hoon, (**Hoon 1**), 31 May 2023, paragraph 4.21.

²⁰⁷ Competition Commission, [BAA Ltd Report on the economic regulation of the London airports companies \(September 2007\)](#), Appendix F: [Cost of Capital](#), paragraph 145.

²⁰⁸ Hoon 1, paragraph 4.21

5.86 Similarly, we note that the CAA’s statement was limited to ‘events of the magnitude of the COVID-19 pandemic’ and that the CAA disagreed with HAL in relation to the consequences of not providing ex ante compensation for risks of such events occurring. In particular, the CAA explained that:

The CAA’s disagreement with HAL concerns the conclusion to be drawn from this observation. HAL’s argument is that, since the CAA did not provide ex ante compensation for bearing COVID-19 risk, then it is incumbent on the CAA to provide that compensation ex post.²⁰⁹

I disagree. The CAA’s approach to assessing HAL’s request for ex post compensation for COVID-19 risk started and ended with its statutory duties under CAA12. The primary duty clearly requires that such compensation would need to be justified on the grounds that it would further the interests of consumers, for example, in facilitating lower allowed returns, greater investment or better quality of service. In considering any intervention, the CAA would also need to consider its secondary duties, for example the need to secure that the licensee is able to finance its functions.²¹⁰

5.87 Accordingly, the statements provide support for HAL’s position that the Q6 settlement did not through the WACC provide ex ante compensation for bearing the risks of events of the scale of COVID-19. They do not, however, provide support for its position on the consequences for investors of events of the scale of COVID-19 happening.

5.88 We also consider HAL’s lack of support for the introduction of a traffic risk-sharing mechanism in Q6 (see paragraph 5.42, and below) to be informative of the allocation of risk, and of the risk accepted by HAL at the time for the following reasons.

5.89 First, we note that, as demonstrated above in paragraph 5.42, the CAA said in the Q6 initial and final proposals that it had asked stakeholders whether there was merit in introducing a traffic risk-sharing mechanism at an earlier stage in the process but that neither HAL nor the airlines supported this concept, preferring to consider traffic risk through the medium of the traffic forecasts and the WACC. The CAA also said that given this lack of support for the concept and the parties’ preference to handle traffic risk using alternative mechanisms, it did not pursue this concept for its Q6 initial proposals.²¹¹

²⁰⁹ Hoon 1, paragraph 4.22

²¹⁰ Hoon 1, paragraph 4.23.

²¹¹ [Q6 Final proposals](#), paragraphs 2.58–2.60, [Q6 Initial Proposals](#), paragraph 14.17.

- 5.90 Second, in the Ground A hearing both parties confirmed that there was discussion in the Q6 process of a 50:50 traffic risk-sharing mechanism, but that HAL was not supportive. HAL explained that, at the time, it was very much focused on seeking clarity around the treatment of catastrophic risk including the circumstances in which the CAA would reopen the settlement.²¹²
- 5.91 Based on this evidence, we consider it likely that HAL would have understood that had the CAA introduced a traffic risk-sharing mechanism in Q6 the result would have been a lower WACC. We also consider that HAL was in a position to support the introduction of a traffic risk-sharing mechanism that would have provided an explicit degree of protection from demand shocks were they to arise in Q6, but that it chose not to do so.
- 5.92 HAL also said that, at the time, business-as-usual traffic risk-sharing was not something it had modelled in its business plan.²¹³ We note that neither HAL nor the CAA suggested that the 50:50 risk sharing arrangements being discussed would have been limited to business-as-usual traffic risk.²¹⁴ Our view, therefore, is that HAL chose not to support the introduction of a traffic risk sharing mechanism that would have provided its investors with a degree of protection from more severe demand shocks including catastrophic events.
- 5.93 We recognise that the choice HAL made would have been informed by its assessment of demand risk at the time. We also note that HAL described COVID-19 as a ‘previously unanticipated and catastrophic demand shock’²¹⁵. Nevertheless, we consider that it is clear from various statements made in the Q5 and Q6 price control processes (and to which HAL has referred in its NoA²¹⁶) that stakeholders were alert to the risk of catastrophic events such as those referred to by the CC in previous cases²¹⁷ (see paragraph 5.83 to 5.84 above). We also note above, that the priority for HAL in the Q6 process was seeking clarity on treatment of catastrophic risk including the circumstances in which the CAA would reopen the settlement.²¹⁸ We therefore consider that HAL made an informed choice in agreeing to the Q6 price control and that even if the Q6 settlement subsequently turned out not to be a good deal for investors, this would not change the allocation of risk accepted by HAL at the time.
- 5.94 We determine, therefore, that HAL has not demonstrated that embedded in the Q6 settlement was any recognition that investors would not bear the risks of demand

²¹² Transcript of Ground A Hearing, page 48, lines 14–21.

²¹³ Transcript of Ground A Hearing, page 48, lines 14–21.

²¹⁴ In Initial Proposals the CAA indicated that the mechanism it had in mind would be similar to that recently introduced for the regulation of NERL (see [Q6 Initial Proposals](#), paragraph 14.17).

²¹⁵ [HAL NoA](#), paragraph 59.

²¹⁶ [HAL NoA](#), paragraphs 76–81.

²¹⁷ CC, BAA Ltd Report on the economic regulation of the London airports companies (September 2007), Appendix F: Cost of Capital, paragraph 145.

²¹⁸ Transcript of Ground A Hearing, page 48, lines 14–21.

shocks of the scale of the COVID-19 pandemic. Given this, we do not consider that that the CAA erred in not treating the Q6 settlement as having that effect.

Conclusion

5.95 Based on the considerations set out in paragraphs 5.64 to 5.94 above, our view is that HAL has not established that past regulatory practice gave rise to reasonable investor expectations that they would not be expected to carry traffic risk for catastrophic events. The CAA was accordingly not wrong in law or in the exercise of a discretion in treating the allocation of passenger risk in the way it did. It was not wrong in considering the position to be one in which, if catastrophic events occurred, it would consider reopening the price control and taking action in light of its statutory duties, but that this did not amount to a transfer of the risk away from HAL and its investors as HAL contends.

CAA's duties to further the interests of consumers

5.96 The second subsidiary question (b) to be addressed in HAL's appeal is whether the CAA was wrong in law and/or in the exercise of a discretion by failing, when allocating the risk in relation to passenger numbers, to carry out its functions in a way that it considers will further the interests of users of air transport services regarding the range, availability, continuity, cost and quality of airport operation services.²¹⁹

HAL's submissions

5.97 HAL submitted that the CAA was wrong because:

- (a) to the extent that the impact of the COVID-19 restrictions fell outside the risks allocated to investors under the existing price control settlement, the CAA's statutory duty required it to take effective action substantially to redress the consequent collapse in passenger numbers and revenue, save insofar as Heathrow was able to mitigate it.²²⁰
- (b) the start and end point of the CAA's statutory duties is the interests of both current and future consumers. Those interests are not always served simply by taking action that directly lowers the charge per passenger in the short term, without regard to the impact on prices over the long term.²²¹

²¹⁹ Ground A: HAL Agreed Issues for Determination, paragraph 9(b).

²²⁰ [HAL NoA](#), paragraphs 87–90.

²²¹ [HAL NoA](#), paragraph 88.

CAA Response

5.98 The CAA submitted that its decision to make a £300 million RAB adjustment supported both the interests of consumers and HAL's financeability. In contrast, the approach that HAL suggested would involve a retrospective and mechanistic adjustment to provide compensation for demand risk that HAL had previously accepted at the time of the Q6 price control settlement. The CAA also said that it is not possible to reconcile HAL's suggested approach with the CAA's duties to protect consumers and act in a proportionate and reasonably consistent way.²²²

Interveners' submissions

5.99 The Airline Interveners were supportive of the CAA's position. They submitted that the CAA 'demonstrably' did not accept that HAL was entitled to be compensated in respect of its lost revenues and the RAB adjustment was not given on the basis that HAL was entitled to some form of indemnity or compensation for its COVID-19 pandemic losses.²²³

5.100 They noted that the CAA acted not to compensate HAL's investors for lost revenues, but rather to 'further the interests of consumers'.²²⁴

5.101 The Airline Interveners also submitted that the 2021 RAB Adjustment Decision was made on the explicit basis that it was to 'secure that all reasonable demands for airport operation services at Heathrow airport are met' by 'incentivising investment by HAL during 2021 that would further the interests of consumers'.²²⁵

Our assessment

5.102 As set out above, HAL made two main arguments in support of its submissions that the CAA failed, in considering HAL's requested RAB adjustment, to carry out its functions in a way that furthered the interests of users of air transport services. We consider each of these in turn.

Statutory duty to take action

5.103 HAL submitted that to the extent that the impact of the COVID-19 restrictions fell outside the risks allocated to investors under the existing price control settlement, the CAA's statutory duties required it to take effective action to redress the collapse in passenger numbers and revenue, save insofar as HAL was able to mitigate it.²²⁶

²²² [CAA Response](#), paragraph 93.

²²³ [BA Nol](#), paragraph 2.2.2 and [Delta Nol](#), paragraph 2.5.

²²⁴ [BA Nol](#), paragraph 2.2.2 and [Delta Nol](#), paragraph 2.5.

²²⁵ [BA Nol](#), paragraph 2.2.4 and [Delta Nol](#), paragraph 2.7.

²²⁶ [HAL NoA](#), paragraphs 87–90.

5.104 We note that HAL’s argument relies on establishing that the impact of the COVID-19 pandemic on Heathrow airport passenger numbers and revenues fell outside of the risks allocated to investors in Q6. We have considered above the evidence presented by HAL on this point and, for the reasons given there, we determine that:

- (a) HAL has not demonstrated that the impact of catastrophic or exceptional risk was transferred away from it and its investors as it contends (albeit with the proviso that the CAA could reopen the price control in certain circumstances); and
- (b) the CAA was not wrong in treating the allocation of risk as it did and in reopening the price control as it committed to doing.

That is important context in which the CAA considered the interests of relevant end users (consumers) in its decisions on the RAB adjustment in 2021 and further in 2023.

5.105 Moreover, we consider that the CAA was required to take action in response to HAL’s requested RAB adjustment only to the extent that it needed to do so to meet its statutory duties.²²⁷ We first note that the CAA considered HAL’s request against its statutory duties as set out in and evidenced by its October 2020 and February 2021 RAB Adjustment Consultations, and 2021 RAB Adjustment Decision.

5.106 In the February 2021 document the CAA consulted on its framework for considering HAL’s request. The CAA said that the actions taken should be justified by reference to its primary duty to further the interests of consumers and that it needed to have regard to the matters set out in its secondary duties, including the need to secure that all reasonable demands are met for airport operation services and that HAL is able to finance its provision of airport operation services at Heathrow airport. The CAA also said that it ‘must have regard to the “better regulation principles” specified in section 1(4) CAA12’.²²⁸

5.107 In the 2021 RAB Adjustment Decision the CAA concluded that early intervention would further the interests of consumers ahead of the H7 price review,²²⁹ and that certain issues would be considered as part of the H7 price review including the impact on the cost of capital, and the overall balance of risk and reward with traffic risk sharing.²³⁰ This would allow the CAA to more clearly assess the impact on forward-looking charges, financeability and investment.²³¹ Within the H7 Final

²²⁷ Transcript of Ground A Hearing, page 30, lines 6–11.

²²⁸ CAA, [Economic regulation of Heathrow Airport Limited: response to its request for a covid-19 related RAB adjustment, February 2021](#) (CAP 2098) (**CAA February 2021 Consultation**), paragraphs 1.15 to 1.24, [Section 1\(4\)](#) of the Act.

²²⁹ [2021 RAB Adjustment Decision](#), paragraph 24.

²³⁰ [2021 RAB Adjustment Decision](#), paragraph 21.

²³¹ [2021 RAB Adjustment Decision](#), paragraph 21.

Decision, the CAA set out the updated weighted average cost of capital estimate, which reflected its final views on the impact of the pandemic and the introduction of the TRS on the cost of capital.²³² Further, the CAA stated in its H7 Final Decision that ‘by confirming the risks that HAL is expected to bear during H7 and by reducing HAL's exposure to the current uncertain environment, [the TRS] should help avoid unnecessary upward pressure on HAL's cost of capital. This will lead to lower charges for consumers than they otherwise would be and will support HAL's financeability’.²³³

Longer term impact on prices

- 5.108 We note, second, that, as to the longer term impact on prices, HAL submitted that the interests of both current and future consumers are not always simply served by taking action that directly lowers the charge per passenger in the short term, without regard to the impact on prices in the long term.²³⁴ HAL added that the CAA's decision not to make a further RAB Adjustment (in 2023) would result in higher prices for consumers in the longer term, because of a loss of investor confidence leading to a higher cost of capital.²³⁵
- 5.109 The CAA submitted that to go beyond the action it took and apply mechanistic and retrospective compensation would be unlikely to achieve anything more for consumers. HAL's proposals would be very largely a value transfer from consumers to investors.²³⁶
- 5.110 Our judgement is that the evidence shows that the CAA did properly consider the immediate and longer-term case for further intervention. We note, for example, that, in addition to the consideration reflected in the 2021 RAB Adjustment Decision cited in paragraphs 5.48 and 5.107, in the H7 Final Decision, the CAA concluded that:
- (a) an interim RAB adjustment had done enough to address immediate concerns about financeability and investment,²³⁷ and
 - (b) a package of measures including the introduction of the TRS, recalibrated WACC, and the asymmetric risk allowance would be key to HAL's financeability over the H7 price control period.²³⁸

²³² [Final Decision, Section 3](#), Chapter 9.

²³³ [Final Decision, Summary](#), paragraph 56; [Final Decision, Section 1](#), paragraph 2.4 and 2.23.

²³⁴ [HAL NoA](#), paragraph 88.

²³⁵ [HAL NoA](#), paragraph 88.1.

²³⁶ [CAA Response](#), paragraph 72.

²³⁷ [Final Decision, Section 3](#), paragraph 10.62 – 10.63. Also Transcript of Ground A Hearing, page 33, lines 1–4.

²³⁸ [Final Decision, Section 3](#), paragraphs 11.38, and 13.9; [Final Decision, Summary](#), paragraphs 69–76.

- 5.111 The CAA also stated that further intervention would be expensive for consumers and undermine the CAA's primary duty.²³⁹
- 5.112 Taking all the above points into account, it is not evident that there was a clearly superior alternative approach open to the CAA, considering its statutory duties. In our judgement, it considered, on a sufficiently sound basis, and within the margin of appreciation open to it as the expert regulator, that making the £300 million RAB adjustment in 2021, for the reasons it did so at that time, and making no further RAB adjustment, as part of the package of measures in H7, would further the interests of end users in relevant respects in line with its primary duty.
- 5.113 We further consider that HAL has not provided any evidence to support its argument that the CAA's decision not to make a further adjustment to the RAB would result in a higher cost of capital and, as a result, higher prices in the longer term than otherwise for consumers. This also supports a finding that the CAA did not fail to adopt a clearly superior alternative approach. We consider this point further below in paragraphs 5.143 to 5.149 where we consider submissions on investor reports.

Conclusion

- 5.114 For the reasons given above, we determine that HAL has not demonstrated that the CAA failed, when allocating the risk in relation to passenger numbers, to carry out its functions in a way that it considered would further the interests of users of air transport services. We find that the CAA was not wrong in law or in the exercise of a discretion in this regard.

Regulatory principles of proportionality and consistency

- 5.115 The third subsidiary question (c) to be addressed in HAL's appeal is whether the CAA was wrong in law and/or in the exercise of a discretion by failing, when allocating the risk in relation to passenger numbers, to have regard to the principles that regulatory activities should be carried out in a way which is proportionate and consistent.²⁴⁰

HAL's submissions

- 5.116 Again, as we note above, HAL submitted that the CAA was wrong because:

²³⁹ Transcript of Ground A Hearing, page 33, lines 1–12.

²⁴⁰ Ground A: HAL Agreed Issues for Determination, paragraph 9(c).

- (a) proportionality required that action taken by the CAA should be calibrated to address the fundamental reason for intervention, ‘namely the crystallisation of a catastrophic risk which had not been allocated to investors’.²⁴¹
- (b) the CAA’s refusal to implement a RAB adjustment which compensated HAL for the occurrence of a catastrophic demand shock, or at least ensures it will achieve the return of its capital, was ‘contrary to the requirements of proportionality and regulatory consistency, and therefore contrary to the interests of consumers’.²⁴²

CAA Response

5.117 As we similarly note above, the CAA submitted that:

- (a) ‘no indication was given that, were a “catastrophic” event to take place, HAL would receive mechanistic compensation for its losses or that the CAA would act in any way other than being guided by its statutory duties’.²⁴³
- (b) the impact of the COVID-19 pandemic ‘clearly revealed new information on risks that was not available at the time of the Q6 settlement’, and the CAA had now taken this new information into account on a forward-looking basis for the H7 period. This is ‘entirely consistent with the normal workings of the price control review process with each price control review updating the regulatory framework as appropriate for the emergence of new information’.²⁴⁴
- (c) the approach the CAA took to guide the development of possible regulatory interventions was consistent with what the CAA said at the Q6 price control review that the price control could be reopened in exceptional circumstances, and that it would consider such a request in the light of its statutory duties and the circumstances prevailing at the time.²⁴⁵
- (d) the decision to make a £300 million RAB adjustment supported both the interests of consumers and HAL’s financeability. In contrast, the approach that HAL has suggested would involve a retrospective and mechanistic adjustment to provide compensation for demand risk that HAL had previously accepted at the time of the Q6 price control settlement: ‘It is not possible to reconcile HAL’s suggested approach with the CAA’s duties to protect consumers and act in a proportionate and reasonably consistent way’.²⁴⁶

²⁴¹ [HAL NoA](#), paragraph 89.3.

²⁴² [HAL NoA](#), paragraph 89.

²⁴³ [CAA Response](#), paragraph 62.1.

²⁴⁴ [CAA Response](#), paragraph 62.2.

²⁴⁵ [CAA Response](#), paragraph 64, referring to [CAA February 2021 Consultation](#), paragraph 16.

²⁴⁶ [CAA Response](#), paragraph 93.

- (e) The CAA looked at the RAB Adjustment twice, first on the interim basis in 2021, and secondly during the main H7 review, and ‘neither of those assessments revealed a need for further intervention that would otherwise be expensive for consumers and undermine our duty to consumers’.²⁴⁷

Interveners’ submissions

- 5.118 Again, the Airline Interveners were generally supportive of the CAA’s position. They submitted that the RAB adjustment was not given on the basis that HAL was entitled to some form of compensation for its COVID-19 pandemic losses. That is not the purpose of the price control, nor could it be justified either as a matter of regulatory principle or by reference to the CAA’s statutory duties.²⁴⁸
- 5.119 The Airline Interveners noted that the CAA’s decision to apply a RAB Adjustment of £300 million was made on the explicit basis that it was to secure that all reasonable demands for airport operation services at Heathrow airport are met, by incentivising investment by HAL during 2021 that would further the interests of consumers, which is consistent with the CAA’s objectives.²⁴⁹
- 5.120 They also stated that HAL requested a RAB adjustment, which the CAA ‘duly considered’, and which did result in an adjustment. They noted that the CAA’s decision said that this adjustment would promote financeability by ‘providing a strong signal that the regulatory framework is consistent with enabling a notionally financed company to continue to access cost effective investment grade debt finance’.²⁵⁰

Our assessment

- 5.121 HAL submitted that the CAA’s refusal to implement a RAB adjustment which compensated HAL for the occurrence of a catastrophic demand shock was contrary to the requirements of the regulatory principles of proportionality and consistency.²⁵¹
- 5.122 We note firstly that the CAA’s statutory duties are in a hierarchy. Its primary duty in section 1(1) of the Act is that it must carry out its relevant functions in a manner which it considers will further the interests of users of air transport services regarding the range, availability, continuity, cost and quality of airport operation services. Section 1(3) of the Act says that in performing its duties under subsections (1) and (2) the CAA **must have regard** [emphasis added] to certain matters. That is, broadly speaking,²⁵² the CAA must take the relevant statutory

²⁴⁷ Transcript of Ground A Hearing, page 33, lines 9–12.

²⁴⁸ [BA Nol](#), paragraph 2.2.2 and [Delta Nol](#), paragraph 2.5.

²⁴⁹ [BA Nol](#), paragraph 2.2.4 and [Delta Nol](#), paragraph 2.7.

²⁵⁰ [BA Nol](#), paragraph 2.3.10 and [Delta Nol](#), paragraph 2,20, referring to [2021 RAB Adjustment Decision](#), paragraph 4.

²⁵¹ [HAL NoA](#), paragraph 89.

²⁵² And as more fully described in chapters 3 (legal framework) and 11 (Ground E) of this Final Determination.

matters properly and conscientiously into account, and weigh them in the balance, in making its decision. Those statutory matters include that regulatory activities should be carried out in a way which is, amongst other things, proportionate and consistent.

- 5.123 Our judgement is that the CAA did respond to HAL's request for a RAB adjustment, and decided the matter in 2021 and 2023, in a manner which had proper regard to the principles of consistency and proportionality, as evidenced by the following:
- (a) The CAA did reopen the price control given the severity of the shock and the exceptional circumstances at play and assessed the options for intervention in terms of its statutory duties, as it said it would within the Q6 price control.²⁵³
 - (b) The CAA acted promptly on receipt of HAL's request to reopen the price control in July 2020 in publishing its first consultation in October 2020 and issuing a final decision in April 2021.²⁵⁴
 - (c) The CAA considered and consulted on the case for a range of options in the form of four broad packages as follows:
 - (i) no intervention before H7, but considering interventions at H7;
 - (ii) targeted intervention now and considering further intervention at H7;
 - (iii) application of the H7 traffic risk sharing approach to 2020-2021;
 - (iv) HAL's proposed risk-sharing arrangements for 2020-2021.²⁵⁵
 - (d) In the 2021 RAB Adjustment Decision the CAA decided to make a £300 million RAB adjustment stating that an early and targeted intervention would be consistent with its statutory duties and proportional to the issues at play.²⁵⁶
 - (e) The CAA also said that it would consider the need for further intervention in the on-going H7 price control review and provided an update of the changes it was thinking about making including the introduction of a traffic or revenue risk-sharing arrangement.²⁵⁷
 - (f) In June 2022 the CAA stated that the impact of the COVID-19 pandemic had clearly revealed new information on risks that was not available at the time of

²⁵³ [2021 RAB Adjustment Decision](#), paragraph 3.

²⁵⁴ [2021 RAB Adjustment Decision](#), paragraph 1.

²⁵⁵ [2021 RAB Adjustment Decision](#), paragraph 3.3.

²⁵⁶ [2021 RAB Adjustment Decision](#), paragraphs 3 and 4.

²⁵⁷ [2021 RAB Adjustment Decision](#), paragraph 33.

the Q6 settlement and proposed introducing a TRS calibrated to provide a high level of protection from future demand shocks.²⁵⁸

- (g) In the H7 Final Decision, the CAA retained its position on the RAB adjustment²⁵⁹ and introduced a package of forward-looking measures concerned with the allocation and remuneration of demand shock risks (including the introduction of the TRS, recalibrated WACC, and the asymmetric risk allowance) which it considered key to HAL's financeability over the H7 price control period.²⁶⁰
- (h) In this context, the CAA stated that further adjustment to the RAB would be expensive for consumers and undermine the CAA's primary duty.²⁶¹
- (i) The CAA concluded in the H7 Final Decision, specifically as far as the regulatory principles of consistency and proportionality are concerned, that generally it had considered a range of potential options/approaches to ensure its approach was proportionate to furthering consumers' interests.²⁶²

5.124 HAL also submitted that the principle of proportionality required the CAA to have calibrated the action taken to address the fundamental reason for intervention, 'namely the crystallisation of a catastrophic risk which had not been allocated to investors'.²⁶³

5.125 In this regard, we note two points. First, and re-iterating the point above, the duty is one of having regard to the relevant principles.

5.126 Second, HAL's argument is premised on the fundamental reason for intervention being to compensate investors for a catastrophic demand shock the risks of which were not allocated to them. For the reasons given above, in our assessment of the first subsidiary question (paragraphs 5.64 to 5.94), we determine that HAL has not made its case on this point and that the CAA was not wrong in considering that passenger volume risk was not transferred away from HAL and its investors in the manner and to the effect HAL contends.

5.127 In that context, our view is that the CAA did have proper regard to the principles of consistency and proportionality and made assessments it was entitled to make in those connections.

5.128 We also note that HAL's position that the RAB adjustment made by the CAA was not proportionate, as the RAB adjustment should have been calibrated in proportion to the shortfall in the revenue it expected to recover in 2020 and

²⁵⁸ [Final Proposals Section 1](#), paragraph 2.3 and [CAA Response](#), paragraph 62.2.

²⁵⁹ [Final Decision, Summary](#), paragraph 54.

²⁶⁰ [Final Decision, Section 3](#), paragraphs 11.38 and 13.9.

²⁶¹ Transcript of Ground A Hearing, page 33, lines 1–12.

²⁶² [Final Decision, Summary](#), paragraph 78.

²⁶³ [HAL NoA](#), paragraph 89.3.

2021,²⁶⁴ fails to recognise that the £300 million adjustment made in April 2021 was only part of the CAA's response to the impact COVID-19 had on Heathrow airport.

- 5.129 The CAA clearly stated, at the time it made the £300 million RAB adjustment, that it was an early regulatory response to HAL's request ahead of the H7 price review and that it would consider the need for further intervention as part of the H7 price review.²⁶⁵ The CAA also said that it was thinking about introducing a form of traffic or revenue risk-sharing which would reduce the level of risk that HAL bears from variations in traffic levels in future.²⁶⁶ In the Final Decision, the CAA introduced a traffic risk-sharing arrangement calibrated to provide a high level of protection from future downside demand shocks, as part of a package of measures (as set out above in paragraph 5.123(g)) in response to what it described as 'the greater than normal uncertainty about future traffic levels'.²⁶⁷ In this context, the CAA determined that any further adjustments of the RAB would not be in the interests of consumers.
- 5.130 In our judgement, this indicates that the CAA had regard to the principles of consistency and proportionality in considering its response to the impact that the pandemic had on HAL, in a context where HAL's investors generally bore passenger volume risk. Moreover, there is clear evidence of the CAA weighing up benefits and risks. For example, the CAA said in this regard in the H7 Final Proposals that it considered that a further RAB adjustment as proposed by HAL would not provide sufficient offsetting benefits to consumers: for example by reducing the WACC or providing essential support for future investment.²⁶⁸ Further, the CAA noted that the £300 million adjustment was justified and appropriately calibrated given the information available at the time,²⁶⁹ and the CAA stated that its approach was consistent with the approach to pandemic risk set out by the CC in 2007.²⁷⁰ Given the above, it is not evident that, in having regard to the principles of proportionality and consistency, the CAA failed to adopt a clearly superior alternative view or approach.

Conclusion

- 5.131 Based on the above, we determine that HAL has not demonstrated that the CAA failed to have the necessary regard to the principles that regulatory activities should be carried out in a way which is proportionate and consistent. We determine that the CAA's Final Decision was not wrong in law or in the exercise of a discretion on this account.

²⁶⁴ [HAL NoA](#), paragraph 3.1.

²⁶⁵ [2021 RAB Adjustment Decision](#), paragraph 23.

²⁶⁶ [2021 RAB Adjustment Decision](#), paragraph 33.

²⁶⁷ Teach-in slides, 6 June 2023, slide 32.

²⁶⁸ [Final Proposals, Section 3](#), paragraphs 10.94–10.95.

²⁶⁹ [Final Proposals, Section 3](#), paragraph 10.99.

²⁷⁰ [Final Proposals, Section 3](#), paragraph 10.96.

Need to secure financeability

5.132 The fourth subsidiary question (d) (see paragraph 5.32(d)) to be addressed in HAL's appeal is whether the CAA was wrong in law and/or in the exercise of a discretion by failing, when allocating the risk in relation to passenger numbers, to have regard to the need to secure that each holder of a licence under Chapter 1 of Part 1 of the Act is able to finance its provision of airport operation services in the area for which the licence is granted.²⁷¹

HAL's submissions

5.133 HAL's submissions were that the CAA was wrong because:

- (a) the CAA clearly rejected a policy of non-intervention because failing to intervene could create difficulties for Heathrow in financing itself and increase the cost of capital on a forward-looking basis, but its intervention did not go far enough to satisfy its regulatory duties.²⁷²
- (b) consumers' interests are not served by inconsistent regulatory action, which undermines confidence in the regulatory scheme and as such is liable to increase the cost of capital and is a risk to financeability.²⁷³
- (c) the CAA's refusal to implement a RAB adjustment which compensates HAL for the occurrence of a catastrophic demand shock, or at least ensures it will achieve the return of its capital, is contrary to the requirements of financeability and therefore contrary to the interests of consumers.²⁷⁴

CAA Response

5.134 The CAA submitted that:

- (a) HAL remained financeable throughout the period of the pandemic and retained an investment grade credit rating.²⁷⁵
- (b) While financeability is a factor to which the CAA must have regard but is under no obligation to secure,²⁷⁶ the CAA did in fact adequately protect HAL's financeability through the £300 million RAB adjustment and its approach to financeability in the H7 price control review.²⁷⁷

²⁷¹ Ground A: HAL Agreed Issues for Determination, paragraph 9d; [the Act, section 1\(3\)](#).

²⁷² [HAL NoA](#), paragraphs 59 and 63.

²⁷³ [HAL NoA](#), paragraphs 88.1 and 89.2, HAL, Witness Statement of Lucy Squire (**Squire 1**), paragraphs 4.11 and 4.13.

²⁷⁴ [HAL NoA](#), paragraph 89.

²⁷⁵ [CAA Response](#), paragraph 81.1.

²⁷⁶ [CAA Response](#), paragraph 92.1.

²⁷⁷ [CAA Response](#), paragraph 92.2.

(c) The CAA's decision to make a £300 million RAB adjustment supported both the interests of consumers and HAL's financeability.²⁷⁸

5.135 The CAA also submitted that after assessing the possibilities that further adjustment to the RAB would reduce the H7 cost of equity, support investment, or service quality, and/or have a positive effect on financeability, the CAA concluded that such a further adjustment would not benefit consumers or be necessary to support HAL's financeability. The CAA, therefore, decided that it would better further the interests of consumers in accordance with its statutory duties to retain the £300 million RAB adjustment and not increase this amount.²⁷⁹

Interveners' submissions

5.136 The Airline Interveners submitted that the purpose of the RAB adjustment was to incentivise further investment by HAL, and to secure that an efficiently (or 'notionally') financed company could finance its licensed activities at Heathrow Airport.²⁸⁰

5.137 The Airline Interveners also noted that the CAA's decision to apply a £300 million upward adjustment to HAL's RAB was made 'on the explicit basis' that it was to secure that all reasonable demands for airport operation services at Heathrow airport were met by incentivising investment by HAL during 2021 that would further the interests of consumers.²⁸¹

5.138 They also stated that HAL's submissions did not acknowledge that 'a material element of [the financial pressures it experienced] arose due to HAL's excessive debt levels'.²⁸² They noted that, consistent with the CAA's statement that HAL's shareholders should bear the risks as well as the benefits associated with adopting its own financing structure,²⁸³ the CAA had considered HAL's request for a RAB adjustment through the prism of HAL's notional (rather than actual) gearing.²⁸⁴

Our assessment

5.139 HAL submitted that the CAA, in making the £300 million RAB adjustment, and the subsequent decision to make no further adjustment in H7, took insufficient account of the need to ensure the financeability of Heathrow airport and that as a result

²⁷⁸ [CAA Response](#), paragraph 93.

²⁷⁹ A Walker 1, paragraph 3.6.

²⁸⁰ [BA Nol](#), paragraph 2.2.2 and [Delta Nol](#), paragraph 2.5.

²⁸¹ [BA Nol](#), paragraph 2.2.4 and [Delta Nol](#), paragraph 2.7, referring to [2021 RAB Adjustment Decision](#), paragraph 4.

²⁸² [BA Nol](#), paragraph 2.4.1 and [Delta Nol](#), paragraph 2.27.

²⁸³ [BA Nol](#), paragraph 2.4.2 and [Delta Nol](#), paragraph 2.27, referring to [2021 RAB Adjustment Decision](#), paragraph 29.

²⁸⁴ [BA Nol](#), paragraph 2.4.3 and [Delta Nol](#), paragraph 2.28.

could undermine investor confidence to the detriment of consumers, including by resulting in an increase in the cost of capital.

5.140 In our view, it is clear that the CAA, in its decision in April 2021 to make the £300 million RAB adjustment and in March 2023 not to make any further adjustment, had regard to the need to secure the financeability of the licence holder in line with its statutory duty. We take account, for example, of the following:

- (a) In the 2021 RAB Adjustment Decision, the CAA said that:
 - (i) In reaching its decision it had regard to the need to secure that an efficiently financed company could finance its licenced activities at Heathrow airport.²⁸⁵
 - (ii) As part of the H7 review, it would decide on whether further intervention was appropriate in the interests of consumers, taking into account the overall price control package and impacts on affordability and financeability.²⁸⁶
- (b) In its H7 Final Decision, the CAA said that the financeability assessment in the Final Proposals clearly showed that the notional company was financeable in the absence of any further RAB adjustment.²⁸⁷

5.141 We are also of the view that it is clear that the CAA considered that the £300 million RAB adjustment would be sufficient to secure the financeability of the notional company. We note, for example, the following statements:

- (a) In the 2021 RAB Adjustment Decision, the CAA said that it had based its calibration of the RAB adjustment on projections showing that an adjustment of £300 million would reduce HAL's notional gearing below that required for investment grade financing.²⁸⁸ The CAA concluded that:

The intervention provides gearing headroom above its planned level of investment, which would provide a clear and strong incentive for HAL to: undertake any necessary investment; maintain service quality; and provide necessary capacity during 2021.²⁸⁹

- (b) The CAA further stated in April 2021 that there was no compelling case for an immediate adjustment greater than the £300 million, as this sum would

²⁸⁵ [2021 RAB Adjustment Decision](#), paragraph 4.

²⁸⁶ [2021 RAB Adjustment Decision](#), paragraph 4.3.

²⁸⁷ [Final Decision, Section 3](#), paragraph 10.62.

²⁸⁸ A Walker 1, paragraph 9.34, referring to [2021 RAB Adjustment Decision](#), paragraph 4.12. Paragraph 14 stated that the 70% gearing level is a guideline level set by some rating agencies, such as Moody and S&P, for a strong investment grade credit rating.

²⁸⁹ [2021 RAB Adjustment Decision](#), paragraph 4.16.

provide HAL with sufficient financial flexibility to deal with any issues that arise. Longer-term investment and quality of service issues would be dealt with at the H7 price control review.²⁹⁰

- (c) In the Final Proposals, the CAA said that its forward-looking analysis of financeability:

demonstrates that the notional entity should be in a position to obtain new finance from both debt and equity investors on reasonable terms without any further RAB adjustment. We therefore disagree with HAL's view that a RAB adjustment is necessary to ensure financeability.²⁹¹

- (d) In the Final Decision, the CAA said that:

a further RAB adjustment would have no material impact on investment or service quality, it logically followed that the main impact of a further RAB adjustment would be the transfer of value from consumers to shareholders and that this would not be in the interests of consumers.²⁹²

- 5.142 Our judgement, therefore, is that HAL has not demonstrated that the CAA, in deciding in H7 to preserve the £300 million RAB adjustment made following its 2021 RAB Adjustment Decision but not to make any further adjustment, failed to have regard to the need to secure financeability as required by the Act. Our view is that it did so and reached a finding that, as the expert regulator, it was entitled to reach and was not wrong.
- 5.143 HAL also submitted that there was evidence that both shareholders and independent analysts considered that the CAA's refusal to make any further adjustment would undermine HAL's financeability, both due to the level of the price control itself and due to a strong perception of regulatory risk arising from the failure to fulfil the Q6 settlement.²⁹³
- 5.144 We note that while the shareholder responses to which HAL referred in its Closing Statement raised many of the points made by HAL in its NoA, they provide no evidence of financeability problems arising from the CAA's decision to make no further adjustment to the RAB.
- 5.145 In its Closing Statement, HAL referred to the following July 2022 ratings agency statements:²⁹⁴

²⁹⁰ [2021 RAB Adjustment Decision](#), paragraph 4.17.

²⁹¹ [Final Proposals, Section 3](#), paragraph 10.46.

²⁹² [Final Decision, Section 3](#), paragraph 10.62.

²⁹³ HAL Closing Statement, paragraph 9.

²⁹⁴ HAL Closing Statement, paragraph 9b, footnote 10.

- (a) an S&P Global Ratings (**S&P**) statement putting HAL's debt on CreditWatch with negative implications stating that the 'proposed tariff decline may weigh further on already-tight credit metrics and that there are still uncertainties regarding Heathrow Funding Ltd's ability to recover and sustain its credit metrics to a level commensurate with its credit ratings'; and
- (b) a Moody's report affirming a negative outlook for HAL reflecting 'the continued risks to the group's credit profile linked to the H7 final regulatory determination against the backdrop of an uncertain economic environment'.

5.146 However, the CAA said in its Closing Statement that after the publication of the 2021 RAB Adjustment Decision, S&P cited no difficulties with the CAA's approach to the RAB adjustment and that after the H7 Final Decision, S&P affirmed the credit rating of HAL Funding PLC's Class A debt (which reflects a higher level of gearing than the notional entity) at BBB+ and removed it from negative credit watch.²⁹⁵

5.147 We also note that the later S&P statement stated that it expected Heathrow to achieve and sustain metrics commensurate with the current ratings, that the outlook was stable, and its expectation was that the airport should achieve and sustain credit metrics in line with its current rating.

5.148 Moreover, the CAA's approach to the assessment of HAL's financeability focused on the notional company. The CAA said that HAL's directors and shareholders are responsible for determining the actual capital structure that they consider to be appropriate, and they bear the risks of their decisions.²⁹⁶ We agree that it is appropriate to consider financeability of the notional company, consistent with regulatory practice. This approach protects the interests of consumers by only funding efficient financing costs while supporting financing for new investment. On this basis, the CAA's overall approach was 'designed to secure that HAL can reasonably finance its activities through an appropriate mixture of debt and equity on the basis of the ratio of debt and equity finance, or gearing, of the notional company'.²⁹⁷ As such, it is unclear that negative views from S&Ps and Moody's which would have been based on the actual company would indicate that the CAA had not acted appropriately. Rather, they would indicate that the equity holders might have to take action to reduce the actual level of leverage.

5.149 We therefore consider that HAL has not provided any compelling evidence in support of its position in relation to the impact of the CAA's actions on investor confidence, nor that HAL has demonstrated that the CAA was wrong in that, in reaching its Final Decision, it failed to have regard to its statutory duty in relation to

²⁹⁵ CAA Closing Statement, paragraph 14(i) and 14(ii).

²⁹⁶ [Final Decision, Section 3](#), paragraph 12.2.

²⁹⁷ [Final Decision, Section 3](#), paragraph 12.3.

financeability or rejected a clearly superior alternative view or approach in that connection.

Conclusion

5.150 Based on the above, we determine that HAL has not demonstrated that the CAA failed, when allocating the risk in relation to passenger numbers to HAL, to have regard to the need to secure that the holder of a relevant licence would be able to finance its provision of airport operation services.²⁹⁸ We determine that the CAA was not wrong in law or in the exercise of a discretion in this regard.

HAL submissions not addressed above

5.151 HAL made a number of detailed submissions on which we do not need to conclude given the determinations above which address matters to which those submissions relate. For completeness, these are (i) HAL NoA paragraphs 115²⁹⁹ and 118.1³⁰⁰ which do not require further consideration in light of the assessment and conclusions at paragraphs 5.64 to 5.95; and (ii) HAL NoA paragraph 118.3 which does not require further consideration in the light of the assessment and conclusions at paragraphs 5.64 to 5.95 and 5.139 to 5.150.

Related arguments made by HAL under Error 2

5.152 Again, for completeness, in this section we consider two arguments made by HAL under Error 2 that overlap with some of those made under Error 1 but have not been expressly addressed fully above. We note that these arguments are made in the context of HAL responding to arguments made by the CAA in the H7 consultation process.

5.153 First, HAL submitted that the CAA's rejection of HAL's argument that the Q6 framework must have envisaged intervention in the event of a demand shock of the scale of COVID-19, since it did not adequately remunerate HAL for accepting such risks,³⁰¹ relied upon a general principle that it should not intervene retrospectively in order to preserve incentives to efficiency.³⁰²

5.154 We determine, in the light of our review of CAA's reasoning on this matter as set out above, that HAL has not demonstrated that the CAA's decision not to make further adjustment to the RAB relied on this general principle. In this context, we

²⁹⁸ Ground A: HAL Agreed Issues for Determination, paragraph 9(d).

²⁹⁹ [HAL NoA](#), paragraph 115.

³⁰⁰ [HAL NoA](#), paragraph 118.1. The footnote referred to in the [Final Proposals, Section 3](#) qualified a statement in paragraph 10.39 that 'we do not retrospectively correct for these forecast errors, even when they are material' and reads: 'There are exceptions to this: for example, where we explicitly introduce mechanisms for truing up against out-turn data, such as the TRS mechanism and cost of new debt indexation mechanism we are introducing at H7. However, these should be clearly signalled and defined upfront. This is not the case with HAL's proposed RAB adjustment.'

³⁰¹ [HAL NoA](#), paragraph 116.

³⁰² [HAL NoA](#), paragraphs 118.2.

note that the CAA did in fact intervene with the £300 million RAB adjustment to address immediate concerns about financeability and investment,³⁰³ alongside a package of forward-looking measures in H7 concerned with the allocation and remuneration of demand shock risks.³⁰⁴ Accordingly, our view is that the CAA did not err in this regard.

5.155 Second, HAL submitted that:

The CAA rejected the argument that there was an inconsistency between its application of the TRS risk-sharing mechanism for the future and its refusal to implement such risk-sharing retrospectively, or that to do so would undermine the credibility of its risk-sharing arrangements for the future. It did so explicitly on the basis that this risk-sharing was a new arrangement, and again that the Q6 settlement did not explicitly or implicitly include any such commitment to risk-sharing.³⁰⁵

5.156 HAL added that ‘it is clear that the CAA did not “consciously and explicitly” apply a different allocation of catastrophic risk in the Q6 period to that in the Q4 and Q5 periods’.³⁰⁶

5.157 We understand HAL’s point to be that statements made in Q4 and Q5 are relevant for understanding the allocation of risk in Q6. We set out in paragraphs 5.64 to 5.71 and 5.78 to 5.94 above our assessment of the effect of the statements the CAA made about the allocation of passenger volume risk in Q6, taking account of the context – the consideration and rejection of the adoption of a TRS mechanism – in which they were made. We also note in this connection that, in its response to the Initial Proposals (that is, reflecting on the position in Q6 and what should happen in H7), HAL said:

The impact of Covid-19 has highlighted that the previous regulatory framework did not have the necessary protections to deal with the asymmetric risk faced by Heathrow. In our business plans, we have proposed a regulatory framework which deals with the issue of asymmetric risk, delivers for consumers, and is aligned to best practice in regulation. We welcome the CAA’s recognition that Covid-19 and its continuing impact necessitates changes to the framework, including new mechanisms to deal with uncertainty and a traffic risk sharing mechanism.

³⁰³ [Final Decision, Summary](#), paragraph 14.

³⁰⁴ [Final Decision, Section 3](#), paragraph 13.4 and 13.9.

³⁰⁵ [HAL NoA](#), paragraph 128.

³⁰⁶ [HAL NoA](#), paragraph 129.

Conclusions

- 5.158 In the light of our detailed review and assessment of the Parties' submissions and supporting evidence, we find that the CAA did not err in law or err in the exercise of a discretion in refusing to make a RAB adjustment calibrated to redress the catastrophic shortfall in passenger numbers and hence revenue, thereby failing to respect the terms of the previous regulatory settlement and hence reasonable investor expectations as to the allocation of risk in the current regulatory settlement.
- 5.159 In our judgement, the CAA was not wrong in concluding that past regulatory practice did not give rise to reasonable investor expectations that they would not be expected to carry passenger volume risk. Nor do we find that the CAA failed to carry out its functions in a way that it considered will further the interests of users of air transport services regarding the range, availability, continuity, cost and quality of airport operation services.
- 5.160 We also find that, in accordance with its statutory duty, the CAA had regard to the principles that regulatory activities should be carried out in a way which is proportionate and consistent when allocating the risk in relation to passenger numbers, and to the need to secure that each holder of a licence under Chapter 1 of Part 1 of the Act is able to finance its provision of airport operation services in the area for which the licence is granted.
- 5.161 Accordingly, we determine that the CAA's Final Decision was not wrong either because it was wrong in law or because the CAA made an error in the exercise of a discretion as contended by HAL in respect of Error 1 under Ground A. We do not, therefore, allow the appeal on that basis.

HAL's Error 2

- 5.162 As set out in paragraph 5.18, HAL submitted that the CAA erred in failing to make a RAB adjustment calibrated to compensate for depreciation of the RAB during the pandemic.

CAA Response

- 5.163 As set out in paragraph 5.27, the CAA stated that HAL is not entitled to recover its invested capital and there was no such regulatory commitment made by the CAA that would entitle HAL to such recovery. The CAA was clear that any mismatch between regulatory depreciation and the revenues actually collected by HAL

represents nothing more than the crystallisation of the demand risk that HAL bore under the Q6 price control settlement.³⁰⁷

5.164 As set out in paragraph 5.28, in relation to HAL's suggestion that the depreciation of its RAB amounts to a 'deprivation' within the meaning of A1P1, the CAA stated that 'that argument is hopeless'. The CAA maintained that the RAB is a regulatory judgement as to the value of the investment in the business and is not itself a 'possession' within the meaning of A1P1. Rather it is a mechanism to assess the value of other possessions in which HAL has invested and which is then used to impose a price cap. It creates no entitlement or legitimate expectation which could amount to a 'possession'. Further, the CAA contends that it is inherent in the nature of capital investment that the value of that investment depreciates over time and that it is neither a deprivation nor a control of use for the RAB calculation to reflect that fact.³⁰⁸

Interveners' submissions

5.165 The Airline Interveners submitted that HAL's Error 2 was 'in substance simply a repackaging of its primary case and again rests on a flawed premise that the risk that passenger numbers would be lower was not HAL's to bear'. They contended that HAL's case in relation to Error 2 'is (again) that it is entitled to an indemnity in respect of depreciation incurred at a time where passenger numbers were low, and that this is the "nature" of the RAB' and that 'this is patently incorrect'.³⁰⁹

5.166 The Airline Interveners refer to the International Financial Reporting Standard IAS 16 to demonstrate that HAL's understanding of the depreciation of the RAB was 'simply mistaken'.³¹⁰

5.167 The Airline Interveners maintained that HAL's shareholders are investing – an activity which inherently carries risk and 'is self-evidently not intended to guarantee the return of invested capital'.³¹¹

5.168 Further, the Airline Interveners did not consider that depreciation of the RAB 'even arguably' represents a control of the use of property within the meaning of A1P1.³¹² First, they argued that the RAB is not a possession within the meaning of A1P1 – it is not a 'shorthand for a "stock of invested capital" [... it] is a mechanism by which HAL has the ability to charge future consumers for present capital expenditure and its depreciation represents the cost charged to current consumers'. They stated that 'it is well established' that future income does not

³⁰⁷ [CAA Response](#), paragraph 94.

³⁰⁸ [CAA Response](#), paragraph 96.

³⁰⁹ [BA Nol](#), paragraph 2.5.2 and [Delta Nol](#), paragraph 2.33.

³¹⁰ [BA Nol](#), paragraph 2.5.3 and [Delta Nol](#), paragraph 2.34.

³¹¹ [BA Nol](#), paragraph 2.5.4 and [Delta Nol](#), paragraph 2.35.

³¹² [BA Nol](#), paragraph 2.5.6 and [Delta Nol](#), paragraph 2.37.

constitute a possession for the purposes of A1P1.³¹³ Finally, to the extent there is any interference with any possession of HAL's, they considered that this would instead equate to a control on its use as opposed to a deprivation or expropriation. The Airline Interveners further considered that such control was then amply justified by the public interest considerations which underlie the Q6 and H7 price controls.³¹⁴

Assessment: HAL's Error 2

5.169 In considering HAL's Error 2, we focus our assessment on the four points set out at paragraph 5.18.

Summary of our approach and conclusions

5.170 As with Error 1, we have considered HAL's contentions that the CAA's decision was wrong because it was wrong in law or because the CAA made an error in the exercise of a discretion in line with the legal framework described in chapter 3. That includes considering whether the CAA was wrong in law because it failed to make a RAB adjustment calibrated to compensate for depreciation of the RAB during the pandemic, where the pandemic restrictions prevented HAL having a fair chance to recover that depreciation, and because the CAA's failure to do so breached A1P1 of the European Convention on Human Rights. It also includes making a judgement about whether the CAA made an error in the exercise of a discretion because it made a choice, albeit a rational one, where a clearly superior alternative advanced by HAL was available to it.

5.171 Following our in-depth review and assessment of the Parties' submissions and supporting evidence, and on the basis of the considerations set out in further detail below, we find that the CAA did not err in law or err in the exercise of a discretion as HAL submitted in respect of Error 2. Our finding is that the CAA treated the depreciation of the RAB consistently with the allocation of risks in the Q6 price control, as part of a package of measures responding to the effects of the pandemic, and consistently with A1P1.

Assessment: HAL's Error 2

5.172 In making our assessment, we consider HAL's Error 2 in three parts:

- (a) first, we consider the treatment of regulatory depreciation in regulating HAL;
- (b) second, we review the CAA's approach to depreciation in its 2021 RAB Adjustment Decision; and

³¹³ [BA Nol](#), paragraph 2.5.7 and [Delta Nol](#), paragraph 2.38.

³¹⁴ [BA Nol](#), paragraph 2.5.8 and [Delta Nol](#), paragraph 2.39.

- (c) third, we discuss HAL's submission that the treatment of depreciation is a breach of A1P1.

The treatment of regulatory depreciation in regulating HAL

- 5.173 We agree with HAL's view that the RAB reflects HAL's previous investment in the business and that it is a means for enabling HAL's investors to receive the return of that efficiently invested capital. However, as set out in more detail at paragraph 5.230 below, we consider that it may in some circumstances, such as those of the COVID-19 pandemic, permissibly be used for other purposes. We also agree with HAL's explanation of the operation of the depreciation charge as a mechanism through which to compensate HAL for the return 'of' the RAB. We also recognise that, due to the COVID-19 pandemic, there were significant periods of time during which HAL was unable to earn a return equivalent to expectations because of travel restrictions. To assess whether these points raised by HAL indicate an error in the CAA's Final Decision on the RAB adjustment, we have focused on the key question of whether HAL should be compensated for the amounts it could not earn (specifically in this case in relation to depreciation) due to operating restrictions resulting from the pandemic.
- 5.174 As we have set out in our discussion of HAL's Error 1, we are of the view that the risk of lower-than-expected passenger numbers was generally a risk for HAL to bear under the terms of the Q6 price control. This had the potential for limiting HAL's ability to recover its allowed return 'on' capital. We have considered whether there is reason to believe that depreciation and the return 'of' capital should be considered differently, and that the CAA was wrong in not doing so. In making that assessment, we have had regard to past regulatory decisions. We note, however, that there is limited commentary in the Q5 or Q6 decisions on the level of certainty around recovery of the return of capital.³¹⁵ This may be a result of such price controls being considered in the context of limited fluctuations in passenger numbers, compared with the significant fluctuations resulting from the COVID-19 pandemic.
- 5.175 During the Ground A hearing, HAL noted its position that it should be compensated for the lost depreciation, explaining that it had a 'legitimate expectation' that it would recover depreciation, and that it was not able to do so as a result of the 'catastrophic event' of COVID-19.³¹⁶ It told us that it did not consider that depreciation was 'guaranteed', but that the COVID-19 pandemic meant that it did not have the opportunity to earn its return of capital as a result of catastrophic impact of the pandemic, which was 'through no fault of its own'.³¹⁷ HAL submitted

³¹⁵ See the Q5 decision: CAA, '[Economic Regulation of Heathrow and Gatwick Airports 2008-2013](#)', 11 March 2008. See also the Q6 decision: CAA, '[Economic regulation at Heathrow from April 2014: Final Proposals](#)' (CAP1103), (**Q6 Final Proposals**) 3 October 2013.

³¹⁶ Transcript of Ground A Hearing, page 52, lines 12–14.

³¹⁷ Transcript of Ground A Hearing, page 64, lines 8–24.

that by continuing to depreciate the RAB throughout the pandemic, HAL did not have the opportunity to recover the depreciation on the RAB which was incurred during that pandemic (when it did not have a 'fair opportunity of recouping its investment'), and that it would otherwise be irrecoverable.³¹⁸

5.176 In contrast, the CAA noted its position that there was 'no separate commitment in relation to regulatory depreciation' and that its consideration of the RAB adjustment was focused on a 'forward looking assessment of financeability concerns, about investment and quality of service is what was important, given our statutory duties'.³¹⁹

5.177 Having reviewed the points put to us by HAL, the Airlines, and the CAA on depreciation, we have been unable to identify any reasoning to suggest that depreciation of the RAB, ie the return 'of' capital, should be treated any differently from the return 'on' capital or that the CAA was wrong in not treating it as such. We take account of the following points:

- (a) As with all other components of allowed revenue, the recovery of depreciation is at risk, as reflected in the fact that the allowed return on the RAB is a cost of capital significantly above the risk-free rate. While depreciation of the RAB throughout the COVID-19 pandemic means that HAL will be unable to recover the value of that proportion of the RAB in future periods, we are of the view that the CAA was not wrong to treat this as reflected within the allocation of risks as set out in the Q6 price control and, as we have set out in detail above, in particular at paragraphs 5.158 to 5.161, we consider the CAA did not err in treating this as a risk generally for HAL to bear.
- (b) The CAA made a £300 million RAB adjustment in 2021, consistent with the commitments it made in respect of the reopening of the Q6 price control in exceptional circumstances, and made no further RAB adjustment in 2023, for the reasons described in paragraphs 5.110 and 5.111 above, as part of the package of measures adopted for H7 following the pandemic. We note that the price control going forward manages traffic risk differently, but in the context of the Q6 price control and the assessment that the CAA was making in April 2021 and March 2023, there is no reason to believe that the CAA was wrong in not treating the revenue associated with regulatory depreciation as more 'secure' than the return of capital, based on the allocation of risks.
- (c) In our judgement – in the light of both: (i) the CAA's allocation of passenger volume risk generally in Q6; and (ii) the other steps it took in making the RAB

³¹⁸ [HAL NoA](#), paragraph 3.1.

³¹⁹ Transcript of Ground A Hearing, page 67, line 22 to page 68, line 3.

adjustment and for sharing risk more specifically in H7 – there was not a clearly superior alternative approach the CAA should have taken.

5.178 In response to our Provisional Determination to the above effect, HAL submitted that the depreciation of the RAB (ie return 'of' capital) should be treated differently to the return 'on' capital. It submitted that it is a fundamental principle of economic regulation that regulated entities should be able to recover efficiently incurred costs. It noted that this is particularly important in the context of regulatory regimes such as those which apply to HAL, and which are subject to a price cap. HAL explained that its regulatory framework is underpinned by the long-term commitment mechanism of the RAB and that the high level of capital investment required at Heathrow means that these costs need to be recovered over time. It told us that investors need confidence that they will be remunerated for their capital investment, and that the depreciation mechanism provides this confidence because depreciation:

- (a) smooths the recovery of capital costs over a long period, reducing the costs to users and spreading the recovery over current and future users;
- (b) provides certainty to investors on the recovery of their efficiently incurred capital investment leading to a lower cost of capital and therefore lower costs for consumers; and
- (c) incentivises investment through the maintenance of a stable framework for the recovery of investment.³²⁰

5.179 HAL told us that, by linking the recovery of depreciation to the risk allocation of the other price control building blocks, the wider policy significance is missed. HAL submitted that, given the significance of the depreciation profile to investor confidence to invest, the logical response to preventing the recovery of depreciation is that utilities would either simply seek to recover all costs up-front in terms of 'fast money' (which would have a significant impact on customer charges and not be in customers' interest), or would seek a higher WACC to reflect the increased risk associated with their investment, or that investors simply would not invest. Further, HAL submitted that 'the CAA's own depreciation policy reflects the important role of depreciation in ensuring that efficient investment can be recovered once'.³²¹

5.180 In assessing these points raised by HAL, we have had regard to the expectations that investors may have around recovery of depreciation. While we note that depreciation allows investors the opportunity to recover their investment via the return 'of' capital, we do not consider that the inclusion of depreciation in allowed revenues implies investors are guaranteed recovery of that part of allowed

³²⁰ HAL Response to PD, paragraphs 179–180.

³²¹ HAL Response to PD, paragraphs 181–194.

revenues (ie that investors are guaranteed to fully recover their invested capital over time). The CAA set out its position on the likelihood of recovering depreciation in the 2021 RAB Adjustment Decision in which it noted:

We do not accept that the Q6 price control provided a guarantee that HAL would be able to recover all its regulatory depreciation and/or a particular level of return. The Q6 price control for HAL was set ex ante on the basis that HAL would recover regulatory depreciation and a reasonable allowed return on a forward-looking basis. HAL would bear traffic risks, and we could consider requests to re-open the price control. This did not constitute an absolute guarantee that HAL would recover regulatory depreciation ex post irrespective of what happens to traffic levels during the regulatory period. Such a guarantee does not seem proportionate or consistent with the approach we took to setting the Q6 price control.³²²

5.181 The CAA noted the importance of considering regulatory depreciation, further stating:

This is an important issue that merits additional consideration, including assessing the impact of the treatment of regulatory depreciation on HAL's cost of capital, and if we were to make allowances for the recovery of historical depreciation, whether these should be adjusted to take account of outperformance by HAL earlier in the Q6 period.³²³

5.182 Ensuring the recovery of depreciation in the way proposed by HAL would imply investors would never be exposed to losses of their invested capital. We are not aware of any regulatory principle which would imply investors' losses are limited in this way. We do not consider that this would be consistent with the way the WACC is generally estimated or with the approach to the Q6 price control which was set on the basis of HAL generally bearing traffic risk.

5.183 On this basis, our consideration of the recovery of regulatory depreciation is not linked solely to the risk allocation of other building blocks, but also to investor expectations on the recovery of depreciation itself. Moreover, on that footing, again we do not find that the CAA rejected a clearly superior alternative (ie treating regulatory depreciation differently and making a RAB adjustment calibrated to compensate for such depreciation during the pandemic).

³²² [2021 RAB Adjustment Decision](#), paragraph 4.28.

³²³ [2021 RAB Adjustment Decision](#), paragraph 35.

The CAA's approach to depreciation in the 2021 RAB Adjustment Decision

- 5.184 Also in its response to our Provisional Determination, HAL submitted that the CAA did not properly consider the 'mechanistic implementation' of its depreciation policy during COVID-19 and how this would contribute to the delivery of its statutory duties.³²⁴ It told us that a RAB adjustment calculated in line with the asset usage during the COVID-19 pandemic is a 'far superior alternative' to the CAA's £300 million RAB adjustment, and that it ensures that the CAA discharges its primary duty as it:
- (a) Ensures that the cost of airport operation services is in line with the efficient cost of delivering the services requested by users.
 - (b) Promotes ongoing investment in the airport to further the interests of users in regard to the range, quality, and continuity of airport services by preserving the incentive to invest through maintaining a stable and consistent regulatory framework and the underpinning principle of return of efficiently incurred investment.
 - (c) Ensures intergenerational fairness across current and future users by ensuring that users are paying for the efficient cost of the services they are receiving.³²⁵
- 5.185 HAL submitted that the approach to depreciation as set out in the CAA's Final Decision: (i) undermines incentives to invest by transferring value from investors to others who have as a result made no financial contribution to it; and (ii) distorts the cost of the service being provided leading to future users not paying their fair share or efficient prices for the services they are using.³²⁶
- 5.186 As set out in detail in our discussion of HAL's Error 1 above, our view is that the CAA clearly re-opened and reconsidered the Q6 price control and in doing so considered potential changes to depreciation. Further, as evidenced in the CAA's documents assessing and confirming its 2021 RAB Adjustment Decision, the CAA did have regard to alternative approaches to applying depreciation. In its initial assessment of the RAB Adjustment in October 2020 and its response to HAL's proposals around depreciation (including a 'depreciation holiday') the CAA explained that it would assess whether, if HAL were not to recover a significant proportion of the depreciation of past investments, this could lead to an increase in the cost of capital in the longer term to the detriment of customers.³²⁷ In February 2021, the CAA further explored HAL's submissions on depreciation (including whether a RAB adjustment was necessary to allow a smoothing of regulatory

³²⁴ HAL Response to PD, paragraphs 185–197.

³²⁵ HAL Response to PD, paragraph 195.

³²⁶ HAL Response to PD, paragraph 196.

³²⁷ [CAA October 2020 Consultation](#), paragraph 2.8.

depreciation over the H7 period). The CAA's report demonstrates its consideration of HAL's submissions, for example, stating:

From an initial review, we are unclear why a RAB adjustment is needed to facilitate the reprofiling of regulatory depreciation during H7.³²⁸

- 5.187 Further, the CAA demonstrated clear consideration of its approach to depreciation in the 2021 RAB Adjustment Decision, as set out in more detail at paragraphs 5.180 and 5.181 above. The CAA also had regard to the ongoing approach to depreciation, explaining that its consideration of how traffic risks would be allocated in future at the stage of setting the H7 price control could reduce the likelihood that HAL would under-recover depreciation in the future.³²⁹
- 5.188 On this basis, the CAA did clearly consider what an appropriate approach to the application of depreciation would be in the context of the COVID-19 pandemic. We understand that the CAA considered HAL's proposals on a depreciation holiday and the use of a RAB adjustment to manage depreciation as part of its overall assessment of HAL's RAB Adjustment request. That is, the CAA considered whether, in light of its decision as to where passenger volume risk lay and its commitment to consider requests to re-open the price control in exceptional circumstances and in accordance with its statutory duties, regulatory depreciation should, subject to any such re-opening, apply in the usual way. The CAA met its commitment to reopening the Q6 price control in exceptional circumstances and, having done so, concluded (i) that regulatory depreciation should apply in that way and (ii) that it would make a specific RAB adjustment for specific reasons in line with its duties. On this basis, we consider that the CAA did properly consider the appropriateness of the application of depreciation and did not apply it 'mechanistically'.

Consideration of the treatment of depreciation as a breach of A1P1

- 5.189 We note that HAL considers the approach taken by the CAA to be a breach of A1P1 on the basis of the price control representing a control of use property and its view that the approach to depreciation through the price control represented expropriation.
- 5.190 Article A1P1, under the heading 'Protection of property' provides:

Every natural or legal person is entitled to the peaceful enjoyment of his possessions. No one shall be deprived of his possessions

³²⁸ [CAA February 2021 Consultation](#), paragraph 2.51.

³²⁹ [2021 RAB Adjustment Decision](#), paragraph 33.

except in the public interest and subject to the conditions provided for by law and by the general principles of international law.

The preceding provisions shall not, however, in any way impair the right of a State to enforce such laws as it deems necessary to control the use of property in accordance with the general interest or to secure the payment of taxes or other contributions or penalties.

- 5.191 We note from the submissions outlined above that the Parties take differing views as to whether the RAB is a ‘possession’ within the meaning of A1P1 and therefore whether it falls to be protected under the ECHR.³³⁰ However, even if the RAB were such a possession, this does not necessarily mean that the CAA’s actions constituted a breach of A1P1. Other elements of that provision are relevant (and determinative).
- 5.192 Assuming the RAB is a ‘possession,’ HAL submitted that the price control itself constitutes the control of the use of its property.³³¹ It said that the failure by the CAA to compensate it for depreciation of the RAB and which it was unable to recover due to COVID-19 restrictions results in an expropriation of at least a portion of that property.
- 5.193 Our view is that the depreciation mechanism is not a form of expropriation or, in terms closer to A1P1, a deprivation of a possession. Depreciation in the context of the present form of regulation forms part of the ‘building blocks’ of the price control. We are of the view that these are set in the context of the proper application of a statutory regime, which we set out at paragraphs 5.195 to 5.197. Pursuant to that regime, in line with our assessment of HAL’s Error 1, the CAA generally placed the risk of under-recovery of depreciation with HAL and its investors, not consumers, in the Q6 price control.
- 5.194 The final element of our assessment of this issue is that, in any event, even if:
- (a) the RAB (or a portion of it) constitutes a ‘possession’ for the purposes of Article 1 Protocol 1 ECHR; and
 - (b) the State has exercised control over this possession through the imposition of the price control or failure to fully compensate HAL for depreciation of its RAB during the pandemic,
 - (c) we do not consider that the CAA acted in breach of A1P1.

³³⁰ See paragraph 5.18(d) for HAL’s submission, paragraphs 5.28 and 5.164 for the CAA response to HAL’s submission and paragraph 5.168 for an overview of the submissions made by the Airline Interveners in relation to the application of A1P1 ECHR to HAL’s RAB.

³³¹ [HAL NoA](#), paragraph 100.

- 5.195 The price control mechanism, including the treatment of the RAB, is set pursuant to a statutory regime under the Act. Under that regime, the CAA has made a market power determination in relation to HAL, granted HAL a licence and, as required by the Act, included in that licence charge control conditions taking account of its duties in sections 1 and 18 of the Act. In our view it has done so, in relation to the RAB, in accordance with its statutory duties, including that to further the interests of end-users (consumers) and having regard to the principle that regulatory activities should be carried out in a way that is proportionate.
- 5.196 On that basis, in our judgement, the price control mechanism, including the treatment of the RAB, is clearly accessible, precise and foreseeable as to its application (and HAL has not previously raised any objection to the regime itself on this basis). The use of the price control regime pursues, and can be justified on the basis of, a clear public interest, ie the prevention of an abuse of substantial market power under the Act,³³² in accordance with the law and where a proportionate balance has been struck between the interests of the public and HAL (as an operator of a dominant airport).
- 5.197 Accordingly, we do not consider the CAA to have erred in not allowing for compensation of the depreciation ‘lost’ as a result of the COVID-19 pandemic, under A1P1 of the ECHR. Nor do we consider that we are obliged to allow such compensation.

Conclusions

- 5.198 In the light of our detailed review and assessment of the Parties’ submissions and supporting evidence, our view is that the CAA did not err in law or err in the exercise of a discretion by failing to make a RAB adjustment calibrated to compensate for depreciation of the RAB during the pandemic. The CAA’s Final Decision was not wrong on that account. We do not therefore, allow the appeal on that basis.

Airlines’ appeals

- 5.199 In their NoAs, the Airlines submitted that the CAA made two errors:
- (a) **The RAB Adjustment Error:** that in making the adjustment – adding £300 million – to HAL’s RAB the CAA made errors of fact, was wrong in law or made errors in the exercise of a discretion;³³³ and
 - (b) **The Failure to Review Error:** that the CAA made errors of fact, was wrong in law or made errors in the exercise of a discretion in failing to review,

³³² [Section 6](#) of the Act.

³³³ [BA Notice of Appeal \(BA NoA\)](#), 18 April 2023, paragraph 4.2.1(b), [Delta Notice of Appeal \(Delta NoA\)](#), 18 April 2023, paragraph 6.3(a), and [Virgin Notice of Appeal \(VAA NoA\)](#), 18 April 2023, paragraph 6.3(a).

reduce or remove the RAB Adjustment originally made in 2021 before reaching the Decision.³³⁴

5.200 In relation to the RAB Adjustment Error, the Airlines alleged that the CAA's Final Decision was wrong because the adjustment was:

- (a) unjustified, in that it was inconsistent with the regulatory principle or purpose of the RAB (to incentivise efficient investment);³³⁵ and was unjustified because it was inconsistent with the Q6 control and amounted to double recovery and because 'there are other, more appropriate and proportionate regulatory tools and mechanisms' to mitigate COVID-related uncertainty for investors;³³⁶
- (b) unnecessary to secure,³³⁷ or not justified by the need to secure,³³⁸ that the notional or efficient company considered by the CAA in its assessment could finance the provision of airport operation services, nor that all reasonable demands for airport operation services would be met;
- (c) wrongly justified as necessary to allow HAL the flexibility to respond to changing circumstances;³³⁹ and
- (d) contrary or harmful to consumers' interests.³⁴⁰

5.201 In relation to the Failure to Review Error, the Airlines alleged that the CAA's Final Decision was wrong because in failing to review the RAB Adjustment first decided on in April 2021 and before making the Final Decision the CAA:

- (a) acted contrary to its previous commitment to carry out a review if evidence emerged of HAL failing to deliver (or misdirected itself that the adjustment in 2021 was intended to be final and/or not contingent on HAL's subsequent conduct);³⁴¹
- (b) as a result, failed properly to consider the evidence before it and erred in its conclusion that it was not clear that it would have been in consumers' interests for HAL to have undertaken a materially greater volume of capital expenditure in 2021;³⁴²

³³⁴ [BA NoA](#), paragraph 4.2.1(a), [Delta NoA](#), paragraph 6.3(b), and [VAA NoA](#), paragraph 6.3(b).

³³⁵ [BA NoA](#), paragraph 4.9, [Delta NoA](#), paragraph 6.22; and [VAA NoA](#), paragraph 6.22.

³³⁶ [BA NoA](#), paragraph 4.11.9 and Schedule 1, paragraph 1.1.4, [Delta NoA](#), paragraphs 6.23 and 6.24, , and [VAA NoA](#), paragraphs 6.23 and 6.24.

³³⁷ [Delta NoA](#), paragraphs 6.33 and 6.38, and [VAA NoA](#), paragraphs 6.33 and 6.38.

³³⁸ [BA NoA](#), paragraphs 4.10 and 4.11.

³³⁹ [BA NoA](#), paragraph 4.12.4, [Delta NoA](#), paragraph 6.40 and [VAA NoA](#), paragraph 6.40.

³⁴⁰ [BA NoA](#), paragraph 4.12, [Delta NoA](#), paragraph 6.43 and [VAA NoA](#), paragraph 6.43.

³⁴¹ [BA NoA](#), paragraph 4.6, [Delta NoA](#), paragraph 6.48, and [VAA NoA](#), paragraph 6.48.

³⁴² [BA NoA](#), paragraph 4.6.9, [Delta NoA](#), paragraph 6.57, and [VAA NoA](#), paragraph 6.57.

- (c) wrongly treated itself as precluded from reversing or reducing the adjustment by regulatory precedent;³⁴³ and
- (d) caused and will continue to cause consumer harm.³⁴⁴

5.202 On the basis of the Airlines' pleadings, the overall statutory questions for determination are:

- (a) For the RAB Adjustment Error: Was the CAA's Final Decision wrong because it was based on errors of fact, was wrong in law or an error was made in the exercise of a discretion in making the RAB Adjustment?
- (b) For the Failure to Review Error: Was the CAA's Final Decision wrong because it was based on errors of fact, was wrong in law or an error was made in the exercise of a discretion, in failing to review, reduce or remove the RAB Adjustment originally made in 2021?

5.203 Taking into account the submissions made by the Airlines in their NoAs and supporting evidence, in our assessment of the overall statutory questions we have addressed a number of subsidiary questions as to whether the Final Decision was wrong because it was based on an error of fact, or the CAA was wrong in law or in the exercise of a discretion. These subsidiary questions are split between the RAB Adjustment Error and the Failure to Review Error (see further below).

5.204 Below we first consider the RAB Adjustment Error overall statutory question, subsidiary questions, submissions, our assessment and conclusions before then turning to the Failure to Review Error.

The RAB Adjustment Error

5.205 As set out above in paragraph 5.202, the overall statutory question for determination is:

Was the CAA's Final Decision wrong because it was based on errors of fact, was wrong in law or an error was made in the exercise of a discretion in making the RAB Adjustment?

Summary of our approach and conclusions: subsidiary questions – the RAB Adjustment Error

5.206 In the light of the very diffusely pleaded appeals advanced by the Airlines, the subsidiary questions relating to the RAB Adjustment Error that we have

³⁴³ [BA NoA](#), paragraph 4.7.2, [Delta NoA](#), paragraph 6.68, and [VAA NoA](#), paragraph 6.68.

³⁴⁴ [BA NoA](#), paragraphs 4.12 and 4.13.1(c); [Delta NoA](#), paragraph 6.70, and [VAA NoA](#), paragraph 6.70.

considered in order to determine the overall statutory question, and our findings in respect of each of them, are as follows.

The RAB Adjustment was unjustified

- (a) Was the CAA wrong in law because, by acting inconsistently with the regulatory principle or purpose of the RAB and in making the RAB Adjustment, it breached its statutory duty to have regard to the principles that regulatory activities should be carried out in a way which is transparent, accountable, proportionate, consistent and targeted only at cases in which action is needed, or acted in defiance of logic? Our finding is that the CAA was not wrong as alleged.
- (b) Did the CAA make an error in the exercise of a discretion because, by acting inconsistently with the regulatory principle or purpose of the RAB, it failed to take relevant considerations into account? Our finding is that the CAA was not wrong as alleged.
- (c) Was the CAA wrong in law because it made a RAB Adjustment that is inconsistent with the Q6 price control and amounts to double recovery from consumers, in defiance of logic? Our finding is that the CAA was not wrong as alleged.
- (d) Was the CAA wrong in law (by failing properly to enquire and to take proper account of relevant considerations) or did it make an error in the exercise of a discretion (by failing to utilise the most appropriate regulatory mechanism, to consider all alternative options, and to prefer clearly superior approaches) in making the RAB Adjustment where there are other, more appropriate and proportionate regulatory tools and mechanisms at its disposal to mitigate uncertainty for investors arising out of the COVID-19 pandemic? Our finding is that the CAA was not wrong as alleged.

The RAB adjustment was unnecessary

- (a) Did the CAA make errors of fact in concluding that the RAB Adjustment was necessary to ensure notional financeability by (i) relying on flawed evidence and assumptions (that the 70% gearing threshold would have been breached without the RAB Adjustment, that it was necessary for HAL to access investment grade finance, that improved financial metrics would be sufficient to improve HAL's credit ratings); (ii) reaching conclusions without a reasonable basis that the RAB Adjustment was necessary to secure notional financeability and that HAL was at risk of an increase in debt costs sufficient to justify a £300 million RAB Adjustment? Our finding is that the CAA was not wrong as alleged.

- (b) Was the CAA wrong in law in making the RAB Adjustment because it failed to have regard to the need to secure that a 'notionally financed company' (and not HAL specifically) is able to finance its provision of airport operation services at Heathrow Airport? Our finding is that the CAA was not wrong as alleged.
- (c) Did the CAA wrongly conclude as a matter of law that the RAB Adjustment was necessary to ensure notional financeability because it failed to carry out the necessary analysis and quantification in relation to the potential increase in debt costs (and thus failed in its duty properly to enquire)? Our finding is that the CAA was not wrong as alleged.
- (d) Did the CAA wrongly conclude that the RAB Adjustment was necessary to ensure notional financeability because it made errors in the exercise of its discretion by taking into account the risk to the headroom on HAL's actual debt gearing covenants which were irrelevant factors? Our finding is that the CAA was not wrong as alleged.
- (e) Was the CAA wrong in law in making the RAB Adjustment because it failed to have regard to the need to promote economy and efficiency by HAL in its provision of airport operation services at Heathrow Airport? Our finding is that the CAA was not wrong as alleged.
- (f) Did the CAA make errors of fact in concluding that the RAB Adjustment was necessary to secure that all reasonable demands for airport operation services are met by (i) relying on flawed evidence and assumptions that the adjustment would incentivise additional investment; (ii) making false comparisons in relation to using the RAB to smooth the impact on charges from adjustments and incentives? Our finding is that the CAA was not wrong as alleged.
- (g) Was the CAA wrong in law in making the RAB Adjustment because it failed to have regard to the need to secure that all reasonable demands for airport operation services are met? Our finding is that the CAA was not wrong as alleged.
- (h) Did the CAA wrongly conclude as a matter of law that the RAB Adjustment was necessary to secure that all reasonable demands for airport operation services are met because it: (i) failed to properly enquire by not properly assessing the impact of the RAB Adjustment on HAL's investment incentives; (ii) acted in defiance of logic by seeking to use a lump sum RAB Adjustment as an incentive mechanism, and by failing to apply effective incentive regulation which would have used rewards and/or penalties to induce HAL to

achieve set objectives;³⁴⁵ and (iii) acted disproportionately by using a long-term solution for a potentially short-term issue? Our finding is that the CAA was not wrong as alleged.

- (i) Did the CAA wrongly conclude as a matter of law that the RAB Adjustment was necessary to allow HAL the flexibility to respond to changing circumstances because it reached conclusions that the RAB Adjustment could be belatedly justified on the basis of flexibility for HAL without adequate supporting evidence, contrary to the CAA's earlier reliance on evidence relating to notional financeability and securing all reasonable demands for airport operation services? Our finding is that the CAA was not wrong as alleged.

The RAB Adjustment was contrary or harmful to consumers' interests

- (a) Was the CAA wrong in law in making the RAB Adjustment because it failed to carry out its functions in a manner which it considers will further the interests of users of air transport services regarding the range, availability, continuity, cost and quality of airport operation services? Our finding is that the CAA was not wrong as alleged.
- (b) Was the CAA wrong in law in making the RAB Adjustment because it acted in defiance of logic, having included a review mechanism in the original 2021 RAB Adjustment Decision precisely because the CAA was not able at the time to be sure that the RAB Adjustment was justified and appropriately calibrated? Our finding is that the CAA was not wrong as alleged.
- (c) Did the CAA harm the interests of consumers in making the RAB Adjustment because it made errors in the exercise of its discretion by failing to meet any of its own key consumer interest objectives? Our finding is that the CAA was not wrong as alleged.

Airlines' submissions: the RAB Adjustment Error

5.207 In support of their appeals, the Airlines relied on the following.

The RAB Adjustment was unjustified

5.208 The Airlines submitted that the CAA was wrong because:

- (a) The CAA decided on a RAB Adjustment that was inconsistent with the primary purpose of the RAB. The RAB is intended to reflect the capital value of investments such that an efficient company is allowed to earn a return, to

³⁴⁵ [Delta NoA](#), paragraph 6.38(d)(iv) and [VAA NoA](#), paragraph 6.38(d)(iii).

incentivise efficient investment.³⁴⁶ The RAB Adjustment was not required for that purpose.³⁴⁷ efficient capex is added to the RAB anyway, and there is no evidence that 2021 adjustment did lead to investment.³⁴⁸ HAL's RAB has now been set 'at a level that is not reflective of the value delivered and unreasonably compensates HAL's investors at consumers' expense'.³⁴⁹

- (b) The RAB is to represent efficient capex investments which investors can expect (although there is no guarantee) to recoup and earn a return on, will include investments from different periods, and is not to compensate pandemic losses.³⁵⁰ Any adjustments must be strictly justified, and this adjustment was not.³⁵¹
- (c) Rather, the CAA's £300 million upward adjustment of HAL's RAB was not 'reasonable and appropriate' as it artificially inflated HAL's RAB so that 'it no longer represents the value of efficient investments that HAL has made in the regulated business'.³⁵² It benefitted HAL – and its investors – at the expense of consumers, becoming in effect a compensation for pandemic losses, particularly when permitted to be retained despite HAL's failure to deliver, despite traffic risk being a cost for HAL to bear and no identifiable benefit for consumers being delivered.³⁵³ It is contrary to other regulators' approaches³⁵⁴ and undermines the predictability of, and confidence in, the RAB model, and consumer legitimacy.³⁵⁵
- (d) Insofar as the RAB Adjustment becomes, in effect, a compensation for historic pandemic losses it is inconsistent with the Q6 price control and amounts to an unjustified 'double recovery' from consumers. The Q6 price control was concluded on the basis that HAL assumed the traffic risk. This was made clear in Q6 and in the Q7 Final Proposals. The Q6 price control also included higher WACC (relative to other network facilities) and a Shock Factor (**Shock Factor**) adjustment that took account of the risk.³⁵⁶
- (e) For the H7 period, there are other more appropriate and proportionate regulatory tools and mechanisms at the CAA's disposal to mitigate uncertainty for investors arising out of the COVID-19 pandemic:

³⁴⁶ [BA NoA](#), paragraphs 4.9.1-4.9.7, [Delta NoA](#), paragraph 6.22 and [VAA NoA](#), paragraph 6.22.

³⁴⁷ [BA NoA](#), paragraph 4.9.9(a), [Delta NoA](#), paragraph 6.38 and [VAA NoA](#), paragraph 6.38.

³⁴⁸ [BA NoA](#), paragraph 4.9.9(b), [Delta NoA](#), paragraph 6.38(d)(iii) and [VAA NoA](#), paragraph 6.38(d)(v).

³⁴⁹ [BA NoA](#), paragraph 4.8.1, [Delta NoA](#), paragraphs 6.2 and 6.75(c), and [VAA NoA](#), paragraphs 6.2 and 6.75(c).

³⁵⁰ [BA NoA](#), paragraph 4.9.6, [Delta NoA](#), paragraphs 6.22(a) – (g) and (h)(iii), and [VAA NoA](#), paragraphs 6.22(a) – (g) and (h)(iii).

³⁵¹ [BA NoA](#), paragraphs 4.8.2(b) and 4.9.7, [Delta NoA](#) paragraph 6.22(h)(ix), and [VAA NoA](#), paragraph 6.22(h)(viii).

³⁵² [BA NoA](#), paragraph 4.5.1, [Delta NoA](#), paragraph 6.22(h)(i), and [VAA NoA](#), paragraph 6.22(h)(i).

³⁵³ [Delta NoA](#), paragraphs 6.22(h)(iii) and 6.23, and [VAA NoA](#), paragraphs 6.22(h)(iii) and 6.23.

³⁵⁴ [Delta NoA](#), paragraph 6.22(h)(vi).

³⁵⁵ [BA NoA](#), paragraph 4.9, [Delta NoA](#), paragraph 6.22(h)(viii), and [VAA NoA](#), paragraph 6.22(h)(vii).

³⁵⁶ [Delta NoA](#), paragraph 6.23, and [VAA NoA](#), paragraph 6.23.

- (i) the TRS mechanism provides HAL with a relatively high degree of protection from extreme events – mitigating c.50% of HAL’s overall volume risk;
- (ii) the Asymmetric Risk Allowance aims to give the notional company a fair bet and to compensate HAL for bearing the downside risk for low frequency, high-impact shocks that cause major traffic disruption;
- (iii) the CAA has set a higher asset beta (and correspondingly higher WACC) to reflect that HAL is higher risk, even with the TRS mechanism;
- (iv) the CAA has included a Shock Factor to cover temporary and difficult to predict non-economic downside risks;
- (v) the CAA has issued guidance on reopening HAL’s price controls;³⁵⁷
- (vi) the RAB Adjustment, by contrast, is blunt and unfocused – it will have long term effects to solve short term issues and has poor incentive properties;³⁵⁸ and
- (vii) HAL’s shareholders could have injected equity but have not done so.³⁵⁹

The RAB Adjustment was unnecessary

5.209 The Airlines submitted that the CAA was wrong because:

- (a) The RAB Adjustment was not necessary to secure all reasonable demand for airport operation services would be met.³⁶⁰
- (b) There is no evidence that HAL had actually made any incremental expenditure due to the RAB Adjustment: out-turn capital expenditure in 2021 was lower than in 2020. The evidence before the CAA – had it properly enquired – admitted of only one conclusion: that HAL had failed to do as it had promised when seeking the RAB Adjustment.³⁶¹
- (c) The RAB Adjustment was not necessary to incentivise making required investments, and it was ‘an extra-ordinary justification to suggest’ that it was. Efficient investment is added to the RAB. Making a RAB Adjustment in advance of any additional capex would not realise additional investment without controls to ensure it was spent. Without such controls, the risk was that HAL would make no investment and the Net Present Value (**NPV**) of its

³⁵⁷ [Delta NoA](#), paragraphs 6.24 and 6.25, and [VAA NoA](#), paragraphs 6.24 and 6.25.

³⁵⁸ [Delta NoA](#), paragraph 6.26, and [VAA NoA](#), paragraph 6.26.

³⁵⁹ [BA NoA](#), paragraphs 4.11.8 and 4.12.7; [Delta NoA](#), paragraphs 6.27–6.28, and [VAA NoA](#), paragraphs 6.27–6.28.

³⁶⁰ [BA NoA](#), paragraph 4.10, [Delta NoA](#), paragraph 6.38, and [VAA NoA](#), paragraph 6.38.

³⁶¹ [BA NoA](#), paragraph 4.10.

profits would increase by £300 million. The CAA recognised this in the review mechanism built into the 2021 RAB Adjustment decision but failed to use that mechanism. HAL did not make the capex the CAA sought to incentivise through the adjustment (it spent less in 2021 than 2020 and failed to open Terminal 4 in a timely way despite this being a specific expectation of the CAA). Nor were there clear advantages in using the RAB Adjustment to smooth the impact on charges.³⁶²

- (d) In relation to securing that an efficiently (notionally) financed company can finance its licensed activities, it was an error for the CAA to assume that HAL was at risk of an increase in debt costs – and certainly not of the order to justify a £300 million RAB Adjustment. Such an adjustment would require an 86 Basis Points (**bps**) rise in the cost of HAL’s new debt and the CAA could not reasonably conclude there would be anything like such an effect.³⁶³
- (e) The CAA was wrong to conclude that the RAB Adjustment was necessary to ensure notional financeability for the following reasons:
 - (i) It recognised elsewhere in the 2021 RAB Adjustment Decision that, viewed on an actual basis, the evidence suggested that ‘an early RAB adjustment [was] not necessary to support HAL being able to access investment grade debt or prevent a substantial short term increase in the cost of debt’ and there is no rational basis why the notional company should have any issues if the much more highly geared actual HAL did not.³⁶⁴
 - (ii) It did not quantify whether the expected saving in interest payments would outweigh the cost of the RAB Adjustment. The adjustment could only have been justified if the cost of new debt for a notionally efficient company would otherwise have increased by a material amount over H7 by around 144bps. The CAA could not reasonably have concluded that there would be anything like such an effect.³⁶⁵
 - (iii) The CAA was wrong to say that absent the RAB Adjustment the gearing of the notional company would go above 70% and above the guidance levels set by some rating agencies for a strong investment grade credit rating. The CAA’s own analysis showed that the notional company could return notional gearing to 60% without a RAB Adjustment.³⁶⁶

³⁶² [Delta NoA](#), paragraph 6.38, and [VAA NoA](#), paragraph 6.38.

³⁶³ [BA NoA](#), paragraph 4.11.

³⁶⁴ [BA NoA](#), paragraphs 4.11.6 and 4.11.7, [Delta NoA](#), paragraphs 6.34 and 6.35, and [VAA NoA](#), paragraphs 6.34 and 6.35.

³⁶⁵ [Delta NoA](#), paragraph 6.36(a) and [VAA NoA](#), paragraph 6.36(a). See also [BA NoA](#), paragraph 4.11 where BA refers to an increase of 86 bps rise in the cost of HAL’s new debt as opposed to the 144 bps calculated by Delta and VAA.

³⁶⁶ [BA NoA](#), paragraph 4.11.6, [Delta NoA](#), paragraphs 6.36(a) and (b), and [VAA NoA](#), paragraphs 6.36(a) and (b).

- (iv) Despite being highly geared, HAL was financeable without the RAB Adjustment. HAL's financing group had made public statements that it had good liquidity and would not breach its debt covenants in 2021. HAL maintained investment grade credit ratings just before the 2021 adjustment decision. It raised significant debt in 2020 and 2021 (£2.5 billion in 2020) and retained headroom on its gearing ratios to raise effective investment grade finance.³⁶⁷
- (v) The CAA should have taken into account the fact that HAL's higher financing costs were due to its higher gearing practices and dividend payments and HAL's significant over-achievement of regulatory WACC over the Q6 period.³⁶⁸

The RAB Adjustment was unnecessary to allow HAL the flexibility to respond to changing circumstances

5.210 The Airlines submitted that an adjustment to HAL's RAB was not necessary to allow HAL the flexibility to respond to changing circumstances:³⁶⁹

- (a) The CAA's reliance on a stronger than expected recovery in passenger traffic as the trigger for HAL's additional expenditure was 'at odds with' statements in the original 2021 RAB Adjustment Decision that HAL was expected to invest in 2021 in anticipation of increases in traffic.
- (b) The CAA provided no supporting evidence or analysis for its view that it is not clear that it would have been in consumers' interests for HAL to have undertaken a materially greater volume of capital expenditure in 2021. HAL 'manifestly failed to make additional investment in 2021 to support service quality and capacity going forward, with significant consequences for airlines and consumers.' It would have been in consumers' interests to make further investments in 2021 insofar as they might have mitigated issues that arose in 2022.
- (c) The CAA's 'belated' reliance on flexibility 'renders worthless' the additional protection for consumers that the CAA chose to include, in the form of the review mechanism, in the initial 2021 RAB Adjustment Decision.

³⁶⁷ [Delta NoA](#), paragraph 6.36(c), and [VAA NoA](#), paragraph 6.36(c).

³⁶⁸ [Delta NoA](#), paragraph 6.36(d), and [VAA NoA](#), paragraph 6.36(d).

³⁶⁹ [Delta NoA](#), paragraphs 6.40 to 6.42, and [VAA NoA](#), paragraphs 6.40 to 6.42.

The RAB Adjustment was contrary or harmful to consumers' interests

5.211 The Airlines submitted that the RAB Adjustment was contrary or harmful to consumers' interests in that:³⁷⁰

- (a) The adjustment is contrary to the principle that only efficient investment is added to the RAB.
- (b) The CAA said it is 'plausible' that a small increase in charges would be offset by (i) a WACC reduction; (ii) increased investor confidence leading to investment in quality of service; (iii) improvement in the notional company's financing position going into H7. However, to be justified, the CAA would have to 'reasonably expect' that the adjustment would add £300 million of consumer benefits, and there is no reasonable basis to think HAL's debt costs would fall enough to offset the higher charges.
- (c) Consumers are actually paying for no benefit:
 - (i) The adjustment was not required to enable HAL to meet higher than forecast demand. On HAL's own forecasts, it only sought to make £218 million in capex in 2021, which would be added to RAB anyway, and it would not necessarily need to spend all in the event of higher than forecast passenger traffic. And, absent the review promised in the original 2021 RAB Adjustment Decision, HAL is not incentivised to invest by the adjustment, since the adjustment is not conditional on HAL having spent the sums or having enabled higher demand to be met.
 - (ii) Nor is the adjustment required for financeability if demand is lower than forecast. Even if, without the adjustment, HAL received a two-notch downgrade on its credit rating (which 'was never in reasonable prospect'), consumers would effectively be paying 1.4 to 2.2 times what is necessary to maintain HAL's credit rating.
 - (iii) Even if there was a financeability issue with the notional company, requiring consumers to pay more was not reasonable or lawful because:
 - (1) the adjustment added more value to investors, who already expected a cost of equity return; and
 - (2) investors could, as the CAA acknowledges, have invested to maintain HAL's debt covenants.³⁷¹

³⁷⁰ [BA NoA](#), paragraph 4.12, [Delta NoA](#), paragraphs 6.43 to 6.46, and [VAA NoA](#), paragraphs 6.43 to 6.46.

³⁷¹ [BA NoA](#), paragraph 4.12.

- (i) the TRS mechanism provides HAL with a relatively high degree of protection from extreme events – mitigating c.50% of HAL’s overall volume risk;
- (ii) the Asymmetric Risk Allowance aims to give the notional company a fair bet and to compensate HAL for bearing the downside risk for low frequency, high-impact shocks that cause major traffic disruption;
- (iii) the CAA has set a higher asset beta (and correspondingly higher WACC) to reflect that HAL is higher risk, even with the TRS mechanism;
- (iv) the CAA has included a Shock Factor to cover temporary and difficult to predict non-economic downside risks;
- (v) the CAA has issued guidance on reopening HAL’s price controls;³⁵⁷
- (vi) the RAB Adjustment, by contrast, is blunt and unfocused – it will have long term effects to solve short term issues and has poor incentive properties;³⁵⁸ and
- (vii) HAL’s shareholders could have injected equity but have not done so.³⁵⁹

The RAB Adjustment was unnecessary

5.209 The Airlines submitted that the CAA was wrong because:

- (a) The RAB Adjustment was not necessary to secure all reasonable demand for airport operation services would be met.³⁶⁰
- (b) There is no evidence that HAL had actually made any incremental expenditure due to the RAB Adjustment: out-turn capital expenditure in 2021 was lower than in 2020. The evidence before the CAA – had it properly enquired – admitted of only one conclusion: that HAL had failed to do as it had promised when seeking the RAB Adjustment.³⁶¹
- (c) The RAB Adjustment was not necessary to incentivise making required investments, and it was ‘an extra-ordinary justification to suggest’ that it was. Efficient investment is added to the RAB. Making a RAB Adjustment in advance of any additional capex would not realise additional investment without controls to ensure it was spent. Without such controls, the risk was that HAL would make no investment and the Net Present Value (**NPV**) of its

³⁵⁷ [Delta NoA](#), paragraphs 6.24 and 6.25, and [VAA NoA](#), paragraphs 6.24 and 6.25.

³⁵⁸ [Delta NoA](#), paragraph 6.26, and [VAA NoA](#), paragraph 6.26.

³⁵⁹ [BA NoA](#), paragraphs 4.11.8 and 4.12.7; [Delta NoA](#), paragraphs 6.27–6.28, and [VAA NoA](#), paragraphs 6.27–6.28.

³⁶⁰ [BA NoA](#), paragraph 4.10, [Delta NoA](#), paragraph 6.38, and [VAA NoA](#), paragraph 6.38.

³⁶¹ [BA NoA](#), paragraph 4.10.

profits would increase by £300 million. The CAA recognised this in the review mechanism built into the 2021 RAB Adjustment decision but failed to use that mechanism. HAL did not make the capex the CAA sought to incentivise through the adjustment (it spent less in 2021 than 2020 and failed to open Terminal 4 in a timely way despite this being a specific expectation of the CAA). Nor were there clear advantages in using the RAB Adjustment to smooth the impact on charges.³⁶²

- (d) In relation to securing that an efficiently (notionally) financed company can finance its licensed activities, it was an error for the CAA to assume that HAL was at risk of an increase in debt costs – and certainly not of the order to justify a £300 million RAB Adjustment. Such an adjustment would require an 86 Basis Points (**bps**) rise in the cost of HAL’s new debt and the CAA could not reasonably conclude there would be anything like such an effect.³⁶³
- (e) The CAA was wrong to conclude that the RAB Adjustment was necessary to ensure notional financeability for the following reasons:
 - (i) It recognised elsewhere in the 2021 RAB Adjustment Decision that, viewed on an actual basis, the evidence suggested that ‘an early RAB adjustment [was] not necessary to support HAL being able to access investment grade debt or prevent a substantial short term increase in the cost of debt’ and there is no rational basis why the notional company should have any issues if the much more highly geared actual HAL did not.³⁶⁴
 - (ii) It did not quantify whether the expected saving in interest payments would outweigh the cost of the RAB Adjustment. The adjustment could only have been justified if the cost of new debt for a notionally efficient company would otherwise have increased by a material amount over H7 by around 144bps. The CAA could not reasonably have concluded that there would be anything like such an effect.³⁶⁵
 - (iii) The CAA was wrong to say that absent the RAB Adjustment the gearing of the notional company would go above 70% and above the guidance levels set by some rating agencies for a strong investment grade credit rating. The CAA’s own analysis showed that the notional company could return notional gearing to 60% without a RAB Adjustment.³⁶⁶

³⁶² [Delta NoA](#), paragraph 6.38, and [VAA NoA](#), paragraph 6.38.

³⁶³ [BA NoA](#), paragraph 4.11.

³⁶⁴ [BA NoA](#), paragraphs 4.11.6 and 4.11.7, [Delta NoA](#), paragraphs 6.34 and 6.35, and [VAA NoA](#), paragraphs 6.34 and 6.35.

³⁶⁵ [Delta NoA](#), paragraph 6.36(a) and [VAA NoA](#), paragraph 6.36(a). See also [BA NoA](#), paragraph 4.11 where BA refers to an increase of 86 bps rise in the cost of HAL’s new debt as opposed to the 144 bps calculated by Delta and VAA.

³⁶⁶ [BA NoA](#), paragraph 4.11.6, [Delta NoA](#), paragraphs 6.36(a) and (b), and [VAA NoA](#), paragraphs 6.36(a) and (b).

- (iv) Despite being highly geared, HAL was financeable without the RAB Adjustment. HAL's financing group had made public statements that it had good liquidity and would not breach its debt covenants in 2021. HAL maintained investment grade credit ratings just before the 2021 adjustment decision. It raised significant debt in 2020 and 2021 (£2.5 billion in 2020) and retained headroom on its gearing ratios to raise effective investment grade finance.³⁶⁷
- (v) The CAA should have taken into account the fact that HAL's higher financing costs were due to its higher gearing practices and dividend payments and HAL's significant over-achievement of regulatory WACC over the Q6 period.³⁶⁸

The RAB Adjustment was unnecessary to allow HAL the flexibility to respond to changing circumstances

5.210 The Airlines submitted that an adjustment to HAL's RAB was not necessary to allow HAL the flexibility to respond to changing circumstances:³⁶⁹

- (a) The CAA's reliance on a stronger than expected recovery in passenger traffic as the trigger for HAL's additional expenditure was 'at odds with' statements in the original 2021 RAB Adjustment Decision that HAL was expected to invest in 2021 in anticipation of increases in traffic.
- (b) The CAA provided no supporting evidence or analysis for its view that it is not clear that it would have been in consumers' interests for HAL to have undertaken a materially greater volume of capital expenditure in 2021. HAL 'manifestly failed to make additional investment in 2021 to support service quality and capacity going forward, with significant consequences for airlines and consumers.' It would have been in consumers' interests to make further investments in 2021 insofar as they might have mitigated issues that arose in 2022.
- (c) The CAA's 'belated' reliance on flexibility 'renders worthless' the additional protection for consumers that the CAA chose to include, in the form of the review mechanism, in the initial 2021 RAB Adjustment Decision.

³⁶⁷ [Delta NoA](#), paragraph 6.36(c), and [VAA NoA](#), paragraph 6.36(c).

³⁶⁸ [Delta NoA](#), paragraph 6.36(d), and [VAA NoA](#), paragraph 6.36(d).

³⁶⁹ [Delta NoA](#), paragraphs 6.40 to 6.42, and [VAA NoA](#), paragraphs 6.40 to 6.42.

The RAB Adjustment was contrary or harmful to consumers' interests

5.211 The Airlines submitted that the RAB Adjustment was contrary or harmful to consumers' interests in that:³⁷⁰

- (a) The adjustment is contrary to the principle that only efficient investment is added to the RAB.
- (b) The CAA said it is 'plausible' that a small increase in charges would be offset by (i) a WACC reduction; (ii) increased investor confidence leading to investment in quality of service; (iii) improvement in the notional company's financing position going into H7. However, to be justified, the CAA would have to 'reasonably expect' that the adjustment would add £300 million of consumer benefits, and there is no reasonable basis to think HAL's debt costs would fall enough to offset the higher charges.
- (c) Consumers are actually paying for no benefit:
 - (i) The adjustment was not required to enable HAL to meet higher than forecast demand. On HAL's own forecasts, it only sought to make £218 million in capex in 2021, which would be added to RAB anyway, and it would not necessarily need to spend all in the event of higher than forecast passenger traffic. And, absent the review promised in the original 2021 RAB Adjustment Decision, HAL is not incentivised to invest by the adjustment, since the adjustment is not conditional on HAL having spent the sums or having enabled higher demand to be met.
 - (ii) Nor is the adjustment required for financeability if demand is lower than forecast. Even if, without the adjustment, HAL received a two-notch downgrade on its credit rating (which 'was never in reasonable prospect'), consumers would effectively be paying 1.4 to 2.2 times what is necessary to maintain HAL's credit rating.
 - (iii) Even if there was a financeability issue with the notional company, requiring consumers to pay more was not reasonable or lawful because:
 - (1) the adjustment added more value to investors, who already expected a cost of equity return; and
 - (2) investors could, as the CAA acknowledges, have invested to maintain HAL's debt covenants.³⁷¹

³⁷⁰ [BA NoA](#), paragraph 4.12, [Delta NoA](#), paragraphs 6.43 to 6.46, and [VAA NoA](#), paragraphs 6.43 to 6.46.

³⁷¹ [BA NoA](#), paragraph 4.12.

- (d) The RAB Adjustment has and will continue to cause consumer harm in increased passenger charges in that:
- (i) It is contrary to the key principle that only efficiently incurred expenditure should be added to the RAB – which should have been the CAA’s starting point.
 - (ii) HAL, not consumers, bore volume risk and made its own financing choices (which clearly deviated from the notional company) and it is not appropriate to transfer that risk to consumers from investors who already benefit from the expectation of earning the allowed cost of equity and could provide cash injections if necessary.
 - (iii) The adjustment was always a bad bargain for consumers since:
 - (1) HAL’s expected total expenditure was materially less than £300 million, and capex would be added to the RAB anyway making the adjustment duplicative and consumers pay twice;
 - (2) there was no reasonable basis to assume a risk of increased debt costs that justified a £300 million adjustment and, even with a two-notch downgrade, consumers would be paying 2.5 to 3.7 times the amount necessary to maintain HAL’s credit rating;
 - (iv) The adjustment has not delivered additional value for consumers and, despite the additional protection for consumers in the form of the review built in to the original 2021 RAB Adjustment Decision, there have been no consequences for that non-delivery.
- (e) It is illogical for the CAA to say that reversing the adjustment would not further consumers’ interests – and that the adjustment was justified and carefully calibrated – when the review mechanism was included precisely because the CAA was not able to so justify and calibrate it and the CAA expressly managed the expectations of investors by clearly making it contingent.
- (f) The adjustment will make charges higher than necessary, contrary to the CAA’s stated objective, over multiple price control periods.
- (g) The adjustment has not met any of the six consumer interest objectives the CAA identified in its final assessment framework.³⁷²

³⁷² [Delta NoA](#), paragraph 6.45 and [VAA NoA](#), paragraph 6.45.

CAA response to the RAB Adjustment Error

- 5.212 The CAA submitted that the Airlines' allegation that the overall conclusion that the CAA reached in respect of the RAB was unsupportable does not demonstrate an error on the part of the CAA, but merely reflects a number of policy disagreements with the CAA's exercise of its regulatory judgement.³⁷³
- 5.213 The CAA submitted that it considers that, while the primary purpose of the RAB is to support the remuneration of efficient investment, the RAB adjustment was consistent with this purpose. It told us that the use of the RAB for a wider purpose in the special circumstances of the COVID-19 pandemic falls firmly within the CAA's regulatory discretion.³⁷⁴
- 5.214 The CAA further submitted that the Airlines' argument that an adjustment was not required to encourage efficient investment is merely a policy disagreement, which does not adequately consider the exceptional circumstances of the COVID-19 pandemic and the very real pressure on HAL's cash flow, resulting in the very significant reductions HAL had made to its investment programmes. The CAA maintained that in these special circumstances, where there was evidence of exceptional financial pressure (on both the notional company and HAL itself), it was reasonable for the CAA to conclude that additional incentives were required at that time 'to encourage HAL to react flexibly' to any higher-than-expected increases in passenger traffic.³⁷⁵
- 5.215 Where the CAA took the view in the 2021 RAB Adjustment Decision that HAL was at risk from an increase in debt costs, the CAA maintained that this was an exercise of predictive, expert judgment and was explained and justified in the 2021 RAB Adjustment Decision itself. The CAA submitted that it cannot show that the CAA erred in reaching this conclusion. It told us that any downgrade of the notional company's debt could reasonably have been expected to have limited the notional company's access to financial markets, as well as to have an impact on HAL itself. The CAA therefore maintained that its decision on this issue was appropriate in the light of the broader context of special circumstances in early 2021.³⁷⁶
- 5.216 In relation to consumer harm, the CAA considered that its assessments of (a) the extent to which consumers would be harmed by increased perceptions of investor risk if the CAA went back on its commitment; and (b) the extent to which consumers would be harmed by increased charges following an increase in the

³⁷³ [CAA Response](#), paragraph 111.

³⁷⁴ [CAA Response](#), paragraph 112.

³⁷⁵ [CAA Response](#), paragraph 113.

³⁷⁶ [CAA Response](#), paragraph 114.

RAB, were exercises in regulatory judgement which it was entitled to make. They do not mean that the CAA's decision was wrong.³⁷⁷

- 5.217 In response to the Airlines' arguments that a RAB adjustment was unnecessary, the CAA submitted that it considers that the Airlines' statements ignore the very real risk of a credit rating downgrade that was faced by HAL at the relevant time. The CAA told us that it reasonably expected that its intervention would signal the limits of risk to which HAL would be exposed, thereby providing reassurance to debt investors and credit rating agencies. It was the CAA's further intention that its intervention would provide high-level reassurance that new investment, at the margin, would be profitable on an expected basis, and that HAL 'should therefore go ahead with rather than shun discretionary new expenditure'.³⁷⁸
- 5.218 As regards whether HAL's shareholders should have injected additional equity into the business which would have meant that the RAB adjustment was not necessary or appropriate, the CAA noted that HAL had just incurred a multi-billion-pound loss and current and prospective shareholders may well have viewed an equity injection as throwing 'good money after bad'. Under these circumstances, the CAA considered that it was reasonable to have had doubts regarding the viability of a notional equity injection.³⁷⁹

Intervener's submissions

- 5.219 HAL's position in its intervention remained that the CAA should have made a much larger RAB adjustment than it did, and HAL therefore contended that the Airlines' appeal should fall away on that ground.
- 5.220 However, in relation to the RAB Adjustment Error in particular, HAL contended that the Airlines' arguments are fundamentally wrong in two respects:
- (a) They misunderstand and misrepresent the nature of the RAB; and
 - (b) They ignore the fact that, by reason of the pandemic restrictions, HAL had effectively been deprived of a large part of the RAB which did reflect efficient investments.³⁸⁰
- 5.221 As regards Delta and VAA's argument that it is wrong in principle for the CAA to compensate HAL through the RAB for historic losses giving rise to double recovery, HAL contended that this argument again misunderstands the RAB as a regulatory tool which can be appropriately used to ensure financial capital maintenance and was therefore legitimate for the CAA to use in this case where

³⁷⁷ [CAA Response](#), paragraph 115.

³⁷⁸ [CAA Response](#), paragraph 117.

³⁷⁹ [CAA Response](#), paragraph 118.

³⁸⁰ [HAL NoI](#), paragraph 111.

HAL had been deprived of the opportunity to recover previous efficient investments.

- 5.222 Where the Airlines argue that there are other aspects of the price control framework which adequately and/or more appropriately mitigate the uncertainty for investors arising out of the COVID-19 pandemic, HAL submitted that these arguments only deal with what would happen if a further COVID-type event arise in future and do not deal with the impact of the actual COVID-19 pandemic and associated restrictions. HAL contended that it was legitimate for the CAA therefore to take action to reflect the fact that unforeseen and exceptional circumstances had occurred and where the CAA concluded that to fail to act would not accord with its statutory duties.³⁸¹
- 5.223 As regards the Airlines' argument that a RAB adjustment was not necessary to ensure financeability of the notional company, HAL responded that the Airlines' submissions seemed to be arguments that the CAA should have exercised its regulatory judgement differently. It said that the manner in which the CAA acted was legitimate in the light of the very real risks faced by the notional company and HAL at the relevant time.³⁸²
- 5.224 HAL also considered that the Airlines' arguments that (a) the CAA was wrong to conclude that an adjustment to the RAB was necessary to secure that all reasonable demands for airport operation services at Heathrow were met; (b) that it was necessary to allow HAL the flexibility to respond to changing circumstances; and (c) that the RAB adjustment was not therefore in the interests of consumers, should fail.³⁸³

Assessment: the RAB Adjustment Error

- 5.225 We structure our assessment of the RAB Adjustment Error in line with the subsidiary questions set out above.
- (a) First, we consider whether the CAA was wrong by making a RAB adjustment that was unjustified.
 - (b) Second, we consider whether the CAA was wrong by making a RAB adjustment that was unnecessary.
 - (c) Third, we consider whether the CAA was wrong because the RAB Adjustment was contrary or harmful to consumers' interests.

³⁸¹ [HAL NoI](#), paragraph 111.

³⁸² [HAL NoI](#), paragraph 114.

³⁸³ [HAL NoI](#), paragraphs 115-117.

Was the RAB Adjustment unjustified?

- 5.226 In our assessment of whether the CAA was wrong because the RAB adjustment was unjustified, we focus our assessment on four key questions.
- (a) Was the CAA wrong to adjust the RAB as a matter of regulatory principle and so failed to have regard to the principles that regulatory activities should be carried out in a way which is transparent, accountable, proportionate, consistent and targeted only at cases in which action is needed, and failed to take relevant considerations into account?
 - (b) Did the RAB Adjustment amount to double recovery from consumers?
 - (c) Were there other more appropriate tools available to mitigate the uncertainty arising from the COVID-19 pandemic and did the CAA fail to use the most appropriate regulatory mechanism available to it?
 - (d) Was the adjustment a transfer of value from consumers to investors, with no identifiable consumer benefit?
- 5.227 In our assessment of whether it is wrong to adjust the RAB as a matter of principle, we first considered the nature and function of the RAB. We note the CAA's position in its Final Decision that the RAB reflects the value of investments that HAL has made in its business.³⁸⁴ However, we also note the CAA's submission that while the primary purpose is to reflect the level of efficient investment made for the purposes of setting appropriate charges, this does not preclude the use of the RAB in the manner implemented through the 2021 RAB Adjustment Decision (and maintained in the Final Decision).³⁸⁵
- 5.228 Further, we have had regard to the submission from the CAA which provided examples of other non-capex related adjustments to the RAB. These included the addition to the RAB of: (i) compensation for inflation; (ii) expenditure on abandoned capital projects (as occurred in the Q5 price control); (iii) early expansion costs including financing costs (as occurred in the Q6 price control); traffic risk-sharing reconciliations (as has been implemented via the TRS mechanism in the H7 price control); and under/over forecasts of the cost of new debt (again, as implemented in the H7 price control).³⁸⁶
- 5.229 Alongside these points, we have considered the CAA's submission that the:
- H7 RAB cannot be construed solely as a measure of historical capital investment. Rather, it is best viewed as a store of financial value, or a rolling record showing how much accrued revenue

³⁸⁴ [Final Decision, Section 3](#), paragraph 10.1.

³⁸⁵ [CAA Response](#), paragraph 112.

³⁸⁶ Hoon 1, paragraph 5.36.

entitlement the CAA has acknowledged and expects to bring forward to factor into future price control decisions.³⁸⁷

- 5.230 Our view is that, while the RAB is generally described as reflecting the value of efficient investments, previous instances (both in the regulation of HAL and in the broader UK regulatory regime) demonstrate that adjustments to the RAB are not always directly and only reflective of efficient investment. Rather, the RAB may in some circumstances permissibly be used for other purposes.
- 5.231 Our view, accordingly, is that the CAA was not wrong in law because it acted inconsistently with the regulatory principle or purpose of the RAB, in making an adjustment to the RAB in the special circumstances of the COVID-19 pandemic.
- 5.232 We observe that the Airlines' case appeared at least in part to be that because the CAA had made a RAB adjustment that conflicted with regulatory principle and the purpose of the RAB, it necessarily followed that the CAA breached its statutory duties to have regard to the principles that regulatory activities should be carried out in a way which is transparent, accountable, proportionate, consistent and targeted only at cases in which action is needed. Given our finding that the CAA did not act in conflict with such principle and purpose, we also do not find that, by virtue simply of making the RAB adjustment, the CAA failed to have regard to the relevant principles. Nor did it necessarily act in defiance of logic or fail to take account of relevant considerations. We also take into account in these connections that, in any event, and as set out in paragraphs 5.245 to 5.272 below (and in paragraphs 5.121 to 5.131 above in the context of HAL's appeal), the CAA had regard to a series of considerations relevant to the principles relating to regulatory activities.
- 5.233 Further, we have considered whether the RAB Adjustment is inconsistent with the Q6 price control and amounts to double recovery from consumers. As set out at paragraph 5.200(a), the Airlines consider that the Q6 price control was concluded on the basis that HAL assumed all traffic volume risk, and that providing an adjustment therefore amounts to double recovery. At paragraphs 5.158 to 5.161, we set out our assessment that the Q6 price control was concluded on the basis that HAL generally bore traffic volume risk, but subject to the proviso that the price control might be reopened in exceptional circumstances and considered further in line with the CAA's statutory duties.
- 5.234 That – such re-opening and reconsideration – is what happened. The CAA has been clear in its position in that regard: that the RAB Adjustment was not intended to constitute compensation for HAL's previous losses. Rather, it was to:

³⁸⁷ Hoon 1, paragraph 5.37.

- (a) signal to HAL the importance of maintaining appropriate investment and service quality levels ahead of the start of H7;
- (b) provide stronger incentives and financial capacity for HAL to be proactive in planning for potentially higher than expected traffic levels from the summer of 2021; and
- (c) facilitate HAL in being able to continue to access investment grade debt to finance its activities, particularly if traffic forecasts were lower than forecast at the time of the adjustment.³⁸⁸

5.235 On the basis that the RAB Adjustment was not made to compensate HAL for losses suffered as a result of the pandemic, and was instead focused on ensuring the financeability of the notional company and signalling the importance of ongoing investment and service quality (as considered in further detail in paragraphs 5.258 to 5.272 below), our view is that the CAA was not wrong because it made a RAB Adjustment that was inconsistent with the Q6 price control. Nor was it wrong on the basis the RAB Adjustment amounted to double recovery of revenues from consumers previously provided for at Q6. We find that the CAA's rationale for, and the effect of, the RAB Adjustment was consistent and logical.

5.236 We have also considered the Airlines' submission that more appropriate tools were available to mitigate the uncertainty arising from the COVID-19 pandemic, and that the CAA failed properly to enquire, to take account of relevant considerations and to utilise the most appropriate regulatory mechanism available to it. The Airlines suggested that these tools and mechanisms could take the form of: (i) other uncertainty mechanisms within the H7 price control; or (ii) an injection of equity.

5.237 As to other mechanisms within the H7 price control, we observe that in seeking in April 2021 to mitigate uncertainty arising from the effects of the pandemic, the CAA was making an adjustment outside of the normal price control process. It did not, as it submitted to us, have a fully specified H7 price control at that time.³⁸⁹ It might have been possible to manage future uncertainty through adjustments to the H7 price control in due course, but the H7 process was at that stage not nearing completion and there would have been a significant time delay before it could be adjusted in any way to mitigate the pandemic-related uncertainty that existed. The CAA considered waiting until the finalisation of the H7 process – and doing nothing in the interim – but ruled this out and decided that it needed to act earlier. In doing so, it also recognised that some issues would require further consideration in terms of broader changes to the regime at the time of setting the H7 price control.

³⁸⁸ [2021 RAB Adjustment Decision](#), paragraph 24.

³⁸⁹ Transcript of Ground A Hearing, page 81, lines 1–4.

- 5.238 As to a possible equity injection, the CAA submitted that at the point at which it was considering the RAB Adjustment, it had not seen ‘extensive evidence of other aviation business or other businesses generally injecting substantial amounts of equity’ in a way that would give it confidence that it would be an effective solution in this case.³⁹⁰ It also noted that it had not at that point completed its review of the financeability of the notional company, and it felt the risk of investors seeing an equity injection as ‘throwing good money after bad’ was a live issue.³⁹¹
- 5.239 We have taken into account in this connection that there was significant financial uncertainty across markets more broadly at that time. While there were some equity injections within the aviation sector, as highlighted by the Airlines,³⁹² and while we agree with them that it may be proper for a regulator to require an equity injection in some circumstances,³⁹³ it does not follow that the CAA was wrong in not so requiring in this case. It made a judgement based on its understanding of the limited number of successful equity raises within the sector and the broader uncertainty facing such a proposal in such exceptional circumstances as the COVID-19 pandemic.
- 5.240 We note that the Airlines dispute the CAA’s concern around ‘throwing good money after bad’. The Airlines submitted that this evinces a ‘fundamental misunderstanding as to the motivations and incentives of long-term, institutional investors in regulated infrastructure, and also demonstrates a fundamental unwillingness on the part of the CAA to consider using the obvious lever to protect the consumer interest’.³⁹⁴
- 5.241 However, it is also relevant to consider that the COVID-19 pandemic is liable to have raised uncertainties, at least in the immediate aftermath, that went beyond the normal expectations of long-term institutional investors. Managing risk within that period of uncertainty was a complex task in which – including with the benefit of hindsight – it is not apparent that an equity injection would have been a materially superior approach to a RAB adjustment.
- 5.242 On this basis, and with consideration of its focus on providing increased certainty in a short timeframe and against a highly uncertain backdrop, our view is that the CAA was not wrong in opting for an adjustment to the RAB over an equity injection at the relevant time in 2021 (nor, as we set out elsewhere in this determination, do we find that the CAA was wrong to maintain that adjustment in the Final Decision).
- 5.243 Accordingly, taking into account our assessment of the questions set out at paragraphs 5.206(a) to 5.206(d) above, our view is that the CAA did not make an

³⁹⁰ Transcript of Ground A Hearing, page 81, lines 4–7.

³⁹¹ Transcript of Ground A Hearing, page 81, lines 7–9.

³⁹² Airlines, Response to PD, 22 September 2023 (**Airlines Response to PD**), paragraph 2.18.3.

³⁹³ Airlines Response to PD, paragraph 2.18.1.

³⁹⁴ Airlines Response to PD, paragraph 2.18.2.

error in law or in the exercise of a discretion in making a RAB Adjustment on that basis that it was unjustified. Nor, similarly, on the basis there was an unfair transfer of value from consumers to investors.

5.244 The CAA did not err in adjusting the RAB as a matter of principle. It made its adjustment for reasons that extend beyond the routine management of the allocation of risk, noting the need to support ‘appropriate levels of investment’, and provide ‘clarity and clear signals that could reduce the risk of a credit downgrade and increases in the cost of debt’.³⁹⁵ On that basis, the adjustment was not inconsistent with the Q6 price control and did not amount to double recovery. There were other mechanisms that may have been used to mitigate COVID-related uncertainty for investors – of which there has been implementation in the H7 price control, such as the TRS mechanism – but the CAA’s judgement that it needed to provide greater certainty in the midst of the pandemic, and that an adjustment to the RAB was a means by which to provide a quick and appropriate solution, was one it was entitled to make. It is not clear that either waiting until the H7 price control to implement any action, or requiring an equity injection, would have been a clearly superior means by which to provide such certainty.

Was the RAB adjustment unnecessary?

5.245 We turn next to the Airlines’ allegation that the RAB adjustment was unnecessary. In making our assessment, and having regard to the questions we have identified as being those we need to answer (as set out above), we consider, in particular, whether the CAA was wrong to: (i) use the RAB adjustment as a way of incentivising investment; (ii) conclude that the RAB adjustment was necessary to ensure financeability of the notional company; and (iii) assume that HAL was at risk of an increase in debt costs.

5.246 The CAA stated in its 2021 RAB Adjustment Decision that its rationale for the adjustment was to:

- (a) secure that all reasonable demands for airport operation services at Heathrow are met. It considered that its intervention would do that by incentivising additional investment by HAL during 2021 that would further the interests of consumers; and
- (b) secure that an efficiently or ‘notionally’ financed company could finance its licensed activities at Heathrow airport.³⁹⁶

5.247 The CAA expanded on this during the Ground A hearing, in which it explained to us that there two principal aspects to how it arrived at the £300 million adjustment:

³⁹⁵ [2021 RAB Adjustment Decision](#), paragraph 3.61.

³⁹⁶ [2021 RAB Adjustment Decision](#), paragraph 4.

- (a) First, it examined credit metrics considered by credit rating agencies and estimated the scale of the adjustment that would bring the notional company within the threshold for a strong investment credit rating.
- (b) Second, it reflected on the need to encourage HAL to continue investing ‘particularly ahead of the summer period when there was the possibility of a sudden recovery’.³⁹⁷

5.248 In other words, the CAA told us that it took into account both the need to secure financeability and the need to incentivise investment in determining the £300 million figure, which it concluded would achieve both sets of objectives.³⁹⁸ In this context, we have considered the CAA’s position on the need to secure financeability alongside its view that an adjustment could assist in incentivising investment.

5.249 We note the CAA’s position that the gearing for the notionally financed company was expected to have increased from 60% prior to the COVID-19 pandemic to just over 70% in 2021. It explained that this increase would have taken the notionally financed company above the guideline levels set by some rating agencies for a strong investment grade credit rating, and that a RAB adjustment of £300 million would reduce the gearing of the notionally financed company and bring it below the threshold. It noted that it would not expect a credit rating to be ‘unduly influenced by credit metrics in any single year’, but that it nonetheless considered a regulatory intervention of £300 million would provide a strong signal that the regulatory framework is consistent with enabling the notionally financed company to access cost effective investment grade debt finance.³⁹⁹ On this basis, we understand that the CAA made its financeability assessment taking account of gearing ratios and how these affect credit metrics, and determined £300 million to be an appropriate value.

5.250 The Airlines submitted that the CAA’s RAB adjustment would not be in consumers’ interests if the RAB adjustment exceeded the expected saving in interest payments. They contended that the CAA’s approach would require a 16.7 bps increase in the overall cost of debt to be effective in this context. The Airlines told us that there is no indication that the CAA assessed the likelihood of such an increase. Further, the Airlines submitted that, as a result of the ratio of embedded to new debt, the approach followed by the CAA could only be justified if there were a 144 bps rise in the cost of new debt during H7. They also referred to HAL’s actual gearing position, setting out examples as to why it considered that HAL had a higher level of gearing than the notional company but remained financeable, meaning that the notional company had no need for a RAB adjustment to secure

³⁹⁷ Transcript of Ground A Hearing, page 83, lines 7–11.

³⁹⁸ Transcript of Ground A Hearing, page 83, lines 13–14.

³⁹⁹ [2021 RAB Adjustment Decision](#), paragraphs 4.12–4.13.

notional financeability. We note also that the Airlines submitted that they disagreed with the CAA's position that the pandemic would have resulted in an increase in notional gearing.

5.251 In making our assessment, we take into account, that an actual company having higher gearing and remaining financeable does not necessarily indicate that the relevant notional company would have remained financeable absent the intervention. Gearing is one, albeit significant, element which influences the credit rating amongst a range of quantitative and qualitative indicators. More importantly, we agree with the CAA that the Airlines' point about the actual and notional company overlooks that the CAA's intervention was intended to provide greater clarity about the regulator's support on a forward-looking basis, extending into H7 and beyond.⁴⁰⁰ We also observe that the assessment of financeability requires a degree of judgement and should not be reduced to a marginal cost-benefit analysis as proposed by the Airlines. The CAA's intervention was intended to provide greater certainty to investors which, in our view, could have reasonably been expected to reduce the cost of new debt finance and the cost of equity on a forward-looking basis for the notional company, but quantifying this at the time of the decision would have been challenging.

5.252 We also take into account that, in the 2021 RAB Adjustment Decision, the CAA noted that:

- (a) There was a risk that HAL could face higher debt costs and more difficulty accessing debt if traffic recovery was slower than expected.⁴⁰¹ Credit rating agencies had put HAL on negative outlook and therefore it was at risk of a downgrade.⁴⁰² This could reduce the target credit rating for the notional company, increasing the cost to consumers as a result of higher debt costs.
- (b) Its focus was on the notional company's, rather than HAL's actual, financial structure, and that, on a notional basis, a number of key credit metrics were below the levels normally associated with investment grade debt.⁴⁰³
- (c) On the basis of the above, early regulatory intervention may be appropriate to signal the importance of the notional company being able to retain access to investment grade finance, in the case of recovery of traffic being slower than expected.⁴⁰⁴

5.253 Additionally, the CAA explained that notional gearing was expected to increase substantially in 2021, as a result of the impact of COVID-19, to above 70%. Again, the CAA noted that if recovery in traffic remained lower than expected, this would

⁴⁰⁰ Hoon 1, paragraph 5.19.

⁴⁰¹ [2021 RAB Adjustment Decision](#), paragraph 3.27.

⁴⁰² [2021 RAB Adjustment Decision](#), paragraph 3.42.

⁴⁰³ [2021 RAB Adjustment Decision](#), paragraph 3.42.

⁴⁰⁴ [2021 RAB Adjustment Decision](#), paragraph 3.42.

increase the peak gearing of the notional company. That could prolong the reduction in access to efficient and sustainable levels of finance unless the CAA made an intervention. The CAA noted that without an intervention, the increase in gearing could reduce the headroom for the notional efficient company to make investments in the short term that would further the interests of consumers.⁴⁰⁵

- 5.254 On the specific issue of assuming an increase in the notional company's gearing from 60% to just over 70%, the CAA explained to us its judgement that 'it was reasonable to assume that the operating issues associated with the pandemic would have initially been funded through debt issuance (rather than equity injections) and therefore drive-up notional gearing'.⁴⁰⁶ That, in our view, was a judgement the CAA was entitled to make, given its (in our view, legitimate) assessment of the limited prospects for a fresh equity injection in the relevant circumstances.
- 5.255 On these bases, the CAA considered that there was a case for targeted intervention to address the risks that the notional company could face higher debt costs. That risk was liable to affect its financeability – in particular its ability to raise finance at efficient costs – which would in turn increase charges to customers.⁴⁰⁷
- 5.256 The CAA also noted that, in addition to considering the notional company, it examined the impact on the actual company (as a secondary consideration). It observed that it was possible that HAL would need to seek support on debt covenants in 2021 in respect of interest cover ratios but that it was unlikely that HAL's ability to achieve such waivers would depend on early regulatory intervention because: (i) a RAB adjustment would not improve interest cover ratios; and (ii) HAL should remain an attractive investment when traffic recovers.⁴⁰⁸
- 5.257 Further, the CAA noted that shareholders had the option of providing additional support to HAL, but nonetheless the CAA considered that providing a signal of regulatory support for the notional company was likely to provide a spill-over effect to the benefit of the actual company. That is, both in terms of improving the headroom on certain covenants and strengthening HAL's negotiations with bondholders on future waivers if required (thereby reducing the cost of covenant waivers or potentially avoiding the need for waivers on gearing).⁴⁰⁹
- 5.258 We have also considered that, alongside the CAA's financeability reasoning for the RAB adjustment, it referred to the need to encourage HAL to maintain appropriate investment and service quality levels ahead of the start of H7.⁴¹⁰ This would in turn have helped ensure that reasonable demands for airport services were met as

⁴⁰⁵ [2021 RAB Adjustment Decision](#), paragraph 3.42.

⁴⁰⁶ Hoon 1, paragraph 5.28.

⁴⁰⁷ [2021 RAB Adjustment Decision](#), paragraph 3.43.

⁴⁰⁸ [2021 RAB Adjustment Decision](#), paragraph 3.44.

⁴⁰⁹ [2021 RAB Adjustment Decision](#), paragraph 3.45.

⁴¹⁰ [2021 RAB Adjustment Decision](#), paragraph 24.

passenger numbers recovered following the pandemic. The CAA did not, therefore, fail to have regard to the need to secure that the notional company would be able to finance its provision of airport operation services at Heathrow. To the contrary, the CAA's reasoning for making the RAB Adjustment was to encourage continued investment and the maintenance of service quality levels at the height of the pandemic uncertainty and through 2021.

- 5.259 We take into account that, as noted above, we agree that the general purpose of the RAB is to reflect the value of efficient investment. Generally, therefore, we would expect the value of such investment to be applied to the RAB after the expenditure had been occurred. However, as set out at paragraph 5.230 above, we also recognise that the RAB may in some circumstances, such as those of the COVID-19 pandemic, permissibly be used for other purposes.
- 5.260 In this case, the CAA was considering the need to incentivise investment in the context of the COVID-19 pandemic. While we would be generally less sympathetic towards a view that a RAB adjustment ahead of investment would be an appropriate tool to incentivise investment in a business-as-usual scenario, we recognise that in this particular case the CAA was concerned about the risk of a 'very real pressure on HAL's cash flow' which had resulted in reductions to its investment programmes (as detailed at paragraph 5.214 above).⁴¹¹ Despite the fact that the value of investments is added to the RAB in the normal course of the regulatory price control, given that HAL was losing money as a result of operating restrictions arising from the COVID-19 pandemic and in light of its concerns about the notional company's ability to borrow at all (or at efficient cost), the CAA was concerned that its normal methods to incentivise investment were less effective.⁴¹²
- 5.261 Finally, we have considered whether the CAA was wrong to include a review mechanism in the 2021 RAB Adjustment Decision because it was not able at the time to be sure that the RAB Adjustment was justified and appropriately calibrated.
- 5.262 As we previously noted, the CAA made clear, at the time it took the 2021 RAB Adjustment Decision, that the adjustment was made in order to:
- (a) signal to HAL the importance of maintaining appropriate investment and service quality levels ahead of the start of H7;
 - (b) provide stronger incentives and financial capacity for HAL to be proactive in planning for potentially higher than expected traffic levels from the summer of 2021; and

⁴¹¹ [CAA Response](#), paragraph 113.

⁴¹² Transcript of Ground A Hearing, page 95, lines 6–22.

- (c) facilitate HAL in being able to continue to access investment grade debt to finance its activities, particularly if traffic levels turned out to be lower than expected.

- 5.263 These were forward-looking objectives and, in a period of such uncertainty, the CAA did – and was, in our opinion, not wrong to – provide for a review mechanism in its 2021 RAB Adjustment Decision to ensure that if the adjustment were to be included in the H7 price control, it was justified on the basis of meeting these objectives. As discussed in further detail below, the CAA, in reaching its Final Decision did assess the RAB Adjustment against the objectives set in April 2021 and concluded that they had been met.
- 5.264 We also consider that the CAA did not provide for the review mechanism on the basis that it was unable to calibrate the level of RAB Adjustment required. The CAA primarily reached the £300 million figure provided for in its 2021 RAB Adjustment Decision on the basis of a financeability assessment.⁴¹³ The review mechanism was not designed to re-calibrate the adjustment amount except in the event that the RAB Adjustment had not met its objectives.
- 5.265 Taking all the above into account, our finding is that the Final Decision was not wrong on account of the RAB adjustment being unnecessary. The decision was not based on errors of fact, nor wrong in law and nor did the CAA make an error in the exercise of discretion, as the Airlines allege.
- 5.266 The CAA was responding to concerns that arose in the highly unusual circumstances of the pandemic. It did so having generally allocated passenger volume risk to HAL and its investors in Q6 but also having indicated that it could re-open the price control in exceptional circumstances and consider matters in the light of its statutory duties. Its assessment was a context-specific and reactive one, in circumstances that it was not wrong to regard as urgent.
- 5.267 In that uncertain and unusual context, the nature of the assessments the CAA had to make is important. It had to make judgements which balanced quantitative considerations (eg the need to bring the notional gearing back to targets consistent with an investment grade credit rating) and qualitative considerations (eg as to the signalling effect of any intervention or non-intervention). Our view is that this was an appropriate evaluative approach in the circumstances, and one that the CAA was accordingly not wrong to adopt. The Airlines' contended approach to aspects of the CAA's assessment involves an overly simplified quantification of the potential impact of the CAA's decision.
- 5.268 Insofar as the CAA's assessment involved alleged errors of fact, these were not simply matters of plain fact. They were matters of evaluative and predictive

⁴¹³ Transcript of Ground A Hearing, page 83, lines 3–23

assessment (eg as to gearing thresholds and the need to bring ratios back to certain levels and the effect on the ability to meet uncertain levels of demand after the pandemic), where there was uncertainty around identifying the precise impacts of any intervention and in respect of which the CAA should be afforded a margin of discretion.

- 5.269 On that basis, we do not find that the Final Decision was wrong as alleged because it was based on material errors of fact relating to the need for the RAB adjustment in terms of financeability or HAL's ability to meet demand for airport services.
- 5.270 Neither do we find that the decision was wrong in law in those respects. The CAA plainly had regard to the need to secure the financeability of the notional company and to the need to meet all reasonable demands for airport services (in the context of the uncertain recovery of passenger numbers following the pandemic). Its assessments were the products of enquiry and its regard to relevant considerations, and had foundations in the facts (as it judged them) and evidence, such that we do not consider them to have been wrong as a matter of law.
- 5.271 In making this judgement, we recognise that while the CAA made only a single adjustment to the RAB, by doing so it addressed a number of concerns relating to HAL's ability to operate amidst the uncertainty arising from the COVID-19 pandemic. The CAA considered there to be a very real risk to the ongoing financeability of the notional company and its incentives to deliver the necessary investment to maintain service quality. In the context of those (in our view) legitimate concerns, it judged an intervention in the form of a RAB adjustment to be in line with its statutory duties, including having regard to the needs for financeability, to meet demand and to promote economy and efficiency by HAL in the provision of airport operation services at Heathrow airport.⁴¹⁴
- 5.272 We also do not judge the CAA to have made an error in the exercise of a discretion. In the urgency and uncertainty that existed, it is not evident that there was a clearly superior alternative open to the CAA and which we should find it wrong not to have adopted.

Was the RAB adjustment harmful to consumers?

- 5.273 The rationale for the Airlines' submission that the RAB adjustment was harmful to consumers (as set out from paragraph 5.211 above) is, in effect, a logical consequence of their submissions about why – in their view – the RAB adjustment was unjustified and unnecessary.

⁴¹⁴ See paragraphs 5.118 – 5.127 above where we set out further detail on our consideration of the CAA's actions in response to its statutory duties in the context of HAL's appeal.

- 5.274 As set out at paragraph 5.251, we recognise that the RAB Adjustment was made primarily on the basis of ensuring the financeability of the notional company, which the CAA concluded was necessary on the basis of its review of credit metrics, having regard to gearing ratios. We note also the CAA's position that it considered there to be a real risk of HAL pausing or slowing investment due to the uncertainty arising from the pandemic and the potential need to restrict cash outflows. While the Airlines suggested that an adjustment on this basis, in effect, double counts the cost of investment because customers were not paying for actual expenditure but a 'real option' for HAL to undertake investment,⁴¹⁵ our view is that the CAA did not err in having regard to the uncertain financial position in which HAL was considering its investment plans.
- 5.275 In this context, while the passenger charge may be greater than if there had been no RAB Adjustment, this is a direct reflection of a need to support HAL/the notional company during the exceptional circumstances of the pandemic. We recognise that the CAA was balancing additional charges to consumers arising from a higher RAB against the potential harm (and ultimately cost) to consumers in the case of the company being unfinanceable (or facing significantly higher financing costs) or unwilling to continue to invest in projects, negatively affecting service quality. That, in the context of HAL's statutory duties, was a balancing exercise that the CAA had to undertake, and it involved an exercise of regulatory judgement that the CAA, as the expert regulator, was entitled, within the margin of appreciation it should be given, to make. Our view, therefore, is that the CAA did not err in this regard.

Conclusions on the RAB Adjustment Error

- 5.276 On the basis of our detailed review of the Parties' submissions and supporting evidence and the assessment set out above, we determine that the CAA was not wrong in fact, law, or in the exercise of a discretion in making a RAB Adjustment.
- 5.277 We find that the CAA was not wrong in that:
- (a) It acted consistently with the regulatory principle and purpose of the RAB in making the RAB Adjustment;
 - (b) It plainly had regard to its statutory duties in reaching the conclusion that the RAB Adjustment was necessary to ensure (notional) financeability, and in order to encourage efficient investment so as to meet all reasonable demands for airport services;

⁴¹⁵ Airlines, AlixPartners, Assessment of the CAA's H7 RAB Adjustment, Report prepared for British Airways, Virgin Atlantic Airways and Delta Air Lines, 17 April 2023, paragraph 2.6.7.

- (c) It based its conclusions on evaluative assessments of facts that it was entitled to make and on supporting evidence available to it, taking into account relevant factors;
- (d) In focusing a RAB adjustment on relevant considerations that arose in the context of the pandemic⁴¹⁶, the CAA acted in the way it considered would further consumers' interests and had regard to its statutory duties, including the principles that regulatory activities should be carried out in a way which is transparent, accountable, proportionate, consistent and targeted. It also took relevant considerations into account, and the RAB Adjustment it made was not inconsistent with the Q6 price control.
- (e) It did not err in the exercise of a discretion by failing to adopt a clearly superior alternative to the making of the RAB Adjustment.

The Failure to Review Error

5.278 As set out above in paragraph 5.202, the overall statutory question for determination in this regard is:

Was the CAA's Final Decision wrong because it was based on errors of fact, was wrong in law or an error was made in the exercise of a discretion, in failing to review, reduce or remove the RAB Adjustment originally made in 2021?

Summary of our approach and conclusions: subsidiary questions – the Failure to Review Error

5.279 The Airlines' appeals on the Failure to Review Error were again diffusely pleaded. In the light of the pleadings made and supporting evidence, the subsidiary questions relating to this alleged error that we have considered in order to determine the overall statutory question, and our findings in respect of each of them, are:

The CAA was wrong in failing to review the RAB contrary to a previous commitment to do so

- (a) Did the CAA make errors of fact in refusing to conduct a review of the RAB Adjustment because: (i) it relied on flawed evidence and assumptions that reversal of the RAB Adjustment would not be the appropriate remedy in the context of a review, and that the RAB Adjustment had not been made to support service quality over 2021 and into 2022; and (ii) had the wrong facts

⁴¹⁶ For example, legitimate concerns about HAL's ability to borrow at all (or at efficient cost) and the real risk to its ongoing operation in terms of financeability and investment.

or interpreted them incorrectly in concluding that a review would be distraction? Our finding is that the CAA was not wrong as alleged.

- (b) Was the CAA wrong in law in refusing to conduct a review of the RAB Adjustment because it misdirected itself that the 2021 RAB Adjustment decision was intended to be final or was not contingent on HAL's subsequent conduct and failed to meet its commitment to conduct a review in the circumstances which arose? Our finding is that the CAA was not wrong as alleged.
- (c) Did the CAA make errors in the exercise of a discretion by refusing to conduct a review of the RAB Adjustment because it: (i) put in place additional protections for consumers but unreasonably sought to limit and refused to use them; and (ii) failed to provide proper reasons? Our finding is that the CAA was not wrong as alleged.

The CAA failed properly to consider the evidence and erred in its conclusion relating to the volume of capital expenditure in 2021

- (d) Did the CAA make errors of fact in refusing to conduct a review of the RAB Adjustment because it reached conclusions that it would not have been in consumers' interests for HAL to have undertaken more investment in 2021 to maintain and improve quality of services to consumers in 2021 and beyond without a reasonable basis for doing so? Our finding is that the CAA was not wrong as alleged.
- (e) Was the CAA wrong in law because in refusing to conduct a review of the RAB Adjustment it failed to take proper account of relevant considerations in the form of evidence that HAL had failed to meet commitments on investment, capacity, and service quality? Our finding is that the CAA was not wrong as alleged.

The CAA wrongly treated itself as precluded from reversing or reducing the adjustment by regulatory precedent

- (a) Did the CAA make errors of fact in refusing to conduct a review of the RAB Adjustment because it relied on flawed assumptions and evidence that the facts of the Competition Commission's (**CC**) Phoenix Natural Gas Limited (**PNGL**) price determination were sufficiently similar to the H7 price control to justify the CAA's reliance on that determination in its refusal to reverse the amounts previously added to the RAB? Our finding is that the CAA was not wrong as alleged.
- (b) Was the CAA wrong in law because in refusing to conduct a review of the RAB Adjustment it misdirected itself in law by misinterpreting and

misapplying (i) the CC's price redetermination in *PNGL* (or, in the alternative, by indicating that the RAB Adjustment could be reversed or reduced when it could not); (ii) the contingent nature of the RAB Adjustment? Our finding is that the CAA was not wrong as alleged.

Failing to review the RAB adjustment caused and will continue to cause consumer harm

- (a) Did the CAA make errors in the exercise of a discretion by refusing to conduct a review of the RAB Adjustment which has created a significant and lasting distortion to airport charges which unreasonably benefits HAL's investors at consumers' expense? Our finding is that the CAA was not wrong as alleged.

Airlines' submissions on the Failure to Review Error

The CAA was wrong in failing to review the RAB contrary to a previous commitment to do so

5.280 The Airlines submitted the CAA was wrong because:

- (a) It misdirected itself in asserting that 'the April 2021 RAB Adjustment Decision was intended to be our H7 Final Decision to give effect to the inclusion of the £300 million in HAL's opening RAB for H7' such that there was 'a relatively high evidential threshold for us to consider reversing that decision'.⁴¹⁷
- (b) The adjustment was made on the explicit basis that it was to secure that all reasonable demands for airport operation services at Heathrow airport are met by incentivising investment by HAL during 2021 that would further the interests of consumers. The CAA made statements that the adjustment was contingent on HAL making the investments necessary to maintain service quality and provide necessary capacity during the remainder of 2021 and beyond in the event of a stronger than expected recovery in passenger traffic, and that it intended to hold HAL to its commitments. It said that if evidence were to emerge of HAL failing to deliver on an appropriate quality of service in 2021, it would conduct a review and, if that review were to show that HAL had not responded appropriately, including in respect of service levels where this is within HAL's control, it would consider reducing the adjustment.⁴¹⁸
- (c) There was ample evidence of HAL not making the promised investments and this failure demonstrably resulting in a failure to deliver on an appropriate

⁴¹⁷ [BA NoA](#), paragraph 4.6.7.

⁴¹⁸ [BA NoA](#), paragraph 4.6, [Delta NoA](#), paragraph 6.49 and [VAA NoA](#), paragraph 6.49.

quality of service, making it incumbent on the CAA to conduct the promised review:

- (i) HAL's out-turn capital expenditure was lower in 2021 than 2020;
 - (ii) HAL was not planning and prepared for, and subsequently was unable to meet, demand in Summer 2022 despite airlines' warnings of a strong rebound in passenger volumes;
 - (iii) HAL refused to open T4 until mid-2022, leading to congestion at T2 in particular, and significant delays at the UK border across all terminals; and
 - (iv) HAL under-performed in the Service Quality Rebates and Bonuses (**SQRB**) metrics,⁴¹⁹ particularly in relation to security queue performance, and a decline in passenger satisfaction in relation to security.⁴²⁰
- (d) The original 2021 RAB Adjustment Decision included statements that showed the CAA clearly wanted to ensure that HAL was appropriately prepared for the return in demand by making investments in 2021 and beyond. Whilst the CAA has attempted to reposition its RAB adjustment as relating only to outcomes in 2021, this is inconsistent with previous statements made by the CAA and with what HAL requested. The 2021 RAB Adjustment Decision expressly stated that: (i) the CAA would review the adjustment if evidence were to emerge of HAL failing to deliver on quality of service; and (ii) the outcome of such review could be a reduction in the RAB Adjustment.⁴²¹
- (e) There was clear evidence of HAL's failures, and numerous explicit requests for the CAA to initiate a review, but the CAA failed to conduct a review:
- (i) the Airlines put evidence to the CAA of HAL's failure to invest in 2021 to meet forecast demand for 2022 and delivery of poor quality of service; and
 - (ii) there were at least eight requests for a review of the adjustment, citing failures to invest and poor quality of service, made to the CAA by or on behalf of airlines between December 2021 and October 2022.⁴²²

⁴¹⁹ The service quality regulation regime for Q6.

⁴²⁰ [BA NoA](#), paragraph 4.6.9. Delta and VAA made similar submissions in [Delta NoA](#), paragraph 6.61 and [VAA NoA](#), paragraph 6.61

⁴²¹ [BA NoA](#), paragraph 4.6, [Delta NoA](#), paragraphs 6.49 and 6.51(c) to (f); and [VAA NoA](#), paragraphs 6.49 and 6.51(c) to (f).

⁴²² [BA NoA](#), paragraphs 4.6.12 and 4.10.2, [Delta NoA](#), paragraphs 6.51(a) and (b), and [VAA NoA](#), paragraphs 6.51(a) and (b).

- (f) In the H7 Final Proposals the CAA said that, if appropriate, it would review HAL's performance in the Autumn of 2022, with a view to ensuring that consumers' interests were properly protected. It then wrongly refused to do so, saying its focus was on finalising the H7 price control and a review would be a distraction, and that it was not clear that the reversal of the original April 2021 RAB Adjustment would have been the appropriate remedy in such a review.
- (g) This refusal was wrong because: (i) a review was an essential part of calibrating the RAB and reaching the Final Decision to ensure that HAL's future charges would be no higher than necessary; and (ii) the CAA provided no reasons why a review was unnecessary and its assertion that it was not clear the reversal of the adjustment would have been the appropriate remedy was opaque and ill-founded (without a review, the CAA could not consider properly the appropriate outcome).⁴²³

The CAA failed properly to consider the evidence and erred in its conclusion relating to the volume of capital expenditure in 2021

5.281 The Airlines submitted the CAA was wrong because:

- (a) HAL told the CAA in response to the February 2021 Consultation that preceded the original 2021 RAB Adjustment Decision that the adjustment would unlock additional investment and help to deliver more benefits for consumers. The CAA's decision to make the adjustment was linked to this investment, with a review mechanism as an additional protection for consumers if it was not made. A review properly considering the evidence would have made clear that:
 - (i) HAL had not delivered on its investment, capacity and quality of service commitments in 2021 and beyond;
 - (ii) HAL's failure to invest to provide sufficient capacity to meet returning demand had serious negative impacts on airlines and consumers; and
 - (iii) in those circumstances, it was inappropriate for HAL to retain the benefit of (some or all of) the adjustment.
- (b) The evidence would have included:
 - (i) there was no evidence of additional expenditure – in fact outturn capex in 2021 was lower than in 2020;

⁴²³ [BA NoA](#), paragraphs 4.6.13–4.6.17, [Delta NoA](#), paragraphs 6.52–6.55, and [VAA NoA](#), paragraphs 6.52–6.55.

- (ii) there was a delay in re-opening Terminal 3 until July 2021;
- (iii) Terminal 4 re-opened late despite airlines' requests and passenger forecasts for 2022 and this being a specific expectation of the CAA in connection with the RAB adjustment – leading to very long queues and substantial impacts on consumers' experiences;
- (iv) there were resilience issues in the baggage system owing to HAL's lack of maintenance;
- (v) HAL failed to ensure there were sufficient staff to meet demand in 2022, with published SQRB performance data (highlighted by the CAA in the 2021 RAB Adjustment Decision as 'useful information to signal any potential issues with service quality') showing failures to meet security queue performance targets, and there were failures by the HAL ID Centre in processing staff security clearances efficiently and effectively; and
- (vi) the capacity restrictions under Local Rule A between July and October 2022 were a further demonstration that HAL failed to maintain and improve quality of services to consumers in 2021 and beyond, and this outcome is exactly what the CAA stated the RAB Adjustment should avoid.⁴²⁴

The CAA wrongly treated itself as precluded from reversing or reducing the adjustment by regulatory precedent

5.282 The Airlines submitted the CAA was wrong because:

- (a) It misinterpreted the direction in the CC's price determination in *PNGL* in suggesting that this precluded the CAA from reversing or reducing the RAB Adjustment. It was clearly wrong to say that the Commission's decision proscribed ex-post RAB reductions – it said they should only be made with very good justification and after appropriate consultation.
- (b) The context of the direction in *PNGL* is important because:
 - (i) *PNGL* involved changes already made in a price review. Here, the adjustment is a policy decision where the licence modifications have not yet taken effect;
 - (ii) the historic position differs – HAL has always borne the passenger volume risk and been allowed to earn a higher WACC as a result;

⁴²⁴ [BA NoA](#), paragraphs 4.10.1 and 4.10.2, [Delta NoA](#), paragraphs 6.58-6.64, and [VAA NoA](#), paragraphs 6.58-6.64.

- (iii) the CAA itself said *PNGL* had limited application – unlike in *PNGL*, the CAA was not making a discretionary reduction in HAL’s RAB, rather HAL was subject to an external shock and experiencing the crystallisation of a commercial risk;
- (iv) the scope for a review and reduction was signalled in 2021 when the adjustment was first made;
- (v) in *PNGL*, the CC decided that the regulated company should not retain a financial benefit for projects not undertaken;
- (vi) *PNGL* is not, in any event, a binding precedent; and
- (vii) if *PNGL* did, as the CAA has suggested, preclude a RAB reduction, the CAA erred in law in saying that it would consider reducing the adjustment first made in 2021.⁴²⁵

Failing to review the RAB adjustment caused and will continue to cause consumer harm

5.283 The Airlines submitted the CAA was wrong because:

- (a) In addition to the points going to consumer harm above, the CAA’s failure to reverse or reduce the adjustment has caused and will continue to cause such harm in that it:
 - (i) will cost consumers on average an additional £0.17 per passenger over H7, and more in later periods, or £338.48 million in NPV terms (in 2021 prices) and more in cash terms over multiple price control periods; and
 - (ii) has undermined the incentive properties of the review mechanism and made it likely that consumers will continue to pay for and receive poor customer service, disruption and inconvenience at Heathrow.⁴²⁶

CAA Response

5.284 The CAA submitted that there is no merit in the Airlines’ argument that the CAA committed a ‘fundamental misdirection’ by failing to appreciate that, in April 2021, it had adjusted the RAB on a contingent basis.⁴²⁷

5.285 The CAA maintained that the 2021 RAB Adjustment Decision stated that the intervention it decided to make would:

⁴²⁵ [BA NoA](#), paragraph 4.7, [Delta NoA](#), paragraphs 6.67–6.69, and [VAA NoA](#), paragraphs 6.67–6.69.

⁴²⁶ [BA NoA](#), paragraph 4.3.2, [Delta NoA](#), paragraphs 6.71 to 6.73 and [VAA NoA](#), paragraphs 6.71 to 6.73.

⁴²⁷ [CAA Response](#), paragraph 99.

- (a) Signal to HAL the importance of maintaining appropriate investment and service quality levels ahead of the start of H7;
- (b) Provide stronger incentives and financial capacity for HAL to be proactive in planning for potentially higher than expected traffic levels from the summer of 2021; and
- (c) Facilitate the notional company being able to continue to access investment grade debt to finance its activities, particularly if traffic levels turned out lower than forecast.⁴²⁸

5.286 The CAA submitted that it did not make the adjustment of £300 million in the 2021 RAB Adjustment Decision on a 'contingent basis' or in any other way dependent on HAL's performance (whether in terms of making specific capex investments or increases in opex) except to the extent that it expected HAL to be proactive in undertaking necessary investment to maintain service quality and provide necessary capacity during the remainder of 2021 in the event of a stronger than expected recovery in passenger traffic. It told us that it did not make a promise to conduct a review and HAL did not promise to make any specific investments.⁴²⁹

5.287 The CAA further submitted that it found no evidence of significant failures in HAL's provision of quality of service in 2021 and therefore the circumstances in which the CAA might have undertaken a review along the lines set out in the 2021 RAB Adjustment Decision did not arise.⁴³⁰

5.288 The CAA noted that, whilst it was aware of service quality issues arising during 2022, it was also clear that these issues were by no means confined to Heathrow airport or even the aviation sector (in particular, issues with staff absences, retention and recruitment were an economy-wide issue in 2022). At the time, the CAA considered it the right approach to work with the industry 'as a whole' to address these problems rather than instigate a specific investigation of HAL. The CAA considered that this was the best means at its disposal to further the interests of consumers at that time.⁴³¹

5.289 In addition, the CAA considered that the RAB adjustment in 2021 was expressly framed as an early intervention and, properly assessed, was an entirely reasonable response to the exceptional circumstances of the pandemic. It considered that, at the point at which it took the Final Decision, reversal of the RAB adjustment for reasons beyond those set out in the 2021 RAB Adjustment

⁴²⁸ [CAA Response](#), paragraph 100.

⁴²⁹ [CAA Response](#), paragraphs 101 and 102.

⁴³⁰ [CAA Response](#), paragraph 103.

⁴³¹ [CAA Response](#), paragraph 105.

Decision would give rise to increased perceptions of investor risk which would undermine the CAA's duties towards consumers.⁴³²

5.290 Finally, the CAA also submitted that the Airlines' suggestion that the CAA misdirected itself in relation to the *PNGL* precedent is misconceived. The CAA told us that it did not direct itself that there was a 'categorical proscription' on revoking the RAB adjustment, merely that it decided it would not review its adjustment of the RAB because there was no evidence that this was necessary.⁴³³

Intervener submissions

5.291 HAL's position in its intervention remained that the CAA should have made a much larger RAB adjustment than it did, and HAL therefore contended that the Airlines' appeal should fall away on that ground. However, in any event HAL submitted that the Airlines' grounds of appeal in respect of the RAB adjustment are misconceived and fail to identify any proper basis on which the £300 million RAB adjustment should be removed.

5.292 HAL contended that the Airlines' arguments were based on a fundamental misunderstanding of the 2021 RAB Adjustment Decision. HAL maintained that the 2021 RAB Adjustment Decision was neither conditional nor provisional as regards the making of a RAB adjustment of £300 million and that this was a firm and binding decision. Nor was the £300 million RAB adjustment simply a payment for specific investment projects or the making of an equivalent amount of investment. HAL argued that such an arrangement would have done nothing to tackle the problems caused by the COVID-19 pandemic restrictions. The RAB adjustment was made to be an additional and immediate signal to HAL that it could continue to invest in the airport despite the uncertain outlook.⁴³⁴

5.293 HAL also submitted that the Airlines' argument that the CAA failed to consider various items of evidence before making the Final Decision does not add anything to the Airlines' previous argument. HAL maintained that the CAA had taken a binding decision on the £300 million RAB adjustment in its 2021 RAB Adjustment Decision and that, to the extent that the CAA might consider reversing that RAB adjustment, this would therefore require a much higher threshold for intervention than simply considering the evidence in the round.⁴³⁵

5.294 HAL further contended that the CAA was correct to reference the CC's *PNGL* determination on the basis that, as the 2021 RAB Adjustment Decision was itself a decision, any reversal of that decision would require a fresh decision and that, as stated in the *PNGL* decision 'to reduce ex-post and without clear signalling the

⁴³² [CAA Response](#), paragraph 107.

⁴³³ [CAA Response](#), paragraph 109.

⁴³⁴ [HAL NoI](#), paragraph 108.

⁴³⁵ [HAL NoI](#), paragraph 109.

opening value of a RAB is a step that should not normally be taken without good justification'.⁴³⁶

Responses to our Provisional Determination

- 5.295 Our provisional finding, set out in our Provisional Determination, was that the CAA did not err as the Airlines alleged in respect of the Failure to Review Error. In response to that, the Airlines submitted that we had misunderstood the scope of their appeal in this regard. They said that, contrary to our provisional finding that the CAA had not so erred, they 'squarely contended that no such review was carried out, and that HAL had not done what was required of it – including in 2021'.
- 5.296 We have considered the Airlines' response carefully before making our Final Determination. While we make the same final finding as in our Provisional Determination – ie that the CAA did not err in this regard – our assessment below expands on that we previously set out.

Assessment: Failure to Review Error

- 5.297 In assessing the Airlines' alleged Failure to Review Error, we have regard to the questions set out in paragraph 5.279 above. In doing so, we particularly focus our assessment, first, on the parameters the CAA set for review of the RAB Adjustment in its 2021 RAB Adjustment Decision, and then on whether the CAA was wrong because it fell short in the context of these parameters. We then consider whether the CAA wrongly interpreted a previous regulatory determination in making its decision.

Parameters the CAA set for a review of the RAB Adjustment in its 2021 RAB Adjustment Decision

- 5.298 In the 2021 RAB Adjustment Decision, the CAA stated that its decision to adjust the RAB was made having regard to the need to 'secure that all reasonable demands for airport operation services at Heathrow airport are met' and that it considered that the adjustment would do this by 'incentivising additional investment by HAL during 2021' that would further consumers' interests. This was in addition (a counterpart to) having regard to the need to secure that an efficiently or 'notionally' financed company could finance its licensed activities at Heathrow airport.⁴³⁷
- 5.299 The CAA said that it expected that HAL would be 'proactive in undertaking necessary investment to maintain service quality and provide necessary capacity

⁴³⁶ [HAL Nol](#), paragraph 110.

⁴³⁷ [2021 RAB Adjustment Decision](#), paragraph 4.

during the remainder of 2021 in the event of a stronger than expected recovery in passenger traffic'.⁴³⁸ It also observed that short-term investment might have been required by HAL to maintain service quality over 2021 and into 2022.⁴³⁹

5.300 We have considered what the CAA said specifically about the contingencies that attached to the 2021 RAB Adjustment Decision and the review it would undertake. Our finding, based on those statements, is that the decision was not as contingent as the Airlines contend, nor was the CAA's commitment to a review in the sort of terms that would support their submissions.

5.301 Rather, the CAA was careful in the limitations it set around the objectives of the RAB Adjustment, stating that it was made for a range of purposes. What it said in the 2021 RAB Adjustment Decision made clear that a review was contemplated, not guaranteed, if **evidence were to emerge** that HAL was not delivering an appropriate quality of service in 2021.

5.302 In particular, the CAA said (emphasis added):

We consider that an intervention that provides gearing headroom above its level of planned investment, for example, in the range £230 million to £300 million, would provide a clear and strong incentive for HAL to:

- undertake **any necessary investment**;
- **maintain service quality**; and
- provide **necessary capacity during 2021**.

We also note that efficient capex investment would be added to HAL's RAB and the current evidence is that HAL has maintained a reasonable quality of service throughout the covid-19 pandemic. As a result, there is no compelling case for an immediate adjustment greater than the £300 million, as this sum will provide HAL with sufficient financial flexibility to deal with any issues that arise. Longer-term investment and quality of service issues will be dealt with at the H7 price control review.

As set out above, we have considered potential interventions based on mitigating risks around the notional company's gearing (£300 million) and providing clear incentives on investment (above £230 million). On this basis, our judgment is that a RAB adjustment

⁴³⁸ [2021 RAB Adjustment Decision](#), paragraph 4.

⁴³⁹ [2021 RAB Adjustment Decision](#), paragraphs 3.16 and 3.38.

of £300 million in 2021 would be an appropriate and proportionate regulatory intervention.⁴⁴⁰

5.303 As to a review that may be carried out, the CAA said (again our emphasis):

If evidence were to emerge of HAL failing to deliver on quality of service then we will take steps to further protect the interests of consumers by conducting a review of these matters (and we would seek to protect consumers from the costs of any such failure). This should help further incentivise HAL in delivering an appropriate level of investment and quality service to consumers.⁴⁴¹

We will consider whether any further intervention is required as part of the H7 price control.⁴⁴²

As noted above, **if evidence were to emerge of HAL failing to deliver on an appropriate quality of service in 2021, we will conduct a review of these matters**. This would seek to understand whether HAL was reasonably prepared for the increase in passengers, provided additional capacity (for example, by reopening terminals) in a timely way and maintained service quality. In the event that such a review were to show that HAL had not responded appropriately, including in respect of service levels where this is within HAL's control, we would look to introduce additional protections around service quality in H7 and we would consider reducing the £300 million RAB adjustment or making offsetting reductions to revenue. The existing Service Quality Rebates and Bonus scheme provides metrics that can help to give an early indication of any issues with service quality.^{443, 444}

5.304 In other words, the CAA said that the conduct of what might for ease of reference be called a 'full' or 'formal' review depended on whether, in an earlier, less formal assessment or review, evidence emerged that the objectives of the RAB Adjustment had not been met. We also observe that, in that connection, the CAA additionally said (our emphasis again):

[...] It would be undesirable for us to reverse interventions we make now during the H7 process unless HAL were to manifestly fail to deliver on investment or quality of service. This could undermine both investor expectations and our

⁴⁴⁰ [2021 RAB Adjustment Decision](#), paragraphs 4.16–4.18.

⁴⁴¹ [2021 RAB Adjustment Decision](#), paragraph 4.

⁴⁴² [2021 RAB Adjustment Decision](#), paragraph 23.

⁴⁴³ [2021 RAB Adjustment Decision](#), paragraph 32.

⁴⁴⁴ These were points the CAA re-iterated through the 2021 decision. See also, for example, [2021 RAB Adjustment Decision](#), paragraphs 4.21–4.25.

credibility. The approach we have decided to take seeks to manage this risk to consumers by making a proportionate intervention at this stage and considering whether further action is needed as part of the H7 price control.⁴⁴⁵

5.305 We note that, in their response to our Provisional Determination, the Airlines referred to certain paragraphs of the 2021 RAB Adjustment Decision as evidence of the contingencies attached to the adjustment and the CAA's commitment to a review. They submitted that these show that the CAA 'prescribed' the expected investment outcomes.⁴⁴⁶

HAL also reports that Terminal 4 requires investment which will take approximately 9 to 12 months before it can reopen (which is currently planned for the second half of 2022).⁴⁴⁷

As a result, we consider it is plausible that there may be some additional investment in the short term which is necessary to support:

- service quality being maintained over 2021 and into 2022; and
- such investment in critical maintenance for Terminal 4 to be carried out in a timely way.⁴⁴⁸

HAL has set out that with appropriate incentives, it would plan to make additional investment in 2021 of around £230 million (£218 million capex and £9m of opex) to maintain and improve quality of services to consumers in 2021 and beyond. This includes investment to provide appropriate capacity at the airport **if there is a particularly strong recovery in demand.**⁴⁴⁹

5.306 It is, in our view, instructive to consider the paragraphs referred to by the Airlines above (at paragraph 5.305) in the context of those we set out previously above (in paragraphs 5.302 to 5.304). That makes clear the (limited) extent to which the RAB adjustment was contingent and subject to review.

Did the CAA fail to review the RAB adjustment made in 2021 in the context of the parameters set in the 2021 RAB Adjustment Decision?

5.307 The Airlines highlighted a number of areas where they considered that HAL's performance was below expectations, as set out above at paragraph 5.281(b)). We have considered whether the CAA erred as alleged, in light of the

⁴⁴⁵ [2021 RAB Adjustment Decision](#), Appendix C, paragraph C20.

⁴⁴⁶ Airlines Response to PD, paragraphs 2.11 and 2.14.

⁴⁴⁷ [2021 RAB Adjustment Decision](#), paragraph 3.37.

⁴⁴⁸ [2021 RAB Adjustment Decision](#), paragraph 3.38.

⁴⁴⁹ [2021 RAB Adjustment Decision](#), paragraph 4.15.

contingencies and commitments described above, by failing to reverse or reduce the £300 million RAB Adjustment as a result of HAL falling short of expectations of investment and service quality in 2021.

5.308 We have assessed these matters by reference to the CAA’s consideration of them as set out in the Initial Proposals, Final Proposals and the H7 Final Decision (together the **Decision Documents**). Our view is that the Decision Documents make clear that the CAA reviewed matters consistently with the contingencies it set and the commitments it made, and so did not err as alleged.

5.309 The CAA’s Initial Proposals (published in October 2021) demonstrated that the CAA had assessed HAL’s service quality up to that point. The CAA said that:

In the April 2021 RAB Adjustment Decision, we stated it would be undesirable for us to reverse our £300 million RAB adjustment during the H7 process, with the “benefit of hindsight”, unless there was evidence that HAL was manifestly failing to deliver on necessary investment to re-open additional capacity, particularly in terminals, in a timely way and to maintain quality of service. Otherwise, reversing the RAB adjustment could undermine both investor expectations and the credibility of our decisions, leading to higher costs to consumers in future. So, we do not propose to adopt the suggestions made by airlines that we reverse the RAB adjustment set out in our April 2021 RAB Adjustment Decision.

We also said that if evidence were to emerge that HAL had not responded appropriately, including in respect of service levels where this is within HAL’s control, we would:

- look to introduce additional protections around service quality in H7; and
- consider reducing the £300 million RAB adjustment or making offsetting reductions to revenue.

We are continuing to monitor performance at the airport including with respect to investment and service levels. Our initial view is that HAL has re-opened terminal capacity in a way that has allowed airline demand to be met, and that service quality performance has been good when measured against the metrics.⁴⁵⁰

5.310 Stakeholders responded to those Initial Proposals and in the Final Proposals (in June 2022) the CAA said:

⁴⁵⁰ [Initial proposals, Section 2](#), paragraphs 6.14-6.16.

We disagree [with BA] that we made an error at Initial Proposals in relation to our assessment of HAL's investment and operational performance. At that point in time, the evidence suggested to us that there were no clear grounds for further intervention in the interest of consumers.⁴⁵¹

5.311 The CAA also said in the Final Proposals:

For avoidance of doubt, the April 2021 RAB Adjustment Decision was intended to be our final decision to give effect to the inclusion of the £300m in HAL's opening RAB for H7 RAB.

Bearing this in mind, there is a relatively high evidential threshold for us to consider reversing this decision. We would, for example, need to consider the adverse impact that this would have on investor confidence and hence on HAL's cost of capital and the level of airport charges.⁴⁵²

5.312 The CAA assessed 'Consumer outcomes and investment' in paragraphs 10.69 to 10.79 of the Final Proposals, including that:

We reached the April 2021 RAB Adjustment Decision with the expectation that HAL would be proactive in undertaking necessary investment to maintain service quality and provide necessary capacity during 2021 in the event of a stronger than expected recovery in passenger traffic.⁴⁵³

The recovery in passenger numbers was, in fact, relatively subdued during 2021. As such, it is not clear to us that it would have been in consumers' interests for HAL to have undertaken a materially greater volume of capital expenditure in that year than it did in practice. Nonetheless, it was important to have allowed HAL the flexibility to respond to changing circumstances and, on this basis, we continue to consider that the £300m RAB adjustment was warranted.⁴⁵⁴

Our reasoning was that providing a RAB adjustment could alleviate balance sheet constraints faced by the notional entity that might otherwise prevent it from undertaking capital expenditure needed to accommodate a potential recovery of passenger volumes in the summer of 2021. We continue to consider that this was a reasonable assumption in the context of the prevailing

⁴⁵¹ [Final Proposals, Section 3](#), paragraph 10.86.

⁴⁵² [Final Proposals, Section 3](#), paragraphs 10.61-10.62.

⁴⁵³ [Final Proposals, Section 3](#), paragraph 10.81

⁴⁵⁴ [Final Proposals, Section 3](#), paragraph 10.82.

circumstances at the time of the April 2021 RAB Adjustment Decision.⁴⁵⁵

- 5.313 In the Final Decision (in March 2023) the CAA decided to maintain, rather than further review, remove or reduce the RAB Adjustment it made in 2021. Amongst other things, the CAA said:

We note in this regard that the focus of the RAB adjustment made under the April 2021 Decision was on outcomes, namely, service quality and investment in 2021: that is, before we were able to take account of such outcomes in our H7 price control proposals. As such, we do not consider that it would be appropriate to revisit our April 2021 RAB Adjustment Decision on the basis of outcomes in 2022.⁴⁵⁶

We did not subsequently consider that a review of HAL's operational performance was necessary, and that it would distract from our primary focus of reaching a decision in respect of the H7 price control. In any case, it is not clear that the reversal of the April 2021 RAB Adjustment would have been the appropriate remedy in the context of such a review.⁴⁵⁷

- 5.314 We also take account of the CAA's evidence at the main party hearing on Ground A, which was consistent with the contents of the Decision Documents set out above. As to its focus being on HAL's service quality in 2021 and there being no sufficient emerging evidence then (in its assessment) to trigger a full or formal review of the RAB Adjustment, the CAA said, amongst other things:

So in 2021 we set a clear trigger as to whether we would revisit that RAB adjustment and that was based on quality of service in 2021. So when we came to 2023 what we did was look back to those prior commitments that we'd made and whether there was a problem with quality of service during 2021, and there wasn't.⁴⁵⁸

Our focus was looking at service quality in 2021. As we said we would do in our April 2021 decision. The service quality metrics didn't show any significant issues or problems at the airport. So there was no substantive case to re-open.⁴⁵⁹

- 5.315 As to effect of regulatory consistency and credibility if the CAA removed or reduced the RAB Adjustment in the Final Decision in 2023, the CAA's statements

⁴⁵⁵ [Final Proposals, Section 3](#), paragraph 10.84.

⁴⁵⁶ [Final Decision, Section 3](#), paragraph 10.68.

⁴⁵⁷ [Final Decision, Section 3](#), paragraph 10.71.

⁴⁵⁸ Transcript of Ground A Hearing, page 93, lines 15–23.

⁴⁵⁹ Transcript of Ground A Hearing, page 104, lines 1–4.

at the Ground A hearing, which again we note are consistent with the Decision Documents, included that:

[...] the removal of amounts from the RAB is not a decision that should be taken lightly. Without adequately signalling this course of action well in advance there is a real risk of undermining our credibility as a regulator.⁴⁶⁰

As far as 2023 goes, we saw the April 2021 decision as a decision [...] We felt that it was justified based on the information we had at the time and that to withdraw it subsequently based on new information would be potentially very deleterious in terms of credibility.⁴⁶¹

Findings and conclusions on the Failure to Review Error

Findings

- 5.316 We make a number of findings and draw a number of conclusions based on the above statements.
- 5.317 First, the CAA made the RAB Adjustment in 2021 for a range of reasons (incentivising investment if necessary and maintaining service quality in 2021, protecting financeability and to give HAL additional flexibility). The CAA properly assessed and concluded at the time that such an adjustment for those reasons was in line with its statutory duties and, as we find in this Final Determination, it was not wrong to do so.
- 5.318 Second, having so concluded (not wrongly in our view), the CAA placed a degree of contingency, but a limited degree, around the RAB Adjustment. That is, it said it would consider whether evidence emerged that the objectives of the adjustment were not met in 2021. If so, it would conduct a fuller review that could result in the removal or reduction of the adjustment. We observe in that connection that the RAB Adjustment Decision was made in April 2021, when the CAA expected that the H7 price control would be in operation by 2022. It was not, accordingly, likely at that stage to have been contemplating a contingency to apply in that latter year.
- 5.319 Third, the CAA was clear that, having decided to make the adjustment, a high bar applied before it would be removed or reduced – evidence of HAL ‘manifestly’ failing to deliver on investment or quality of service would be required. Again, in our view, this is an assessment the CAA was entitled to make. Having (not wrongly) decided that the adjustment should be made, in line with its statutory

⁴⁶⁰ Transcript of Ground A Hearing, page 18, lines 10–15.

⁴⁶¹ Transcript of Ground A Hearing, page 93, lines 9–14.

duties, for the reasons stated, it was also not wrong to take the view that removing it too readily could undermine both investor expectations and the CAA's credibility (neither of which would have been in consumers' interests).

- 5.320 Putting the second and third points another way, the CAA made the RAB Adjustment and specified its contingent status and liability to review carefully. It did this by stating that the RAB Adjustment could be reviewed if relevant evidence emerged, but also making statements about its relative finality and limited scope for review. What the CAA did not do was make a commitment to a full review in any event. Its position is better characterised as one in which the RAB Adjustment **could** be reviewed (if necessary) not that it **will** be (in any event).
- 5.321 Fourth, the CAA did a 'review' within the scope to which it committed. That is, it considered if evidence had emerged of poor service quality and demand not being met in 2021. These were matters of evaluation, rather than just of plain fact, that it fell to the CAA to assess. In light of that evidence – that in its assessment demand was met and relevant performance metrics did not demonstrate significant service problems – and of the subdued recovery in passenger numbers in 2021, the CAA assessed that a basis for a further, full or formal review had not emerged. In other words, the condition the CAA set for not reviewing the adjustment further was met, and the condition for reviewing it further was not.
- 5.322 Fifth, in that context, the CAA was not wrong in:
- (a) not considering matters of service quality in 2022; or
 - (b) taking the view that a removal or reduction of the RAB Adjustment made in 2021 would not necessarily be the appropriate remedy for any shortcoming in service quality in 2022.

Having made the adjustment contingent on objectives relating to 2021, the CAA was not wrong to consider that reviewing the adjustment based on outcomes in a different year would go against regulatory consistency. This does not disclose an error of fact (or any other error).

- 5.323 Taking account of these points, we consider that the CAA was not wrong to make an assessment in 2023 that:
- (a) the reasons for which the RAB Adjustment had been made in 2021 justified its making;
 - (b) the limited circumstances in which it had committed to formally review the adjustment had not transpired; and
 - (c) in that context, maintaining a regulatory commitment and thereby providing regulatory certainty was important.

That involves judgements that fell to the CAA to make within its margin of appreciation as expert regulator.

- 5.324 We note that the Airlines have submitted that the CAA wrongly treated the CC's interpretation of the *PNGL* case as relevant regulatory precedent that precluded it reopening the RAB Adjustment. While we do not consider the Airlines' allegation to relate to errors of fact but instead to an alleged error of judgement on the part of the CAA, we observe that, as set out above, the CAA said its decision not to reopen the 2021 RAB Adjustment Decision was not made on the understanding that it was precluded from doing so.
- 5.325 Nor do we find that the CAA misdirected itself in law by misinterpreting or misapplying the *PNGL* price determination. The CAA did not reopen the 2021 RAB Adjustment Decision on the basis that: (i) its trigger for a further reopener based on HAL's investment in 2021 and set out in the 2021 RAB Adjustment Decision was not met; and (ii) reversing the decision without a strong foundation and on the basis of matters outside of those provided for in the 2021 RAB Adjustment Decision itself would have a broader detrimental impact on the regulatory regime.⁴⁶² This is evident both in the submissions set out by the CAA from paragraphs 5.287 to 5.289 above, and in the statements it has made to us throughout the appeal process.
- 5.326 On those bases, our view is that the Final Decision was not wrong on account of the CAA failing to review and reverse the adjustment owing to its understanding of the *PNGL* determination.

Conclusions

- 5.327 We accordingly determine, following a detailed assessment of the Parties' submissions and supporting evidence, that the CAA did not err in failing to review, reduce or remove the RAB Adjustment it set out in the 2021 RAB Adjustment Decision prior to its inclusion in the Final Decision.
- 5.328 Our finding is that the CAA was not wrong because:
- (a) It did not make errors of fact, and nor was it wrong in law, in refusing to conduct a review of the RAB Adjustment. The CAA did review the 2021 RAB Adjustment consistently with the commitment it made to do so.
 - (b) It had proper regard to the reasons for making the RAB Adjustment, to the need for regulatory consistency and certainty and to its statutory duties, and it made assessments and judgements it was entitled to make that the

⁴⁶² Transcript of Ground A Hearing, page 93, lines 19–23 and page 111, lines 3–4.

adjustment should not be removed or reduced. It did not wrongly regard itself as precluded from acting by regulatory precedent.

- (c) It did not make an error in the exercise of a discretion by refusing to conduct a review. Given the reasons for making the RAB Adjustment, the contingencies attached to it, the level of review the CAA conducted, and its assessments that the contingencies were met and that a removal or reduction of the adjustment would offend regulatory certainty and consistency, the CAA cannot, in our judgement, be said to be wrong for having failed to adopt a clearly superior alternative approach.

Overall determination on Ground A

5.329 In light of all our findings on this ground A, we determine that neither HAL's nor the Airlines' appeals are allowed and confirm the Final Decision in respect of the RAB Adjustment.

6. Ground B1: Asset beta

Introduction

- 6.1 This chapter covers the errors alleged by the appellants relating to the CAA's methodology and eventual estimate of HAL's asset beta. HAL's asset beta is a component within the estimation of HAL's overall allowed cost of equity.
- 6.2 In broad terms, HAL argued that the CAA had underestimated its asset beta, leading to too low passenger charges. In contrast, the Airlines argued that the CAA had overestimated HAL's asset beta, resulting in too high passenger charges.

Background

Cost of capital

- 6.3 The cost of equity and the cost of debt, along with an assumption about the level of gearing,⁴⁶³ are the key inputs into the Weighted Average Cost of Capital (**WACC**). The WACC is an input to the calculation of HAL's allowed revenue and is used to calculate the profit that HAL needs to earn to compensate its debt and equity investors for the risks of investing into HAL.
- 6.4 The cost of equity is an estimate of the returns required by equity investors. The actual cost of equity is unknowable in advance and must be estimated. The CAA used the Capital Asset Pricing Model (**CAPM**) as the basis of its estimate of the cost of equity within the WACC. The CAPM relates the cost of equity (K_E) to the risk-free rate (R_{rf}), the expected return on the market portfolio (R_m), and a firm-specific measure of investors' exposure to systematic risk (beta⁴⁶⁴ or β) as follows:

$$K_E = R_{rf} + \beta(R_m - R_{rf})$$

- 6.5 The CAPM is an established methodology with well understood theoretical foundations and which makes use of observable market data as far as possible. The CAPM is used by all UK regulators when calculating the cost of capital. The appellants have alleged errors in the CAA's CAPM metrics and the overall level of the cost of equity, but the use of the CAPM 'in principle' was not challenged in this appeal.

⁴⁶³ Gearing is a measure of the proportion of a firm's capital accounted for by debt and is defined as $g = D/(D+E)$ where D is Debt and E is Equity.

⁴⁶⁴ We discuss the concept of beta in paragraphs 6.6–6.11.

Asset beta

- 6.6 Within the CAPM, beta reflects an asset's (or portfolio of assets') exposure to systematic (or common) risks relevant to the broader market. An example of a systematic risk is the performance of the overall economy, which affects all assets to varying degrees.
- 6.7 Systematic risks are distinct from idiosyncratic risks, which may impact only a small number of assets, or may simultaneously impact different assets positively and negatively. When calculating the cost of equity, the CAPM framework is concerned only with investors' exposure to systematic risks because it is assumed that idiosyncratic risks can be diversified away (for example by holding a portfolio of assets).
- 6.8 The beta which would be faced by investors in a company's assets is often called the asset beta. However, investors normally invest in securities (which can call on returns earned on those assets), rather than directly investing in the assets themselves. In this case, the asset beta (β_A) can then be split into:
- (a) Equity beta (β_E), the exposure of shareholders to systematic risk; and
 - (b) Debt beta (β_D), the exposure of bondholders to systematic risk.
- 6.9 In calculating asset beta, debt and equity betas are weighted by the proportion of debt (g)⁴⁶⁵ and equity ($1-g$) within the capital structure as shown below:
- $$\beta_A = g \cdot \beta_D + (1 - g) \cdot \beta_E$$
- 6.10 According to this equation, for a given value of asset beta (β_A) a positive debt beta (β_D) reduces the (re-levered⁴⁶⁶) equity beta, as a portion of systematic risk is assumed to be borne by debt investors, and so does not require compensation in equity returns.
- 6.11 The equity beta, and therefore the cost of equity, in the CAPM framework will also generally rise as gearing rises, because increasing gearing means that shareholders are exposed to increasing levels of systematic risks. As a result of this relationship between gearing and equity beta, in estimating the WACC regulators often calculate an asset beta. This approach enables the regulator to compare firms which have different capital structures. This comparator asset beta is then adjusted using the formula above to estimate the equity beta of the regulated firm.

⁴⁶⁵ 'g' represents 'gearing'. Gearing demonstrates the extent to which a firm's operations are funded by debt compared to equity and measures a company's financial leverage, defined as debt / (debt + equity).

⁴⁶⁶ The equity beta is 're-levered' to represent the notional company gearing.

Final Proposals

- 6.12 This section summarises the decisions made by the CAA in determining the asset beta for the Final Proposals. We provide further detail as necessary on the CAA's reasoning in the assessment of Parties' arguments further below. As a preliminary point, we note that the CAA final view on HAL's asset beta (as set out in its Final Decision) did not differ from its proposed asset beta which it had consulted upon in its Final Proposals.⁴⁶⁷ Much of the CAA's reasoning for its calculation of HAL's asset beta is therefore found within the Final Proposals and we cite the Final Proposals as necessary below.
- 6.13 The CAA's final methodology for the H7 asset beta followed a three-stage process in which the CAA determined the following.
- (a) **Stage 1 – a baseline beta:** the baseline beta captures the balance of risks faced by HAL which are unrelated to COVID-19 (effectively based on a 'pre-COVID-19' beta).
 - (b) **Stage 2 – a COVID-19 adjustment:** to be added to the baseline beta, reflecting the risk of events similar to COVID-19 that may occur in the future. An application of the COVID-19 adjustment to the baseline beta results in the 'post-pandemic' asset beta.
 - (c) **Stage 3 – a Traffic Risk Sharing (TRS)⁴⁶⁸ adjustment:** then applied to the post-pandemic asset beta, to reflect the reduction in systematic risk facing HAL as a result of the TRS mechanism.

Stage 1: baseline beta

- 6.14 In the Final Proposals, the CAA proposed a pre-pandemic asset beta of 0.50 for H7 (the **pre-pandemic asset beta**), in line with the level previously determined for Q6 and at the bottom of the 0.50-0.60 range of betas estimated by the CAA's advisers FlintGlobal (**Flint**)⁴⁶⁹ for listed comparator airports using pre-pandemic data.⁴⁷⁰
- 6.15 At Q6, the CAA estimated an asset beta for HAL (0.42-0.52) that was below the estimated asset betas for comparator airports Fraport (0.52-0.55) and ADP (0.59-0.60), and in line with the Q5 estimate (which was based on BAA's share price

⁴⁶⁷ [Economic regulation of Heathrow Airport Limited: H7 Final Decision Section 3: Financial issues and implementation \(caa.co.uk\) \(Final Decision\)](#), Section 3, paragraph 9.67.

⁴⁶⁸ Traffic Risk Sharing adjustment, implemented by the Traffic Risk Sharing mechanism is intended to ensure that the risks associated with variances between the CAA's forecast of passenger numbers and out-turn passenger numbers are shared between HAL and consumers in an appropriate way. The TRS mechanism is described in more detail at paragraphs 2.6 and 2.7 of the [Final Decision, Section 1](#).

⁴⁶⁹ FlintGlobal is a consultancy firm which was commissioned by the CAA to assess the weighted average cost of capital (**WACC**) for the H7 price control period.

⁴⁷⁰ [Final Proposals, Section 3](#), paragraph 9.62. Flint updated its beta analysis between Initial and Final Proposals but retained the overall recommended baseline beta range at 0.50–0.60.

data). The CAA justified the differential between HAL and ADP/Fraport on the basis that HAL exhibited excess demand due to the capacity constraint, which insulated it from demand risk to a greater extent than comparator airports.

- 6.16 In the Initial Proposals, the CAA had stated that it did not consider it appropriate to rely on BAA share price data, given that this was now over 15 years old. The CAA stated that it must therefore rely on comparator asset beta estimates.
- 6.17 The CAA's advisers, Flint, estimated a baseline beta range of 0.50-0.60, based on pre-pandemic data for three comparator airports (AENA⁴⁷¹, ADP and Fraport) and without an analysis of the relative risk of HAL to these airports. The range was based on spot, 2-year averages, and 5-year averages of 2-year and 5-year betas using daily data up to 28 February 2020.⁴⁷²
- 6.18 In the Final Proposals, the CAA also considered the issue around relative risk of HAL versus comparator airports. The CAA proposed that, in the absence of the pandemic, HAL would have been expected to continue to have a lower asset beta relative to comparator airports in H7 because of the presence of excess demand due to the existence of a capacity constraint.⁴⁷³
- 6.19 However, the CAA also considered that the pandemic has had a significant effect on each of the drivers of differences in risk exposure between HAL and comparator airports and came to the view that the pandemic effectively eliminated the risk differential that previously existed between HAL and comparator airports.⁴⁷⁴
- 6.20 The CAA therefore assumed that the pandemic had increased HAL's asset beta by up to 0.10 due to the change in its relative risk compared with listed comparators, producing an overall baseline beta range of 0.50-0.60 (the **baseline beta**).⁴⁷⁵ This range represented the CAA's view of HAL's riskiness going forward, absent another pandemic event happening but taking into account that COVID-19 had narrowed the risk differential between HAL and comparator airports more generally.
- 6.21 The CAA considered the possibility of future pandemic-like events and their likely impact on the beta in Stage 2.

Stage 2: COVID-19 adjustment

- 6.22 To calculate its COVID-19 adjustment, the CAA calculated the difference between the baseline beta and a probability weighted pandemic beta, based on advice and

⁴⁷¹ AENA was not listed at the time of Q6 beta analysis.

⁴⁷² [Initial Proposals, Section 2](#), Table 9.3.

⁴⁷³ [Final Proposals, Section 3](#), paragraph 9.61.

⁴⁷⁴ [Final Proposals, Section 3](#), paragraph 9.81.

⁴⁷⁵ [Final Proposals, Section 3](#), paragraph 9.81.

analysis from Flint. The CAA stated that such an approach did not ignore the impact of the pandemic on the beta, but it did ensure the impact of the pandemic was not over-represented in the asset beta estimate.⁴⁷⁶

6.23 Flint stated that its overall approach to the COVID-19 adjustment was to estimate the effect on HAL's long-run beta that would be observed if events similar in nature to COVID-19 occurred again in the future.⁴⁷⁷ Flint further stated that its preferred approach was to use Ordinary Least Squares (**OLS**) regression⁴⁷⁸ (as it is commonly used by regulators and practitioners) but with alternative weights applied to different subsets of historical data. The effect was to 'dial down' the influence of the observed, COVID-19 affected data.⁴⁷⁹

6.24 Flint estimated the adjustment in three steps:⁴⁸⁰

- (a) Flint carried out a weighted regression of daily returns for listed comparator airports against their respective market indices, where different weights were applied depending on whether the observation falls within or outside the pandemic period.⁴⁸¹ Flint assigned a lower weight to pandemic-period observations, reflecting an assumption of the frequency and duration with which pandemic-like events might occur in the future (once every 20-50 years) and their duration (17-39 months).
- (b) Flint then estimated a regression that excluded pandemic-period datapoints entirely. It estimated the pandemic impact for each airport as the difference in the asset beta estimates between the two regressions.
- (c) Flint then aggregated the estimated pandemic impacts for each airport into a range for H7 based on 1, 4 and 6-company averages across the comparator airports (AENA, ADP, Fraport, Zurich, Vienna and Sydney).

6.25 The CAA's proposed post-pandemic asset beta range was 0.52-0.71, before taking into account the impact of the TRS.⁴⁸²

Stage 3: the TRS adjustment

6.26 In the Final Proposals, the CAA also proposed adjusting the asset beta range downwards to reflect the introduction of the new traffic risk sharing mechanism for H7, which in its view would reduce the systematic risk faced by HAL. The CAA

⁴⁷⁶ [Final Proposals, Section 3](#), paragraph 9.30.

⁴⁷⁷ CAA, Flint, [Support to the Civil Aviation Authority: H7 Updated Beta Assessment](#), May 2022, page 9.

⁴⁷⁸ OLS describes an approach to analyse the relationship between independent variables and a dependent variable by minimising the sum of the squares in the difference between the observed and predicted values of the dependent variable, configured as a straight line.

⁴⁷⁹ Flint, [Support to the Civil Aviation Authority: H7 Updated Beta Assessment](#), May 2022, page 12

⁴⁸⁰ [Final Proposals, Section 3](#), paragraph 9.151.

⁴⁸¹ [Final Proposals, Section 3](#), paragraph 9.30.

⁴⁸² [Final Proposals, Section 3](#), paragraph 9.152.

was of the view that none of the airport comparators that it used to estimate the H7 asset beta benefited from traffic risk sharing in a way that significantly mitigated pandemic risk, and therefore that observed betas did not already reflect the impact of the TRS.⁴⁸³ The CAA's proposed conclusion was that the best available approach was to apply a reduction that assumed a degree of convergence between the pre-TRS asset beta for HAL and the asset betas for regulated network utilities that were not exposed to traffic risk.⁴⁸⁴

6.27 The CAA noted that while network utilities operated in different sectors and were subject to different risks to HAL, they also exhibited various characteristics which made them suitable as a benchmark. The CAA's proposed conclusion was that the principal driver of the difference in asset betas between HAL (at present) and network utilities was the exposure of HAL to volume risk.⁴⁸⁵

6.28 The CAA estimated the post-TRS asset beta as follows.⁴⁸⁶

- (a) The CAA calculated the difference between its pre-TRS asset beta range for HAL of 0.52-0.71 and the average asset beta for network utilities of 0.342.
- (b) The CAA assumed that traffic risk accounted for 50 to 90% of the difference.
- (c) The CAA then assumed the TRS mechanism would reduce HAL's exposure to traffic risk by 50%, on the basis that the TRS sharing factors insulate HAL from approximately half of possible traffic-related cash-flow losses/gains under plausible (non-pandemic) traffic shock scenarios.

6.29 Following this approach, the CAA estimated that the impact of TRS was to reduce HAL's asset beta by 0.08-0.09. This produced an overall proposed asset beta range of 0.44-0.62.⁴⁸⁷

Summary of CAA's estimates

6.30 Table 6.1 below sets out the estimates determined by the CAA at each stage of its process.

⁴⁸³ [Final Proposals, Section 3](#), paragraph 9.126–9.127

⁴⁸⁴ [Final Proposals, Section 3](#), paragraph 9.153.

⁴⁸⁵ [Final Proposals, Section 3](#), paragraph 9.157.

⁴⁸⁶ [Final Proposals, Section 3](#), paragraph 9.158.

⁴⁸⁷ [Final Proposals, Section 3](#), paragraph 9.159.

Table 6.1: Component parts of the CAA’s asset beta determination

<i>Component</i>	<i>Lo</i>	<i>Hi</i>
Pre-pandemic asset beta	0.50	0.50
Impact of the pandemic on the risk differential between HAL and comparator airports	n/a	0.10
Flint baseline asset beta	0.50	0.60
Impact of the pandemic on comparator airports’ asset betas	0.02	0.11
Impact of the TRS	(0.08)	(0.09)
H7 asset beta	0.44	0.62

Source: CAA, [Final Proposals, Section 3](#) CAP2365D, Table 9.2.

Final Decision

6.31 As noted above, the CAA’s final view on HAL’s asset beta (as set out in its Final Decision) did not differ from its proposed asset beta which it had consulted upon in its Final Proposals.⁴⁸⁸ Rather than repeat its detailed calculation of HAL’s asset beta, the Final Decision set out the CAA’s response to stakeholders’ criticisms of the CAA’s asset beta proposed at Final Proposals. Many of these criticisms (and the CAA’s responses to those criticisms) form the subject of the appeals before us in these proceedings. HAL’s criticisms were set out at paragraphs 9.50 to 9.59 of the Final Decision. In broad terms, HAL submitted that the CAA’s asset beta assessment was poorly evidenced and resulted in an asset beta estimate which was too low. The Airlines’ criticisms were set out at paragraphs 9.62 to 9.66 of the Final Decision. In broad terms, they submitted that the CAA’s asset beta estimate was too high. The CAA responded to those criticisms at paragraphs 9.68 to 9.86 of the Final Decision.

Overview of HAL’s and the Airlines’ appeals

6.32 Ground B1 concerns alleged errors in CAA’s estimation of HAL’s asset beta. We have considered HAL’s and the Airlines’ submissions on the asset beta together, but split into two broad groups:

- (a) The first set of errors concern errors related to stage 1 and stage 2 of the CAA’s assessment. HAL alleged that the assessment of a pre- and post-pandemic asset beta was illegitimate in principle. HAL and the Airlines also alleged that the CAA made various methodological errors in stage 1 and in stage 2 of its assessment. We note that there are interlinkages between HAL’s allegation that the CAA’s overall approach was illegitimate and its specific criticisms of the CAA’s stage 1 and stage 2 assessments. (**Section A** of our analysis).
- (b) The second set of alleged errors concern methodological matters related to the TRS adjustment (ie ‘stage 3’ of CAA’s asset beta calculation). HAL and the Airlines each submitted that methodological errors have occurred, albeit

⁴⁸⁸ [Final Decision](#), paragraph 9.67.

they submitted that different errors have occurred. (**Section B** of our analysis).

- 6.33 In addition to these groups of errors, HAL raised further arguments which it said demonstrated that the CAA's overall asset beta calculation was wrong (too low). These were not separate errors or grounds of appeal. We describe these additional arguments and then address them from paragraph 6.248 below. (**Section C** of our analysis).
- 6.34 In the rest of this chapter, we provide an overview of the issues for determination under HAL's and the Airlines' appeals. We then consider the alleged errors, addressing each of the appellants' appeals. For each group of errors and arguments, we provide summaries of the submissions from the appellants, the CAA and from interveners before providing our assessment and conclusions. Finally, we set out our determination on the appeals concerning the CAA's calculation of HAL's asset beta.

Questions for determination

HAL's appeal

- 6.35 HAL submitted that the CAA made two errors in setting the asset beta for HAL:
- (a) in respect of the pre- and post-pandemic asset beta (stages 1 and 2 of the CAA's asset beta assessment); and
 - (b) in respect of the Traffic Risk Sharing (TRS) adjustment (stage 3 of the CAA's asset beta assessment)⁴⁸⁹
- 6.36 HAL submitted in respect of the first error that the CAA's approach was wrong in law, because it sought to substitute evidence-based decision making with pure discretion. It also contended that the CAA made an error in the exercise of a discretion in its departure from the readily available evidence and a well-established regulatory method used by other regulators.⁴⁹⁰
- 6.37 HAL submitted in respect of the second error that the CAA was wrong in law to apply a further arbitrary (downward) adjustment to the asset beta on account of the TRS mechanism. It said that the adjustment was irrational and lacked evidential support for key assumptions, and that the CAA had failed to take account of relevant considerations, including comparator airports' risk sharing mechanisms. HAL also said that the TRS adjustment suffered from factual errors in respect of its coverage of non-aeronautical charges and the protection rate

⁴⁸⁹ [HAL NoA](#), paragraph 159.

⁴⁹⁰ [HAL NoA](#) paragraph 183.

achieved by the TRS mechanism, and that the CAA had made an error in the exercise of a discretion by departing further from best regulatory practice and applying a disproportionate adjustment to the asset beta.⁴⁹¹

6.38 Accordingly, the overall statutory questions for our determination are:

- (a) Was the Final Decision wrong in law, or because the CAA made an error in the exercise of a discretion, in the estimate of HAL's asset beta?⁴⁹²
- (b) Was the Final Decision wrong because it was based on an error of fact, because it was wrong in law or because the CAA made an error in the exercise of a discretion, in making a further downward adjustment to the asset beta to account for the TRS mechanism?⁴⁹³

6.39 Taking account of HAL's submissions, in order to determine the first of the overall questions set out in paragraph 6.38, we have addressed the following subsidiary questions:

- (a) In estimating HAL's asset beta, was the CAA wrong in law because it sought to substitute evidence-based decision making with pure discretion?
- (b) In estimating HAL's asset beta, did the CAA make an error in the exercise of a discretion by departing from well-established regulatory best practice of relying directly on market data to estimate HAL's asset beta?

6.40 Taking account of HAL's submissions, in order to determine the second of the overall questions in paragraph 6.38, we have addressed these subsidiary questions:

- (a) Was the CAA's decision to make a further adjustment to HAL's asset beta on account of the TRS mechanism wrong because it was based on factual errors in respect of the mechanism's coverage of non-aeronautical charges and the protection rate achieved by it?
- (b) Was the CAA's decision to make a further adjustment to HAL's asset beta on account of the TRS mechanism wrong because it was wrong in law on account of being irrational, lacking in evidential support for key assumptions or because the CAA failed to take account of relevant considerations?
- (c) Was the CAA's decision to make a further adjustment to HAL's asset beta on account of the TRS mechanism wrong because the CAA made an error in

⁴⁹¹ [HAL NoA](#), paragraphs 211 – 213.

⁴⁹² This is the overall statutory question to which HAL's pleaded Ground 2A, relating to stages 1 and 2 of the CAA's asset beta assessment, gives rise.

⁴⁹³ This is the overall statutory question to which HAL's pleaded Ground 2B, relating to stage 3 of the CAA's asset beta assessment (the TRS adjustment), gives rise.

the exercise of a discretion by departing from best regulatory practice and applying a disproportionate adjustment?

Airlines' appeals

- 6.41 The Airlines submitted that the CAA made errors of fact or was wrong in law at the first and third stages of its assessment beta assessment, and made errors of fact, was wrong in law or made an error in the exercise of a discretion at the second, resulting in it setting an asset beta which was too high.
- 6.42 The specific errors alleged by the Airlines were:
- (a) An error in setting the pre-pandemic asset beta using HAL's Q6 asset beta of 0.5, when more recent pre-pandemic asset beta data was available (**Stage 1 – pre-pandemic asset beta**).
 - (b) Errors in calculating the impact of the pandemic on HAL's asset beta:
 - (i) by increasing HAL's asset beta to account for HAL's change in risk compared with comparator airports; and
 - (ii) in calculating the adjustment to reflect the impact of the pandemic on comparator airports (**Stage 2 – pandemic effects**).
 - (c) An error in calculating the Traffic Risk Sharing (**TRS**) adjustment by concluding that traffic risk accounts for 50-90% of the differential between HAL's and regulated utilities asset betas, rather than 90-100% (**Stage 3 – TRS mechanism**).
- 6.43 Accordingly, the overall statutory questions for our determination of the Airlines' appeal on asset beta are:
- (a) Was the Final Decision wrong because it was based on errors of fact, was wrong in law or an error was made in the exercise of a discretion in setting the pre-pandemic asset beta?
 - (b) Was the Final Decision wrong because it was based on errors of fact, was wrong in law or an error was made in the exercise of a discretion, in calculating the impact of the pandemic on HAL's asset beta?
 - (c) Was the Final Decision wrong because it was based on errors of fact, was wrong in law or an error was made in the exercise of a discretion in calculating the TRS adjustment?
- 6.44 Taking account of the Airlines' submissions, in order to determine the overall statutory questions set out in paragraph 6.43, we have addressed the following subsidiary questions as to whether the CAA was wrong in fact, in law or in the

exercise of a discretion, noting that the appeals varied slightly between the airline appellants:

(a) Stage 1 – pre-pandemic asset beta:

- (i) Did the CAA make an error of fact when setting the pre-pandemic asset beta because it relied on flawed evidence and assumptions (by relying on the Q6 asset beta of 0.5, despite more recent pre-pandemic asset beta data being available)?
- (ii) Was the CAA wrong in law in setting the pre-pandemic asset beta because, in doing so, the CAA failed to take proper account of relevant considerations, relied on flawed evidence and assumptions, made methodological errors, acted in defiance of logic or reached conclusions without adequate supporting evidence (by relying on the Q6 asset beta of 0.5, which was out of date, by failing to update the pre-pandemic asset beta data for the comparator set with up-to-date data, selecting the wrong data, relying on asset beta values for the comparator set estimated in 2013, failing to take into account up-to-date and, therefore, more relevant data)?
- (iii) Was the CAA wrong in law in setting the pre-pandemic asset beta using the Q6 asset beta because doing so was irrational when more recent and reliable pre-pandemic asset beta data for comparator airports was available?
- (iv) Did the CAA make an error of discretion in setting the pre-pandemic beta, because it decided to rely on a Q6 finding when more recent (and more reliable) pre-pandemic asset beta data was available for the comparator set?

(b) Stage 2 – pandemic effects:

- (i) Did the CAA make an error of fact when it increased HAL's asset beta to account for the impact of the pandemic on the risk differential between HAL and comparator airports, because it:
 - (1) relied on flawed evidence and assumptions (by relying on out-dated pre-pandemic data for comparator airports); and
 - (2) reached conclusions without a reasonable basis (by wrongly assuming that the pandemic neutralised the effect of the capacity constraint on HAL's beta relative to comparator airport betas)?
- (ii) Did the CAA make an error of law when it increased HAL's asset beta to account for the impact of the pandemic on the risk differential

between HAL and comparator airports, because it failed properly to enquire, failed to take proper account of the relevant considerations, relied on flawed evidence and assumptions, made methodological errors, acted in defiance of logic or reached conclusions without adequate supporting evidence?

- (iii) Did the CAA make errors of fact when it assessed the impact of the pandemic on comparator airports because in doing so, it applied the wrong facts or interpreted the facts incorrectly (it (1) considered that all increases in comparators' betas during the pandemic were due to the pandemic, and (2) relied on analysis by Flint which contained methodological errors)?
 - (iv) Was the CAA wrong in law when it assessed the impact of the pandemic on comparator airports because, in doing so, it failed to take proper account of relevant considerations, relied on flawed evidence and assumptions, made methodological errors, acted in defiance of logic or reached conclusions without adequate supporting evidence?
 - (v) Did the CAA make an error in the exercise of discretion by making erroneous methodological choices (to depart without good reason, from the standard econometric practises of using 'slope dummy' or separate regression models when calculating the impact of the pandemic on comparator airports)?
 - (vi) Did the CAA make an error in the exercise of discretion by adopting a methodological approach that involved combining pandemic and non-pandemic periods, rather than the only reasonable approach of estimating equity betas separately for each period?
- (c) Stage 3 – TRS mechanism:

Taking account of the Airlines' submissions, the subsidiary questions for our assessment, in order to determine the third overall statutory question on the TRS adjustment are:

- (i) Did the CAA make errors of fact when calculating the TRS adjustment by:
 - (1) relying on flawed evidence and assumptions (by wrongly assuming that 50% - 90% of the asset beta differential between HAL and network utilities was due to traffic risk); and
 - (2) reaching conclusions without a reasonable basis (by wrongly considering that other factors mentioned by CEPA could account for the asset beta differential between HAL and network utilities)?

- (ii) Was the CAA wrong in law in calculating the TRS adjustment because, in doing so, the CAA failed properly to enquire, failed to take proper account of relevant considerations, relied on flawed evidence and assumptions, made methodological errors, reached conclusions without adequate supporting evidence or acted in defiance of logic?
- (iii) Was the CAA wrong in law in calculating the TRS adjustment because, in doing so, it failed reasonably to account for the mitigation of HAL's risk exposure in the Final Decision as a whole and made an adjustment outside the range it could reasonably have made?
- (iv) Did the CAA make an error of discretion in calculating the TRS adjustment because it erred in its approach to determining where HAL lay on the risk spectrum.

Section A: stage 1 and stage 2 (pre- and post-pandemic asset beta)

Summary of our conclusions (stage 1 and stage 2)

HAL's appeal

- 6.45 We have considered whether the Final Decision was wrong because the CAA was wrong in law or in the exercise of a discretion as HAL submitted.
- 6.46 In the light of our detailed review and assessment of the Parties' submissions and supporting evidence, we find that the CAA did not err in law because it sought to substitute evidenced-based decision making with pure discretion; nor did the CAA err in the exercise of a discretion by departing from readily available evidence and well-established regulatory method.
- 6.47 Accordingly, we determine that the CAA's Final Decision was not wrong in law, or because the CAA made an error in the exercise of a discretion, in the estimate of HAL's asset beta.

Airlines' appeals

- 6.48 We have also considered whether the Final Decision was wrong because it was based on an error of fact, or because the CAA was wrong in law or in the exercise of a discretion in the diffusely pleaded ways the Airlines alleged.
- 6.49 In the light of our detailed review and assessment of the Parties' submissions and supporting evidence, we find that the CAA did not err in setting the pre-pandemic asset beta using HAL's Q6 asset beta of 0.5. Nor did the CAA err: (i) in calculating the impact of the pandemic on HAL's asset beta by increasing HAL's asset beta to account for HAL's change in risk compared to comparator airlines; (ii) in reckoning

the impact of the pandemic on HAL's asset beta when calculating the adjustment to reflect the impact of the pandemic on comparator airports.

- 6.50 In our judgement, in relation to stage 1 (pre-pandemic asset beta), the CAA did not make an error of fact on which the Final Decision was based when setting the pre-pandemic asset beta because it relied on flawed evidence and assumptions (by relying on the Q6 asset beta of 0.5). Nor do we find that the CAA was wrong in law in setting the pre-pandemic asset beta because, in doing so, the CAA failed to take proper account of relevant considerations, relied on flawed evidence and assumptions, made methodological errors, acted in defiance of logic or reached conclusions without adequate supporting evidence. Nor was the CAA otherwise wrong in law nor did it make an error of discretion in setting the pre-pandemic asset beta when more up to date data was available to it.
- 6.51 In our judgement, in relation to stage 2 (pandemic effects), the CAA did not make an error of fact on which the Final Decision was based when it increased HAL's asset beta to account for the impact of the pandemic on the risk differential between HAL and comparator airports. Nor in doing so did the CAA err in law because it failed properly to enquire, failed to take proper account of the relevant considerations, relied on flawed evidence and assumptions, made methodological errors, acted in defiance of logic or reached conclusions without adequate supporting evidence.
- 6.52 We also find that, in relation to stage 2 (pandemic effects), the CAA did not make errors of fact on which the Final Decision was based when it assessed the impact of the pandemic on comparator airports. Nor in doing so, did the CAA err in law because it failed to take proper account of relevant considerations, relied on flawed evidence and assumptions, made methodological errors, acted in defiance of logic or reached conclusions without adequate supporting evidence. Furthermore, the CAA did not err in the exercise of discretion by not using a 'slope dummy' or separate regression models when calculating the impact of the pandemic on comparator airports. Nor do we agree that the only reasonable approach open to the CAA was to estimate equity betas separately for each period, such that the CAA erred in the exercise of discretion by adopting a different methodological approach.
- 6.53 Accordingly, we determine that the CAA's Final Decision was not wrong either because it was based on errors of fact, was wrong in law or an error was made in the exercise of a discretion in setting the pre-pandemic asset beta. Further, we determine that the CAA's Final Decision was not wrong because it was based on errors of fact, was wrong in law or an error was made in the exercise of a discretion, in calculating the impact of the pandemic on HAL's asset beta.

HAL's appeal on stage 1 and stage 2

HAL's submissions

6.54 In respect of the first set of errors, HAL submitted that the CAA's approach was wrong in law, because it sought to substitute evidence-based decision making with pure discretion. It also submitted that the CAA made an error in the exercise of a discretion in its departure from the readily available evidence and a well-established regulatory method used by other regulators.⁴⁹⁴

1. Departure from regulatory best practice

6.55 HAL submitted that the CAA had departed from regulatory best practice but had no reason to do so.

- (a) **Regulatory discretion:** The CAA's approach effectively substituted evidence from a wide range of market participants with its own subjective assessment of future risk which had little evidential support. That approach was misconceived. The regulatory regime and investor confidence require that regulatory discretion is applied in accordance with principles of regulatory best practice, not arbitrarily. 'Regulatory discretion' should not be relied upon instead of evidence-based decision making.⁴⁹⁵
- (b) **Self-correction:** The established approach (which takes betas from a range of time periods) is self-correcting. In contrast, the CAA's assumption-based approach does not self-correct and simply introduces subjectivity into the assessment process.⁴⁹⁶
- (c) **PR19 and PR24:** The CMA in its Redetermination of Ofwat's PR19 Final Determination and Ofwat in its proposed methodology for PR24 each also indicated that the established approach is more robust than the application of assumptions.⁴⁹⁷

2. Pure discretion

6.56 HAL submitted that the CAA's process depended upon a number of assumptions which were speculative and ill-evidenced.

⁴⁹⁴ [HAL NoA](#), paragraph 183.

⁴⁹⁵ [HAL NoA](#), paragraph 177–180.

⁴⁹⁶ [HAL NoA](#), paragraph 174.

⁴⁹⁷ [HAL NoA](#), paragraph 175–176. PR19 is the five-year price control settlement for water companies in England and Wales for 2020-2024. Ofwat's [PR19 Final Determinations](#) published on 16 December 2019 can be found at: www.ofwat.gov.uk/wp-content/uploads/2019/12/PR19-final-determinations-Overview-of-final-determinations.pdf. PR24 is Ofwat's proposed methodology for the next set of water price controls. CMA: [Anghian Water Services Limited, Bristol Water plc, Northumbrian Water Limited and Yorkshire Water Services Limited price determinations, final report](#), dated 17 March 2021 (**PR19 Final Report**). Ofwat: [Creating tomorrow, together: Our final methodology for PR24, Appendix 11 Allowed return on capital](#), at page 42.

- (a) **Outdated pre-pandemic data:** The first assumption relates to the pre-pandemic beta used by the CAA as a starting point. HAL submitted that the pre-pandemic baseline relied on data from 2014 and earlier which is now out of date given developments since then including the break-up of BAA's ownership of Heathrow, Gatwick and Stansted airports (which now compete), the growth of low-cost airlines and Brexit. The CAA also ignored more recent pre-pandemic asset betas (including those of other airports estimated by the CMA from February 2020).⁴⁹⁸
- (b) **Estimating future pandemic-like events:** The second assumption relates to the frequency and duration of future pandemic-like events, for the probability re-weighting of observed betas. HAL submitted that the CAA's estimate of the likely frequency of pandemic-like events is necessarily arbitrary.⁴⁹⁹
- (c) **Disregard of non-pandemic factors:** The third assumption related to the extent to which recent market data reflects factors other than COVID-19 for the measure of the size of a pandemic effect. HAL submitted that the CAA implicitly assumed that all of the increase in the observed betas over pandemic period was due to the immediate impact of the COVID-19 pandemic, rather than that the pandemic revealed an exposure to policy risk not previously anticipated and not limited to pandemics. HAL further submitted that the increase was also due in part to other factors including those which post-date February 2022 (such as the Ukraine war and changed monetary policy).⁵⁰⁰

3. Impact on regulatory risk

- 6.57 HAL also submitted that the CAA's approach increased perceived regulatory risk which will increase the cost of financing HAL in future. The CAA's subjective approach diminishes investor confidence since, unlike the established approach, it cannot be applied predictably and consistently over time.⁵⁰¹

The CAA's response to HAL's submissions on stage 1 and stage 2

- 6.58 The CAA agreed that its approach is the first to deliberately and explicitly assign weights to different observations but submitted that this approach was reasonable in the circumstances of the COVID-19 pandemic and its impact on estimates of beta values. The CAA also submitted that any asset beta estimate necessarily involves implicitly assigning weights to a particular period of time, and assigning weights to historical observations in line with their expected likelihood of recurrence is less arbitrary than assuming (as HAL did) that each observation is

⁴⁹⁸ [HAL NoA](#) paragraph 171.

⁴⁹⁹ [HAL NoA](#), paragraph 169.

⁵⁰⁰ [HAL NoA](#) paragraph 170, HAL, Witness statement from Michael King, 17 April 2023, (**King 1**) paragraph 71 and 74.

⁵⁰¹ [HAL NoA](#), paragraph 180–182.

equally weighted.⁵⁰² It said that declining to use an unweighted regression cannot be said to be an error as this simply represented an exercise of the CAA's regulatory judgement.

- 6.59 The CAA submitted that it was entitled to consider that the factors mentioned by HAL in its NoA (including those outlined above in paragraph 6.56(a) above) did not amount to a convincing reason to expect that HAL's asset beta had increased between Q5 and the start of the pandemic.⁵⁰³ In particular, the CAA was not aware of evidence that suggested that the competitive pressure on HAL had intensified over this period, and even if it did, it would not necessarily have led to an increase in HAL's systematic risk exposure.⁵⁰⁴ The CAA also submitted that there was no reason to suggest that low-cost carriers had led to increased systematic risk exposure, and that it did not seem likely that Brexit had resulted in a significant increase in the asset beta prior to the pandemic.⁵⁰⁵
- 6.60 Concerning its estimate of the likely frequency and duration of future pandemic-like events, the CAA submitted it was obvious that the frequency of future pandemic-like events was highly uncertain, but the CAA needed to make assumptions about factors which may reduce or increase the frequency or probability of pandemic-like events in the future. This would involve a degree of judgement, but that did not make them 'necessarily ...arbitrary', as HAL alleged. The CAA also submitted that HAL's own estimates included assumptions which were not reasonable, and in any case the CAA's view could not sensibly be described as 'wrong', even if other reasonable views were also possible.⁵⁰⁶
- 6.61 The CAA submitted that HAL's argument that the CAA assumed that the pandemic accounted for substantially all of the increases in comparator airport asset betas observed during the pandemic period was a broadly correct characterisation of the CAA's approach but that did not demonstrate that this approach was wrong. The CAA submitted that it explicitly considered the impact of other events such as the Russia-Ukraine conflict and concluded that their impact was insignificant compared with the onset of the pandemic. In addition, the CAA submitted that recent data showed a clear reversion of comparator airport asset betas towards their pre-pandemic level following the end of the pandemic, suggesting that the pandemic was the dominant driver of elevated asset betas previously.⁵⁰⁷

⁵⁰² [CAA Response](#), paragraph 148

⁵⁰³ [CAA Response](#), paragraph 144.

⁵⁰⁴ [CAA Response](#), paragraph 144.1

⁵⁰⁵ [CAA Response](#), paragraph 144.3–144.3

⁵⁰⁶ [CAA Response](#), paragraph 150.2

⁵⁰⁷ [CAA Response](#), paragraph 150.3.

Interveners' submissions on HAL's submissions on stage 1 and stage 2

- 6.62 BA and Delta (together, the **Airline Interveners**) intervened in HAL's appeal. The Airline Interveners submitted that HAL's allegation that there was no justification to depart from the best regulatory best practice overlooked two critical factors, namely i) the impact on airport betas of the COVID-19 pandemic; and ii) the impact of the introduction of the TRS mechanism which protects HAL from risks deriving from passenger volumes.⁵⁰⁸
- 6.63 The Airline Interveners submitted that HAL's reliance on Ofwat's proposed methodology for PR24 was erroneous. They submitted that the impact of the COVID-19 pandemic was materially different on airports as compared to water companies, which justified the CAA adopting a different approach that specifically looked at appropriate beta adjustments.⁵⁰⁹
- 6.64 With regard to HAL's submission that it was not realistic to assume that the systematic risk of Heathrow would remain the same given certain changes (see paragraph 6.56(a) above), the Airline Interveners submitted a report from their advisers Alix Partners – the **AP Intervention Report** – which noted that these factors did not directly impact on HAL's proposed beta, because none of these represented a systematic risk that would justify a higher beta.⁵¹⁰
- 6.65 The Airline Interveners submitted that it was vital that the CAA took due consideration of the impact of the COVID-19 pandemic, and referred to the AP Intervention Report which indicated that the relevant issue was estimating beta on a forward looking basis allowing the risk of future pandemics, and that the CAA was correct in using judgement to determine how much weight to give to pandemic influenced periods in the estimation of beta. The Airline Interveners submitted that ignoring the pandemic by assuming that the last five years were typical, as HAL proposed, would be a clear error that the CAA has avoided in using its best judgement to support its assumptions.⁵¹¹
- 6.66 The Airline Interveners submitted that the pandemic's impact on the aviation sector specifically had significantly reduced by around March 2022 and factors other than the COVID-19 pandemic are now influencing demand for air travel, and that the CAA was correct in its approach.⁵¹² The Airline Interveners also submitted

⁵⁰⁸ [BA, Application for permission to intervene and Notice of Intervention \(BA Nol\)](#), paragraph 3.2.2b, referring to the AlixPartners, Issues raised by Heathrow Airport Limited's Appeal of the CAA's H7 Final Decision, Report prepared for British Airways, Virgin Atlantic Airways and Delta Air Lines, 22 May 2023, (**AlixPartners Intervention Report**), paragraph 17.

⁵⁰⁹ [BA Nol](#), paragraph 3.3.1b(v), [Delta Nol](#) paragraph 3.29(a)(ii).

⁵¹⁰ [BA Nol](#), paragraph 3.2.2c and [Delta Nol](#) paragraph 3.16, referring to the AlixPartners Intervention Report, paragraph 23.

⁵¹¹ [BA Nol](#), paragraph 3.3.1a and [Delta Nol](#), paragraph 3.20.

⁵¹² [BA Nol](#), paragraph 3.3.1b(i) and [Delta Nol](#), paragraph 3.21.

that there was little evidence that airports' betas were continuing to be impacted by the COVID-19 pandemic.

- 6.67 Overall, the Airline Interveners submitted that to assume that an event such as the COVID-19 pandemic should be given the same weight in H7 as it had in the last five years of HAL's proposed beta estimation period was unreasonable

Our assessment – HAL's appeal on stage 1 and stage 2

Preliminary remarks

- 6.68 Before we consider the detail of HAL's appeal, we first note that the beta estimation is an area within the cost of capital estimation which requires significant judgement. In particular, when the regulated company is not listed on the stock market, as is the case for HAL, the estimation has to rely on comparator analysis, and these comparators will often be far from perfect.
- 6.69 Second, the cost of capital should reflect the forward-looking risk of investing in the regulated activities, but the available evidence on risk is backward-looking. Betas are typically estimated using regression analysis of share price returns on the stock market returns, using historical data (typically over varying periods of time, eg 2-, 5- or 10-year periods).⁵¹³ The frequency of datapoints analysed within the dataset varies, but may be daily, weekly, or monthly. This type of analysis implicitly assumes that risks faced by investors historically are broadly representative of forward-looking risks. The CAA therefore faced a particularly challenging task in estimating beta following the COVID-19 pandemic.
- 6.70 As explained in paragraphs 6.12 to 6.30 above, the CAA followed a 'three-stage' approach to setting the asset beta.
- 6.71 In undertaking our assessment, we have focused on whether the CAA's overall approach to setting the asset beta was wrong. We have considered HAL's submissions that the CAA was wrong to depart from 'well-established regulatory best practice' and that it substituted evidence-based decision making with 'pure discretion'. We then consider HAL's submission that the CAA's approach would increase perceived regulatory risk.

⁵¹³ For example, this was the approach used by the CMA in the PR19 redetermination (See: CMA, [PR19 Final Report](#), paragraphs 9.457–9.494), and in the NERL redetermination (See: CMA, [NATS \(En Route\) Plc Final Report](#), paragraphs 13.84–13.96).

1. 'Departure from regulatory best practice' argument

1a 'Regulatory discretion' argument

- 6.72 Our first observation is that in many respects the CAA's approach was similar to standard regulatory practice. It involved analysing historical share price movements of suitable listed comparator airports relative to the market to derive a forward-looking assessment of risk faced by investors in the long run. The main difference is that the CAA applied different weights to historical datapoints to reflect its view that historical betas (if taken unadjusted) would not be reflective of the forward-looking balance of risk. This is because, according to the CAA, the historical dataset is heavily dominated by the impact of the COVID-19 pandemic, during which airport betas increased considerably.⁵¹⁴ The CAA also noted that the impact of the COVID-19 pandemic on airport betas was significantly greater than that seen in other regulated sectors or in previous determinations, which necessitated taking a different approach to past decisions.⁵¹⁵
- 6.73 HAL's proposed approach instead relies on a selection of estimation windows (ie two, five, seven and ten years) and both daily and weekly frequencies. It makes no adjustments to reflect the impact of the pandemic.
- 6.74 As we explained earlier, the purpose of the asset beta assessment is not simply to consider historical data, but to determine a forward-looking estimate that will capture appropriately the systematic risks expected by investors in HAL in the long run. In normal circumstances, basing forward-looking estimates on recent beta history, as suggested by HAL, is an appropriate means by which to estimate expected levels of systematic risk. However, even in normal circumstances, regulators apply some judgement and implicitly weigh historical data differently in deriving an asset beta range from the available estimates. For example, a range which takes into account both 2-year and 10-year betas would implicitly give more weight to the most recent two years of data than to the other eight years. The main difference is that the CAA assigned explicit weights to historical data. It cannot, in our view, be said to have been wrong to do so in the unusual circumstances that applied and where there is an obvious downside to the approach advocated by HAL that indicates that it is not a clearly superior alternative.
- 6.75 In this context, we agree with the CAA's submission that the impact of the COVID-19 pandemic has resulted in significantly elevated asset betas, and that the asset beta levels observed at the height of the pandemic are unlikely to be

⁵¹⁴ See, for example, Flint's analysis of the 2-year rolling daily asset betas of airport comparators from January 2019 to January 2023. (CAA, Witness Statement from Craig Lonie (Flint), (**Lonie 1**) 31 May 2023, Figure 3. Oxera also presented the 5-year OLS asset beta of comparator airports from January 2015 to January 2023. (HAL, First Witness Statement from Peter Hope, (**Hope 1**), 17 April 2023, Figure 3.8. Both figures demonstrate an increase in asset betas at the start of the COVID-19 pandemic.

⁵¹⁵ See, for example, Flint's comparison of the 2-year rolling asset beta average of water companies as compared to airport groups. (Lonie 1, Figure 7).

representative of future observed asset beta dynamics.⁵¹⁶ We also agree with the CAA's assessment that HAL's estimates implicitly assume that a COVID-19-like event will occur once every five, seven or ten years, which we think is not a credible assumption.⁵¹⁷ Not only does this assume that pandemic-like events are relatively frequent, it also assumes that governments' responses to such events would be similar to their handling of the COVID-19 pandemic.

- 6.76 We further agree with the CAA's submission that future stock price movements are likely to comprise a combination of both relatively benign periods, such as those that prevailed prior to the pandemic, and occasional periods of market turmoil akin to those observed during the pandemic.⁵¹⁸ As such, our judgement is that the CAA was not wrong to give some weight to the pandemic data but also to take the view that reliance only on unadjusted recent historical data to estimate the asset beta would inappropriately weight the asset beta upwards.

1b The 'self-correction' argument

- 6.77 HAL submitted (see paragraph 6.55(b)) that the 'established approach' (which takes betas from a range of time periods) was self-correcting, and that the approach taken by the CAA was not self-correcting and introduced subjectivity. The principle of HAL's argument is that as relevant data comes to light, the broader datasets will 'self-correct', meaning that the 'right' beta will come through over time. Flint (on behalf of the CAA) responded by noting that the CAA has a duty to further the interests of present and future consumers while promoting economy and efficiency on the part of HAL. In this context, it noted that the CAA's duties provide a clear steer that HAL's beta should be made on a forward-looking basis and must not use historically observed values for beta if these values are known or considered likely to be misaligned with its view of the future.⁵¹⁹
- 6.78 In this case, our view is that historical betas risked overweighting COVID-19 data and therefore an unadjusted estimate based on this data risked increasing asset beta, in the current price control, beyond what the CAA considered to be a reasonable reflection of systematic risk in the H7 period. Even if this were to 'self-correct' in future periods, it risked increasing passenger charges in the current period, meaning that current customers would be compensating future passengers for a known over-estimate in the H7 price control. On that basis, our view is that the CAA's interpretation of its statutory duties and its decision to make adjustments to historical data was not wrong.

⁵¹⁶ CAA, Second Witness Statement from Jayant Hoon (**Hoon 2**), 31 May 2023 paragraphs 7.12–7.13.

⁵¹⁷ Lonie 1, paragraph 134.

⁵¹⁸ Hoon 2, paragraph 7.13.

⁵¹⁹ Lonie 1, paragraphs 91–100.

1c CMA PR19 precedent

6.79 HAL also submitted (see paragraph 6.55(c)) that the CMA PR19 Final Report⁵²⁰ indicates that the ‘established approach’ is more robust than the application of assumptions. Flint, on behalf of the CAA, noted that it did not see the CMA PR19 Final Report decision in such clear terms. It submitted that the CMA had decided that, in setting a beta for the water sector, and using comparators from the water sector, the difference between COVID-19- affected data and non-COVID-19 data was insufficiently significant to justify a reweighting approach equivalent to Flint’s.⁵²¹

6.80 We first reproduce the quote from the CMA PR19 Final Report submitted by HAL to support its position.⁵²²

We recognize that beta may change over time (...) we consider the most robust approach to be to use the available beta evidence that we have from historic movements in stock prices, rather than to make speculative adjustments to reflect how beta may change in the future.

6.81 We then show the quote from the CMA PR19 Final Report that Flint (on behalf of the CAA) submitted in support of the CAA’s position (noting that this relates to the water sector and not specifically to HAL nor aviation more broadly).⁵²³

The inclusion of the 10 months from March 2020 to December 2020, covering the period of the COVID-19 pandemic, reduces the spot, 1-year and 2-year rolling average beta estimates materially in comparison with the various estimates to February 2020. Similarly, we observe that, for the period to December 2020, the spot, 1- and 2-year rolling average beta estimates were materially lower than the 5-year average. While we consider that the pandemic represents a systematic event which should not be excluded from our estimates, we also recognise that this type of economic crisis is relatively rare and that it is likely to be over-weighted in our range of beta estimates, which cover the last 2-, 5- and 10-year periods. Therefore, we have placed less weight on the lower estimates from the dataset to December 2020.

6.82 What this shows is that, although the CMA applied the more ‘standard’ methodology in the CMA Final Report on the PR19 Redetermination,⁵²⁴ it placed lower weight on estimates from the pandemic period. Our view is that this is

⁵²⁰ Of the CMA’s redetermination of the PR19 price control of four water companies.

⁵²¹ Lonie 1, paragraph 111.

⁵²² [HAL NoA](#), paragraph 175.

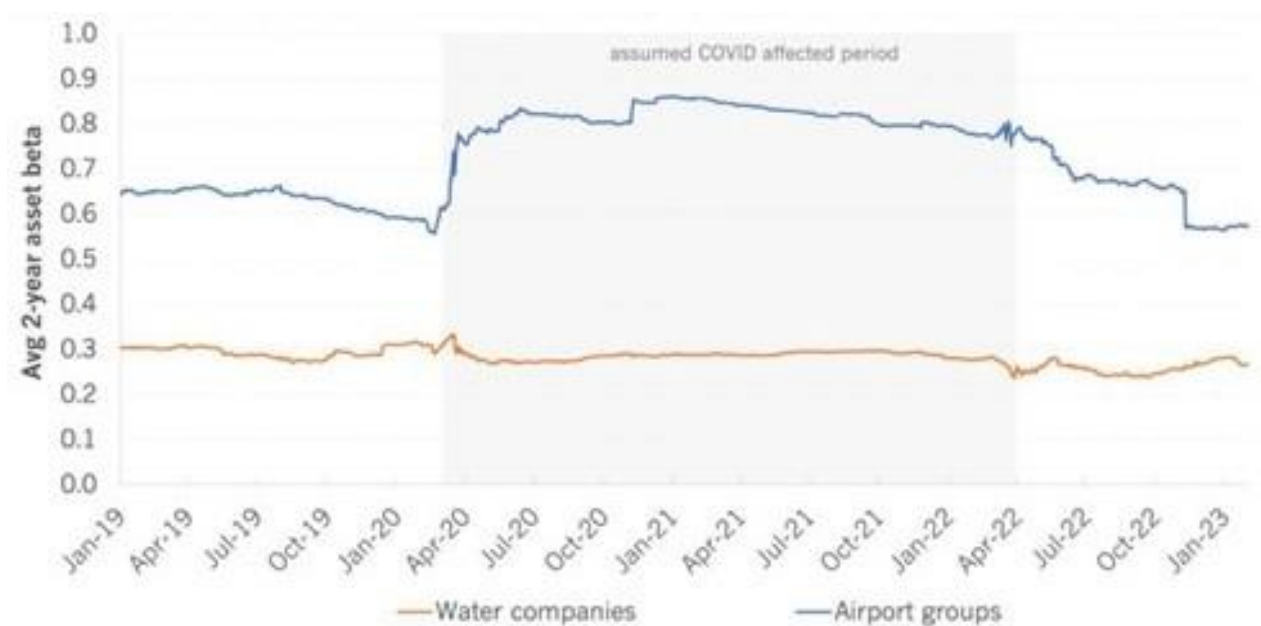
⁵²³ Lonie 1, paragraph 115.

⁵²⁴ CMA [Final Report PR19 Redetermination](#).

consistent with the general observation that past regulatory practice is not mechanistic and involves a critical evaluation of whether historical beta trends are representative of future risks.

6.83 Further, while the inclusion of COVID-19 data is described as having a ‘material’ impact on estimates within the water sector in the quote above, we note that the impact of the pandemic on betas of water companies was of a different scale to the airport sector. A comparison of the two sectors (as demonstrated in Figure 6.1 below, which replicates analysis undertaken by Flint) demonstrates that the impact of the pandemic on water betas was relatively small as compared to airport groups.⁵²⁵ Accordingly, we also make the judgement that the precedent from the water sector is not determinative of the appropriate approach for H7. This similarly applies to HAL’s proposed comparison to Ofwat’s proposed methodology for the next set of water price controls (**PR24**).

Figure 6.1: Flint’s comparison of 2-year rolling asset beta average – water companies versus airport groups



Note: The average beta includes the two-year daily asset beta of Severn Trent and United Utilities for Water companies, and AENA, ADP, Fraport and Zurich for airport groups.

The original source was an analysis by Flint of Thomson Reuters data as of 28 February 2023.

Source: Lonie 1, Craig Lonie Expert Report, Flint Global Limited, May 2023, Figure 7.

6.84 Drawing the above points together, our view is that while regulatory past practice can provide a useful indicator of sensible approaches to take to estimating the asset beta, the CAA was not wrong in departing from past practice (even as recent as PR19) to the extent it did so, on the basis of the actual evidence before it at that time. We agree with the CAA’s position that the interpretation of the COVID-19 evidence was challenging,⁵²⁶ and that it was not bound to follow a particular

⁵²⁵ Lonie 1, Figure 7.

⁵²⁶ Lonie 1, page 21.

approach in the face of evidence that such an approach will fail to take appropriate account of relevant available information.⁵²⁷ It cannot, in our judgement, be said that HAL's proposed approach would clearly have been superior to that adopted by the CAA in the light of all the relevant circumstances. Accordingly, the CAA did not err in the exercise of its discretion in adopting the approach it did to asset beta.

2. 'Pure-discretion' argument

Overall approach

- 6.85 HAL submitted that the CAA substituted evidence-based decision making with pure discretion and was accordingly wrong in law. That, however, is not our assessment. Rather, we find that, in forming its assessment of the asset beta, the CAA applied its expert regulatory judgement to an analysis of market data. That is, as set out at paragraphs 6.13 to 6.30 above, the CAA reviewed a broad range of datasets in making its assessment, and while it recognises that its approach results in the CAA exercising its judgement 'perhaps to a greater extent than is usually the case',⁵²⁸ we do not consider that this amounts to the CAA having engaged in an exercise of 'pure discretion' nor that it was wrong in law on that basis.
- 6.86 As set out at paragraph 6.55 above, HAL also submitted that the CAA approach effectively substitutes evidence from a wide range of market participants and is therefore not 'market-based'. The CAA responded that it sees no reason why an unweighted regression provides a better representation of market evidence or investor views than a weighted regression. The CAA further stated that investors can and do apply their own views in terms of which periods are relevant to assessing future risk and which are not.⁵²⁹
- 6.87 Contrary to HAL's submission, our view is that the CAA's approach remained evidence-based. While at any point in time a stock's share price is expected to reflect the market's latest expectations of future cash flows and returns, assuming markets are efficient, it does not follow that betas based on historical data are necessarily the most appropriate guide to the future assessment of risk.
- 6.88 More broadly, we recognise that beta estimation requires that a number of different assumptions be made to determine an appropriate estimate. In this case, the CAA relied on data from prior to the pandemic period, made an adjustment to reflect the impact of the pandemic, and then made a further adjustment to reflect a broader change to the price control mechanism. We discuss the specifics of each of these adjustments below but for now it suffices to state that, in our view, the

⁵²⁷ Lonie 1, paragraph 103.

⁵²⁸ Hoon 2, paragraph 7.4.

⁵²⁹ Hoon 2, paragraph 20.11.

CAA was not wrong to take this approach in principle, particularly given the highly unusual circumstances it faced during this price control. Its assessment of the evidence and consideration of relevant circumstances was an approach that had reasoned foundations. As such it was within the range of approaches that it was open to the CAA as a regulatory decision-maker to adopt. On this basis, we do not consider that it can be said that the CAA erred in law in its overall approach to setting the asset beta.

‘Outdated data’ and ‘impact of the pandemic’ arguments

- 6.89 HAL submitted that the CAA wrongly relied upon outdated pre-pandemic baseline data (paragraph 6.56(a) above). We note that the Airlines, in their appeals, made similar submissions (see paragraph 6.95 below). We address these arguments together at paragraphs 6.111 to 6.117.
- 6.90 HAL also submitted that the CAA’s assumption of the likely frequency and duration of future pandemic-like events, used for the probability re-weighting of observed betas, were necessarily arbitrary (see paragraph 6.56(b) above). We address these arguments at paragraphs 6.132 to 6.137 (‘length and frequency of future pandemics’).
- 6.91 HAL further submitted the CAA implicitly assumed that all of the increase in the observed betas over pandemic period was due to the immediate impact of COVID-19 pandemic, rather than other matters (paragraph 6.56(c) above). We note that the Airlines, in their appeals, have also submitted that the CAA erred in the setting of its post-pandemic adjustment. We first set out the Airlines’ submissions before addressing HAL’s argument at paragraphs 6.118 to 6.119 and 6.128 to 6.131 below (‘increase in comparator airport betas’).

3. ‘Impact on regulatory risk’ argument

- 6.92 We next turn to HAL’s submission, as set out at paragraph 6.57, that the CAA’s approach increases perceived regulatory risk, which will increase the cost of financing HAL in future and risks diminishing investor confidence. Our view is that, in undertaking its three-stage process to setting the asset beta for the H7 price control, the CAA had regard to the evidence before it and made adjustments for the benefit of accurately estimating a forward-looking asset beta. While this differs from the ‘standard’ regulatory approach, we recognise that, in making its assessment, the CAA has maintained an approach which has regard to historical data, and its adjustments were based on its reasoned assessment of how to weight data to reflect forward-looking risk (taking account of the exceptional circumstances of the pandemic that had occurred and the level of risk of such circumstances in future). On this basis, our view is that the CAA has not introduced material regulatory uncertainty into the process such that its approach was wrong. Rather, it followed a reasoned process which it considered allowed for

an accurate measure of the asset beta estimate in the context of unusual circumstances. This does not point to either an increase in the cost of financing HAL in future, or to the diminishing of investor confidence, nor to the CAA being wrong on that account.

- 6.93 We observe that the CAA's focus in its Final Proposals (as confirmed in its Final Decision) was on determining an appropriate asset beta for the H7 price control period in an exceptional set of circumstances. The CAA judged its approach (not wrongly in our view) to be the right one in those circumstances, taking account of its duty to act in a way that it considered would further the interests of current and future consumers. Insofar as it was an approach that sought accordingly, on the basis of a weighted assessment of the evidence, to reflect risk in relevant circumstances, it was an approach that can be applied consistently and predictably. It was on that basis, and on the basis of our finding that it was an approach open to the CAA to take, not wrong in law.

Conclusion

- 6.94 For the reasons given above, we find that the CAA did not err in respect of the pre- and post-pandemic asset beta (stages 1 and 2 of the CAA's asset beta assessment). We determine that the CAA was not wrong in law or in the exercise of a discretion in these regards.

Airlines' appeals on stage 1 and stage 2

The Airlines' submissions

Stage 1 – reliance on more up to date, pre-pandemic data

- 6.95 The Airlines submitted that the CAA erred because it used unreliable, outdated data. In more detail:
- (a) The Q6 data relied on by the CAA was for a period up to 2013;
 - (b) The CAA could have relied upon up-to-date data from January 2020 (including the comparator group considered by the Airlines) but it did not;
 - (c) The up-to-date data shows the asset beta values were 0.055-0.065 lower than the corresponding values at the time of the Q6 determination; and
 - (d) The CAA therefore over-estimated HAL's asset beta by 0.055-0.065 and it should have been set at 0.44.⁵³⁰

⁵³⁰ [VAA NoA](#), paragraphs 5.36–5.37, [Delta NoA](#), paragraphs 5.38–5.39, [BA NoA](#), paragraphs 5.7.6 and 5.7.9.

Stage 2 – pandemic effects

6.96 The Airlines submitted that the CAA was wrong because it miscalculated the impact of the pandemic on comparator airports for three main reasons.

‘Risk differential between HAL and comparator airports’ argument

6.97 The Airlines submitted that the CAA wrongly made an adjustment to account for a change in HAL’s risk compared with comparator airports:

- (a) The CAA should have analysed whether there had been a relaxation in HAL’s capacity constraints since Q6 relative to comparator airports. It failed to do so, just assuming that the pandemic neutralised the effect of the capacity constraint on HAL’s beta relative to comparators’ betas.
- (b) The evidence before the CAA indicated that HAL was likely to continue to benefit from excess demand, which would insulate it from risks owing to passenger traffic volatility, relative to comparator airports:
 - (i) The CAA’s forecasts of HAL’s traffic volumes for 2023 were at virtually the same level as the CAA had forecast in Q6 for 2018/19 at which time it held that HAL was capacity constrained;
 - (ii) for 2024 onwards the CAA’s passenger forecasts were at least 97.5% of HAL’s 2019 peak passenger numbers; and
 - (iii) the rationale for treating HAL as having lower volatility than comparator airports therefore continued to apply.⁵³¹

Impact of the pandemic on comparator airports

6.98 The Airlines submitted that the CAA erred in calculating the impact of the pandemic on comparator airports. The Airlines’ submissions concerned two issues: (i) the econometric estimation method; and (ii) the impact of gearing.

Econometric estimation method

6.99 The Airlines submitted that the CAA used the wrong econometric estimation method:

- (a) The CAA wrongly relied on a weighted least squares (**WLS**) estimator to address the structural break in the share price time series caused by the

⁵³¹ [BA NoA](#), paragraph 5.7.8, [Delta NoA](#), paragraphs 5.43–5.45, [VAA NoA](#), paragraphs 5.41–5.43.

pandemic. This was a departure from the standard econometric practice, for which there was no good reason.

- (b) The CAA ought to have used a 'slope dummy' to address the structural break or through separate regression models for the two periods, in line with the standard practice.⁵³²

6.100 In response to our Provisional Determination, the Airlines submitted further evidence in support of their argument that the betas for the pandemic and non-pandemic period were structurally different. The Airlines told us that Flint's approach of using a single pooled dataset (with weights applied to the data which are not related to actual market volatility) is not good practice when there 'are clearly two structurally different periods'. The Airlines stated that pooling data periods in these circumstances will give statistically less efficient (ie less accurate) estimates.⁵³³

Impact of gearing

- 6.101 The Airlines submitted that the CAA erred by combining pandemic and non-pandemic periods when calculating HAL's asset beta. This error arose because:
- (a) the CAA examined equity betas of comparator airports across the pandemic and non-pandemic periods and attributed the increase in equity beta that was found to the impact of the pandemic;
 - (b) the CAA failed to take account of the fact that the debt gearing of most airports increased (on average 8%) during the pandemic, and this change in gearing accounted for roughly half of the increase in the comparator airports' equity betas calculated by the CAA; and
 - (c) if the CAA had instead calculated equity betas separately for the pandemic and non-pandemic periods, it would have corrected for this change in gearing and the correct adjustment to the asset beta would have been smaller.⁵³⁴

CAA's response to the Airlines' submissions on stage 1 and stage 2

Stage 1 – reliance on more up to date, pre-pandemic data

6.102 The CAA submitted that the Airlines' estimates of the pre-pandemic asset beta for HAL represented a subset of the evidence considered by the CAA and ignored other evidence that pointed to a higher value. The CAA submitted that once this

⁵³² [BA NoA](#), paragraph 5.7.11, [Delta NoA](#), paragraph 5.48, [VAA NoA](#), paragraphs 5.45–5.46.

⁵³³ Airlines Response to PD, paragraph 3.15.

⁵³⁴ [BA NoA](#), paragraphs 5.7.10–5.7.14, [Delta NoA](#), paragraphs 5.49–5.54, [VAA NoA](#), paragraphs 5.47–5.52.

evidence was taken into account, the CAA's estimate was reasonable in the round.⁵³⁵

Stage 2 – pandemic effects

- 6.103 The CAA submitted that it was reasonable for the CAA to have assumed that Heathrow would exhibit a similar level of excess demand as comparator airports in H7, even if it reached its capacity constraint within the H7 period, and that therefore excess demand would no longer drive a wedge between comparator airports and HAL in H7.⁵³⁶
- 6.104 The CAA submitted that it was reasonable for it to have used a WLS estimate, noting that neither the Airlines nor their expert witness, Mr Holt, actually based their asset beta estimate using slope dummy variables, but on their previous approach of separate beta estimates for pandemic and non-pandemic periods. The CAA submitted that the Airlines' preferred method also failed to reflect the higher market and share price volatility observed during the pandemic period, and, as such, resulted in a biased and inefficient estimator for the H7 asset beta.^{537, 538}
- 6.105 The CAA submitted that changes in gearing at comparator airports were accounted for when estimating the asset beta through the process of 'unlevering' comparator equity betas.⁵³⁹

Intervener's submissions

- 6.106 HAL submitted it had explained in its NoA (Ground 2) that CAA's overall approach to estimating asset beta was flawed and should be rejected, in which case the three stages addressed by the Airline Appellants would not have occurred. Notwithstanding that, HAL submitted that the arguments advanced within the Airlines' Asset Beta subground are also each individually in error.⁵⁴⁰

Stage 1 – reliance on more up to date, pre-pandemic data

- 6.107 HAL submitted that the estimate of 0.44 was neither consistent with the CAA's own estimate of airport asset betas pre-pandemic, nor with HAL's adviser's estimate. It told us that it was not based on up-to-date market information as it

⁵³⁵ [CAA Response](#), paragraph 145.

⁵³⁶ [CAA Response](#), paragraph 153, referring to Hoon 2, paragraph 20.30.

⁵³⁷ [CAA Response](#), paragraph 154.1-154.2.

⁵³⁸ The CAA challenged the admissibility of this point, submitting that it had not been raised by the Airlines during the Initial Proposals or Final Proposals consultations ([CAA Response](#), paragraph 154.3). In our Provisional Determination we set out our provisional view that this point appeared to be akin to a submission or argument rather than a new 'matter' or new piece of 'information or evidence'. Accordingly, our provisional view was that it was not inadmissible under paragraph 23(3) of Schedule 2 to the Act. The CAA did not disagree with this provisional view in its response to our Provisional Determination. We retain that view.

⁵³⁹ [CAA Response](#), paragraph 155

⁵⁴⁰ [HAL, Application for permission to intervene and Notice of Intervention \(HAL Nol\)](#), paragraphs 121-122.

relied on historical differences between market data and CAA assumptions of HAL's asset beta.⁵⁴¹

Stage 2 – pandemic effects

- 6.108 On the risk differential between HAL and comparator airports, HAL submitted that analysis showed that HAL would be expected to face more risk than comparator listed airports, meaning that the CAA was not wrong to adjust HAL's pre-pandemic asset beta upwards. HAL submitted that analyses of HAL's revenue volatility relative to comparator airports during the last two 'major shocks' to airports (the financial crisis and COVID-19) demonstrated that it holds more risk. Further, HAL submitted that an impact of HAL's capacity constraints was that they lead to negatively skewed risk for investors as they limited the potential for upside. HAL submitted that the CAA was therefore right to apply an upwards adjustment to HAL's pre-pandemic asset beta to account for 'the relatively higher level of risk' faced by HAL.⁵⁴²
- 6.109 As noted from paragraph 6.96 above, the Airlines submitted that the CAA's approach to calculating the impact of the pandemic on comparator airports was wrong. In response, HAL submitted that the key point was that the data should not have been weighted at all, as it introduced an 'arbitrary element' into the CAA estimate. HAL noted that the Airlines' proposed alternative weighting was equivalent to the cross-checking method used by the CAA and Flint. HAL submitted that it considered the correct approach to be one which used unweighted market data.⁵⁴³
- 6.110 On the Airlines' submissions on gearing, HAL submitted that the specific manner in which Flint calculated the pandemic adjustment meant that any increase in equity beta due to the increase in gearing would have been offset through the calculation. It told us that the CAA's pandemic adjustment therefore isolated the underlying change in asset beta specifically attributable to the pandemic, and no further accounting for gearing was required. HAL submitted that the Airlines' argument on this point was therefore wrong.⁵⁴⁴

⁵⁴¹ [HAL NoI](#), paragraph 124.

⁵⁴² [HAL NoI](#), paragraph 130.

⁵⁴³ [HAL NoI](#), paragraph 132.

⁵⁴⁴ [HAL NoI](#), paragraph 133–134.

Our assessment – Airlines’ appeals and remaining HAL grounds

The pre-pandemic beta (stage 1)

‘Outdated pre-pandemic data’ argument

- 6.111 The Airlines submitted that the CAA was wrong in its stage 1 (pre-pandemic beta) assessment to rely on the Q6 asset beta range to inform its assessment of the asset beta for H7, rather than more recent pre-pandemic asset beta estimates (which the Airlines submitted were lower). In contrast, HAL contended that, if the CAA’s 3-stage framework were to be adopted, the appropriate pre-pandemic beta would be 0.6 rather than 0.5. In doing so, HAL cited the CMA’s analysis for NATS En Route plc (**NERL**) in which the overall beta range was 0.52 to 0.62, as well as HAL’s closest comparator, AENA, which had an asset beta range of 0.55 to 0.65.
- 6.112 In assessing whether the CAA made an error in determining the pre-pandemic asset beta, we have first sought to understand the CAA’s approach to determining the pre-pandemic asset beta and the evidence that it reviewed in determining its estimate.
- 6.113 The CAA explained that it used the Q6 asset beta as part of its assessment of the pre-pandemic asset beta but that it had also considered fresh analysis which took into account data from the intervening period from 2013 to 2020.⁵⁴⁵ The CAA told us that it considered the analysis undertaken by Flint. Flint recommended a baseline beta range of 0.50-0.60 based on beta estimates for AENA, ADP and Fraport. This range was first recommended in Flint’s August 2021 report⁵⁴⁶ and then later re-affirmed in its May 2022 report.⁵⁴⁷
- 6.114 Table 6.2 below sets out the different pre-pandemic spot asset beta estimates for HAL’s main comparator airport operators, put forward by AlixPartners (on behalf of the Airlines) and Flint (prepared for the CAA). Table 6.3 shows the CAA’s estimates for HAL in its final Q6 and Q7 decisions.

Table 6.2: Pre-pandemic asset beta estimates for comparators

	Q7 Alix Partners	Q7 Flint (August 2021)	Q7 Flint (May 2022)
Fraport	0.48	0.51	0.48
ADP	0.53	0.54	0.54
AENA	0.48	0.60	0.52

Source: ‘AlixPartners WACC Report, 17 April 2023, Table 3; Flint, [Support to the Civil Aviation Authority: Estimating Heathrow’s beta post-COVID-19](#), August 2021, Table 8; and Flint, [Support to the Civil Aviation Authority: H7 Updated Beta Assessment](#), May 2022, Table 3.

⁵⁴⁵ [CAA Response](#), paragraph 143; and Hoon 2, paragraph 19.2.

⁵⁴⁶ Flint, [Support to the Civil Aviation Authority: Estimating Heathrow’s beta post-COVID-19](#), August 2021.

⁵⁴⁷ Flint, [Support to the Civil Aviation Authority: H7 Updated Beta Assessment](#), May 2022, Table 3 (AENA, ADP and Fraport).

Table 6.3: CAA asset beta estimates

	Q6 CAA	Q7 (pre-pandemic) CAA
HAL	0.5	0.5

Source: CAA, [Final Proposals, Section 3](#) CAP2365D, Table 9.2 and paragraph 9.62.

- 6.115 We note that Flint made changes to its estimates between its August 2021 and May 2022 reports. The spot estimates in the Flint May 2022 report are lower than those in its August 2021 report. This is partly due to the extension of the dataset further back in time,⁵⁴⁸ when betas were generally lower.⁵⁴⁹
- 6.116 Despite the reduction in spot estimates, Flint’s May 2022 report retained the range of 0.50 to 0.60 as its recommended baseline range. This is because Flint noted that there was a trend of increasing betas pre-pandemic and therefore it placed greater weight on more recent data over older data, which implied placing greater weight on its original estimates in the April 2021 report which were based on a slightly shorter dataset.⁵⁵⁰ Further, in recommending a range for the baseline beta, Flint did not rely exclusively on spot betas shown in Table 6.2 above, but also considered 2-year averages and 5-year averages of 2-year and 5-year daily betas. Our view is that this type of reasoning and judgement when evaluating beta evidence is relatively standard and does not indicate an error.
- 6.117 We note that the CAA’s pre-pandemic estimate of asset beta of 0.5 is within the ranges put forward by the Airlines (0.48 to 0.52) and Flint (0.5 to 0.6). Judgement is required to select a point estimate from within each of these ranges, and our view is that, taking account of the approach Flint adopted as described above, the CAA was not wrong either in law or in the exercise of its discretion to use 0.5 as the estimate of the pre-pandemic asset beta. We note that it is close to the average of the ‘Q7’ AlixPartners analysis and the Flint May 2022 spot estimates. The CAA’s decision was not wrong on account of being based on outdated data, nor because there was a clearly superior alternative approach the CAA should have adopted instead.

‘Disregard of non-pandemic factors’ argument

- 6.118 We next consider HAL’s allegation that the CAA was wrong in assuming that HAL’s systematic risk exposure did not change between Q5 and the start of the pandemic period. HAL submitted that a number of factors have led to an increase in the systematic risk that it faces, including: (i) the breakup of BAA; (ii) the increasing impact of low-cost carriers; and (iii) the UK’s withdrawal from the EU.⁵⁵¹ As set out above, the CAA told us that it did take these factors into account in making its assessment. It told us that changes in structural factors are only

⁵⁴⁸ Flint, [Support to the Civil Aviation Authority: H7 Updated Beta Assessment](#), May 2022, page 21.

⁵⁴⁹ Flint, [Support to the Civil Aviation Authority: H7 Updated Beta Assessment](#), May 2022.

⁵⁵⁰ Lonie 1, paragraph 162–163.

⁵⁵¹ [HAL NoA](#), paragraph 171; and HAL, First Witness Statement from Michael King (King 1), 17 April 2023, paragraph 62.

relevant to the extent that they drive differences in systematic risk exposure compared with the listed comparator airports on which the CAA's beta estimates are based – otherwise, these would be captured in the CAA's beta estimates. The CAA submitted that it came to the view that they did not have a material impact of HAL's exposure to systematic risk. Therefore, in the CAA's view, it was reasonable to assume that HAL's systematic risk had remained unchanged between Q5 and the start of the pandemic.⁵⁵² In particular, the CAA noted:

- (a) First, the breakup of BAA is not likely to have affected HAL's systematic risk exposure. While the breakup of BAA is likely to have improved competition within the airport market in the south-east of England as a whole, the CAA submitted that it had seen no evidence to suggest that competition intensified at Heathrow airport specifically prior to the pandemic. By way of an example, the CAA submitted that the continued existence of excess demand until the beginning of 2020 is likely to have limited the extent to which competition could have emerged. Further, the CAA submitted that even if one was to accept that competition has intensified at Heathrow airport, this does not imply that HAL's systematic risk exposure had increased. The CAA explained that systematic risk exposure is, by its nature, market wide, whereas competition is fundamentally idiosyncratic in nature.⁵⁵³
- (b) Second, that there is no clear reason why the increase in the number and traffic share of low-cost carriers in the broader UK market should materially affect HAL's systematic risk exposure since HAL exhibited excess demand that would have insulated it from any resulting fluctuations in demand. Moreover, HAL's declining market share is unlikely to have had any bearing on its systematic risk exposure for the same reason.⁵⁵⁴
- (c) Third, that the UK left the European Union on 31 January 2020, shortly before the pandemic. Excess demand persisted at the airport until the onset of the pandemic, and HAL's financial profile appeared to be healthy up to 2019.⁵⁵⁵

6.119 Our view is that the factors above (ie break-up of BAA, advent of low cost carriers, exit from the EU) do not, for the reasons the CAA advanced, provide a convincing basis to expect that HAL's exposure to systematic risk would have increased between Q5 and the start of the pandemic. The CAA was not wrong to take that view. Moreover, in considering whether the CAA made an error in setting the pre-pandemic asset beta, we note that it relied on a combination of data points to make its assessment and took into account data up to the end of February 2020, so HAL's submissions that the CAA's assessment was based on 'severely out of

⁵⁵² Hoon 2, paragraph 19.5.

⁵⁵³ Hoon 2, paragraphs 18.13–18.14.

⁵⁵⁴ Hoon 2, paragraph 19.6.

⁵⁵⁵ Hoon 2, paragraph 19.6.

date' evidence and that the CAA's assumptions were 'clearly flawed'⁵⁵⁶ are not made out. On this basis, our view is that the CAA did not ignore materially relevant information in determining its estimate. Further, while the CAA's 0.50 estimate is in line with the Q6 asset beta estimate (also of 0.5), it is also consistent with the estimates put forward by the Airlines and Flint which took into consideration more updated data. Accordingly, we find that, having considered relevant information and selected a point estimate within the relevant range, the CAA did not make an error in determining the pre-pandemic asset beta estimate.

Pandemic effects (stage 2)

- 6.120 Having estimated a pre-pandemic asset beta, the CAA made two key adjustments. First, it applied an upward adjustment to the pre-pandemic asset beta to reach a baseline beta. Second, it made adjustments based on the impact of the pandemic on comparator airports.

Risk differential between HAL and comparator airports

- 6.121 Having estimated a pre-pandemic beta, the CAA applied an upward adjustment to arrive at a baseline range of 0.50 to 0.60 to reflect the view that on a forward-looking basis the relative risk between HAL and comparator airports had narrowed. The CAA considered that HAL had benefitted from excess demand prior to the pandemic, as a result of being capacity constrained.⁵⁵⁷ This meant that HAL was less exposed to fluctuations in unconstrained demand,⁵⁵⁸ and was therefore deemed to have lower systematic risk than comparators. However, the CAA found that HAL's risk exposure compared with comparator airports remained elevated in the post-pandemic period.⁵⁵⁹ The CAA defined this as a narrowing of the risk differential between HAL and its comparators, hence the CAA decided to apply an upwards adjustment to the asset beta.
- 6.122 The Airlines submitted that this adjustment was wrong because: (i) the CAA failed to conduct analysis on the relaxation of capacity constraints at Heathrow as compared to competitors; (ii) the CAA used passenger numbers consistent with pre-pandemic figures; and (iii) the CAA used outdated data.
- 6.123 The CAA reviewed comparator data and made an assessment of HAL's capacity constraints, noting its view of a narrowing of the differential in excess demand between HAL and its comparators. The CAA noted that it did not set out

⁵⁵⁶ [HAL NoA](#), paragraphs 167 and 171.

⁵⁵⁷ Hoon 2, paragraph 7.12.

⁵⁵⁸ Hoon 2, paragraph 7.12.

⁵⁵⁹ [Final Proposals, Section 3](#), paragraph 9.11.

quantitative evidence but referred to prima facie examples which it considered indicated a closing of the gap.⁵⁶⁰ The CAA's assessment included the following.

- (a) It considered that it is unlikely that HAL will exhibit materially greater excess demand in H7 than comparator airports. It noted its view that neither HAL nor the airports in its comparator set are likely to fully reach their capacity constraints in the near future.
- (b) A review of analysis from CEPA which suggested that HAL is less exposed to risk due to its previously higher proportions of long-haul traffic and lower proportion of low-cost-carrier traffic. However, CEPA submitted that HAL had exhibited a greater decline in traffic during the pandemic than most comparator airports, in part because long-haul traffic at HAL had been more affected by the pandemic than short-haul and low-cost-carrier traffic;
- (c) The CAA also noted CEPA's suggestion that HAL's traffic volatility has been lower than comparator airports. It noted that this was not the case during the pandemic, and there was no evidence to suggest it would be the case in H7, particularly given that there would be limited capacity constraints for a substantial proportion of that period; and
- (d) CEPA suggested that other airports, on account of various investment projects taking place at them, had greater growth and development risk than several of the comparator airports. The CAA noted that this is unlikely to be the case in H7, as capex at most airports was significantly scaled back due to the pandemic.⁵⁶¹

6.124 The CAA took the view that the evidence suggested that the pandemic effectively eliminated the risk differential that previously existed between HAL and comparator airports. The CAA noted that it considered HAL's pre-pandemic asset beta to have been around 0.50, and that Flint estimated the pre-pandemic asset beta for comparator airports to be 0.50 to 0.60. The CAA therefore judged that the pandemic increased HAL's asset beta by up to 0.1, due to this change in relative risk. It noted that this is separate from and cumulative with the impact of the pandemic on comparator asset betas of 0.02 to 0.11 as estimated by Flint (and as discussed in further detail from paragraph 6.126 below).⁵⁶²

6.125 In our view, this exercise entailed a significant element of judgement by the CAA as expert regulator (ie comparisons between HAL and its comparators). On the basis of the CAA's reasoned view and a lack of substantive evidence from the Airlines pointing to the CAA being wrong in its assessment of excess demand, we have not identified material errors of fact on which the CAA's assessment was

⁵⁶⁰ Hoon 2, paragraph 20.31.

⁵⁶¹ [Final Proposals, Section 3](#), paragraph 9.80.

⁵⁶² [Final Proposals, Section 3](#), paragraph 9.81.

based nor an alternative clearly superior approach the CAA should have adopted. We therefore conclude that the CAA was not wrong in reaching its conclusion on the appropriate adjustment to apply.

Impact on comparator airports

6.126 From its baseline range of 0.50 to 0.60, the CAA applied an adjustment of 0.02 at the low end and 0.11 at the high end to reflect the impact of the pandemic on comparator airports' asset betas. HAL and the Airlines both alleged errors in relation to the CAA's adjustment, which we group under the following sub-headings:

- (a) Increase in comparator airport betas;
- (b) Methodological approach – length and frequency of future pandemics;
- (c) Methodological approach – econometric estimation method; and
- (d) Methodological approach – impact of gearing.

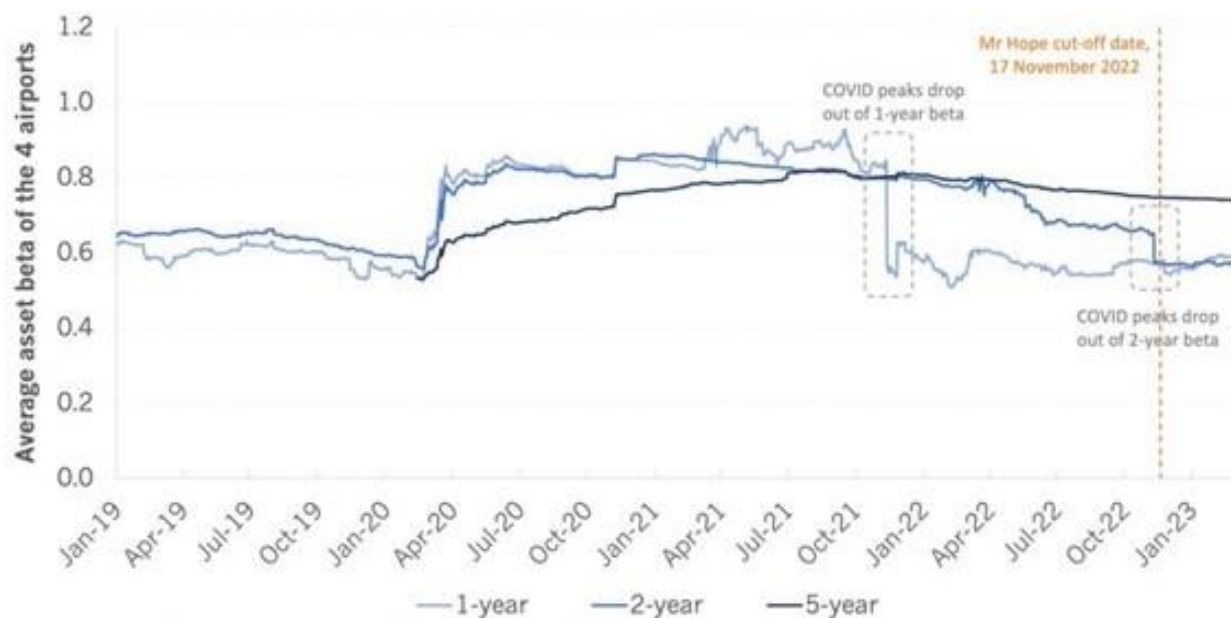
6.127 We consider each of these points in turn.

Increase in comparator airport betas

6.128 HAL has alleged (as set out at paragraph 6.56(c)) that the CAA was wrong to conclude that the pandemic accounted for substantially all of the increases in comparator airport asset betas observed during the pandemic period. HAL stated that the CAA's conclusion demonstrated that the CAA did not adequately consider the impact of other events (including, for example, the Russian invasion of Ukraine) which drove an increase in asset betas.

6.129 In response, the CAA submitted that it did review the impact of events other than COVID-19 and their impact on comparator asset betas, but concluded that it did not expect this to have a significant effect on beta estimates beyond 2021. Further, the CAA submitted that recent data shows a clear reversion of comparator airport asset betas towards their pre-pandemic levels following the end of the pandemic, suggesting that the pandemic had been the dominant driver of elevated asset betas previously. The CAA presented the chart as set out in Figure 6.2 below as evidence.

Figure 6.2: Average betas for the four airport comparator set (AENA, ADP, Fraport and Zurich) over different estimation windows as presented by Flint.



Note: the 4 airports comparator set includes AENA, ADP, Fraport and Zurich.
 The original source was an analysis by Flint of Thomson Reuters data as of 28 February 2023.
 Source: Lonie 1, Craig Lonie Expert Report, Flint Global Limited, May 2023, Figure 8

6.130 Figure 6.2 showed Flint’s analysis of comparator betas. The supporting narrative submitted that the elevated betas resulting from COVID-19, and the more recent reversion of short (for example one- or two-year) window beta observations, are not only driven by the inclusion of new, recent data, but equally by the exclusion of historical data from earlier periods.⁵⁶³ Referring to the November 2020 data which was ‘heavily affected by news of successful vaccine trials’, Flint noted that when this data drops out of the backward-looking beta calculations (for example in November 2021 for the one-year data and November 2022 for the two-year data), there is a marked drop in the observed values.⁵⁶⁴ Further, it noted that the five-year window is yet to see such a drop due to its longer-term timeframe.⁵⁶⁵

6.131 In making our assessment, we have considered first whether the CAA failed to take into account relevant information, and second whether it drew flawed conclusions from the evidence it did consider. As to the first point, we note that the CAA did consider events other than the COVID-19 pandemic in making its assessment of the asset beta but concluded that their impact was not material in comparison to that of the pandemic. As to the second, we have considered the CAA’s conclusions on this matter in the context of the data put to us. We note that the COVID-19 pandemic had a significant upwards effect on asset betas and caused systematic shocks across the market, as demonstrated by the increase in asset betas in early 2020. However, our view is that the data also shows that asset

⁵⁶³ Lonie 1, paragraph 127.

⁵⁶⁴ Lonie 1, paragraph 127.

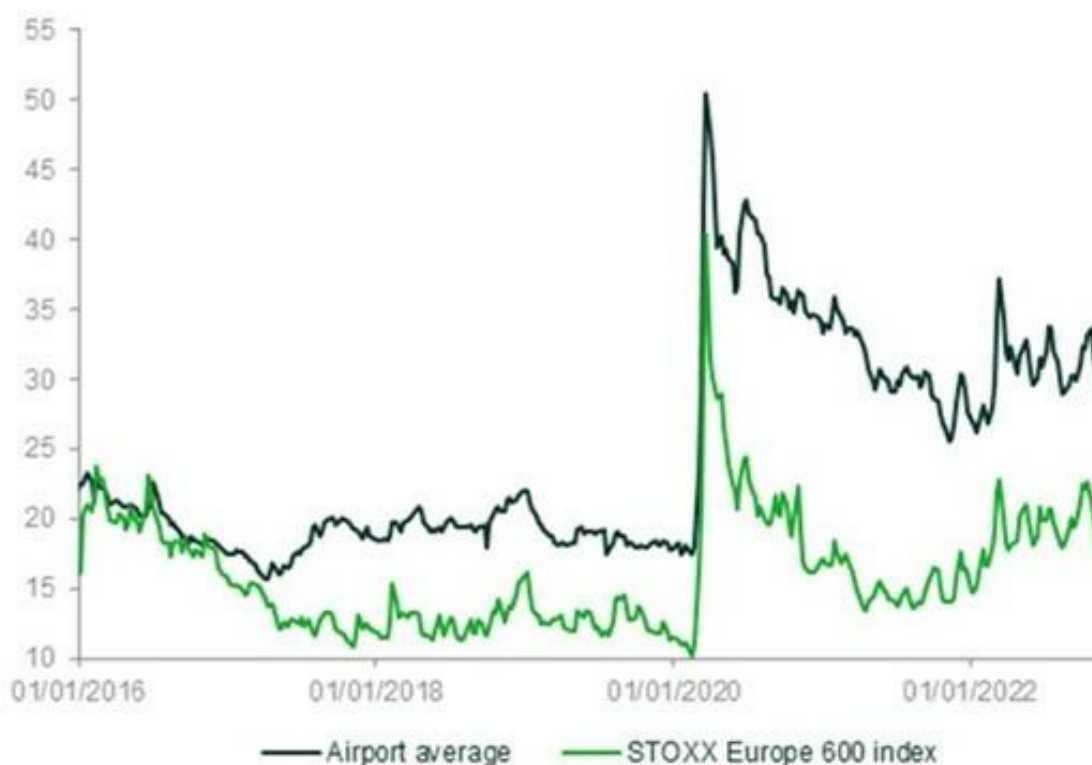
⁵⁶⁵ Lonie 1, paragraph 128.

betas are falling to levels in line with those seen prior to the pandemic. For example, this is evident from a comparison of the one- and two-year datasets in January 2020 and January 2023. Accordingly, HAL’s argument that CAA’s assumptions were ‘clearly flawed’ is not made out.⁵⁶⁶ On this basis, our view is that the CAA was not wrong in determining that events other than the COVID-19 pandemic have not been shown to have had a material impact on comparator asset betas.

Length and frequency of future pandemics

- 6.132 As discussed in the description of the CAA’s approach to setting the asset beta, in determining the probability-weighted pandemic beta, the CAA relied on assumptions around the frequency and duration of pandemics.
- 6.133 As noted at paragraph 6.56(b) above, HAL argued that the CAA’s assumptions around when the COVID-19 pandemic ended were wrong. In support of its submissions, HAL (via Oxera) presented volatility analysis, as set out in Figure 6.3 and Figure 6.4 below.

Figure 6.3: Oxera’s analysis of implied volatilities of the STOXX European 600 index and airport comparators, based on prices of one-year call options

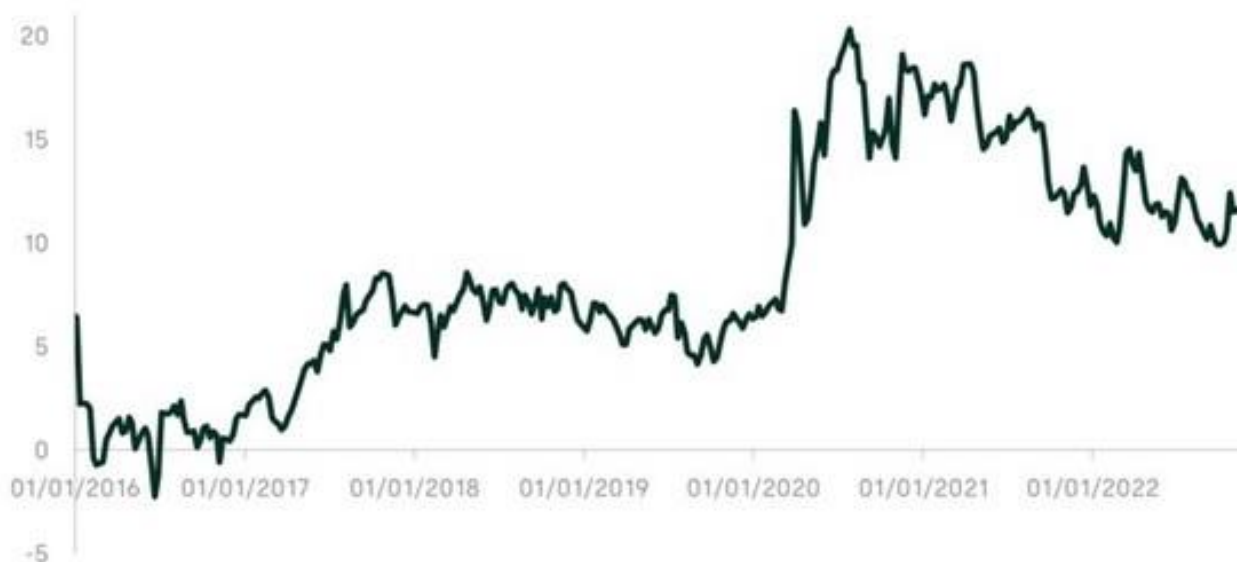


Note: Comparators include ADP, AENA, Fraport and Flughafen Zürich. The cut-off date for the analysis is 17 November 2022. The original source was an analysis by Oxera based on data from Bloomberg.

Source: First Witness Statement of Peter Hope (Hope 1), 17 April 2023; H7 appeal: cost of capital, Oxera, 13 April 2023, Figure 3.3.

⁵⁶⁶ [HAL NoA](#), paragraphs 167 and 171.

Figure 6.4: Oxera’s analysis of the difference between the average airport implied volatilities and the STOXX Europe 600 implied volatilities



Note: The Y-axis indicates the difference between the average implied volatility of four comparator airports (ADP, AENA, Zurich and Fraport) to the implied volatility of the STOXX Europe 600 index. The cut-off date for the analysis is 17 November 2022.

The original source was an analysis by Oxera based on data from Bloomberg (2023).

Source: Hope 1, H7 appeal: cost of capital, Oxera, 13 April 2023, Figure 3.4.

6.134 HAL submitted that Figure 6.3 demonstrated that the implied volatilities on airport equity options remained elevated relative to the implied volatilities from options on the equity market as a whole. It noted that this can be visualised as the difference between the average airport implied volatilities and STOXX Europe 600 implied volatilities since the pandemic started, as set out in Figure 6.4. HAL told us that the increase in the difference between the two volatilities before and after the shock of March 2020 confirmed that airports were still facing relatively more uncertainty than the rest of the market. HAL further submitted that slow recovery in the corporate travel sector and a possible permanent shift in business travel expenditure would result in a permanent change to the betas of aviation businesses.

6.135 In reviewing the evidence put forward by HAL, we observe that there is a difference between a measure of volatility and a measure of beta. Volatility measures the fluctuations in individual stock returns, while a beta analysis considers the variability of individual stock returns relative to a broader stock market index. HAL appears to have tried to control for this in presenting the implied volatility of both airport stocks and the market more broadly (the STOXX Europe index). Noting this limitation of the analysis and the attempt by HAL to control for it, we consider that while option-implied volatility can provide a useful indicator of forward-looking volatility, it is difficult to extrapolate from this evidence the implications for the forward-looking beta. This position was, in our assessment, reflected by the CAA, which noted that it does not see a translation of volatility into beta behaviour, noting that the infrequent nature of trading of such options can

create noise in the results. The CAA noted that the initial volatility assessment has been subsequently shown not to send the signal that it was believed to send at the time of analysis.⁵⁶⁷

- 6.136 Considering the definition of the length and frequency of future pandemics more broadly, we note the CAA's position that the frequency of future pandemics is highly uncertain, and that it had to make assumptions involving a degree of judgement, but that this did not make its decision 'arbitrary'.⁵⁶⁸ Further, it noted that its decision to select March 2022 as the end point of the impact of the pandemic on HAL was not a suggestion that all of the effects of COVID-19 were expected to have ended, rather its assumption concerned the point at which the asset beta for comparator airports no longer appeared to be significantly affected by the pandemic.⁵⁶⁹
- 6.137 We agree with the CAA's position that estimating the length and frequency of future pandemics requires the exercise of regulatory judgement. The CAA based its analysis on a reasoned assessment of the evidence and, while other reasonable conclusions could be reached on when a pandemic may be likely to occur again and the expected timeframe of such a pandemic, there is no evidence of a clearly superior approach that indicates that an alternative conclusion on length and frequency would have been more appropriate. We do not, therefore, find that the CAA was wrong on that account.

Econometric estimation method

- 6.138 AlixPartners (on behalf of the Airlines) submitted that the methodological weakness in the CAA's approach to this issue was the decision by its adviser, Flint, to address the structural break⁵⁷⁰ in the share price time series caused by COVID-19 through a WLS estimator.⁵⁷¹ The Airlines submitted that instead the correct approach would have been the use of a 'slope dummy' for the beta in the pandemic period, or if the model residual variances differ over the non-pandemic and pandemic periods (which, the Airlines submitted, in this case, they do), then through separate regression models for each period. The Airlines submitted that whilst weighting in statistical analysis can be used to make a sample more representative of a population for the purposes of producing descriptive statistics, it is a less precise method for estimating regression coefficients compared to the alternative of including slope dummy variables. Further, the Airlines submitted that combining pandemic and non-pandemic periods into one data series (as in the

⁵⁶⁷ Transcript of Ground B Hearing, 17 July 2023, page 27, line 18 to page 29, line 16.

⁵⁶⁸ [CAA Response](#), paragraph 150.2.

⁵⁶⁹ Hoon 2, paragraph 20.15.

⁵⁷⁰ In econometrics and statistics, a structural break is an observable change over time in the parameters of regression models, which can lead to forecasting errors and unreliability of the model.

⁵⁷¹ 'Cost of capital issues raised by the Heathrow Airport H7 price control': (**AlixPartners WACC Report**) an Expert Report prepared for British Airways, Virgin Atlantic Airways and Delta Air Lines, 17 April 2023, paragraph 53.

case of the CAA's approach) will distort the subsequent calculations of asset beta and so will result in a clear error.⁵⁷²

- 6.139 We make the following observations. First, we understand AlixPartners' argument to mean that in its view the correct approach is to run two separate regressions on COVID-19 and non-COVID-19 data and then take a weighted average of the two betas. While it mentions using slope dummy variables, it then concludes that it would not be appropriate to use this method in the current context.
- 6.140 Second, we note that the approach proposed by the Airlines/AlixPartners was considered by the CAA during the H7 consultation process. Flint presented alternative estimates of the pandemic effect using what it referred to as a 'cross-check' method. This was based on splitting the dataset into COVID-19 and non-COVID-19 periods, estimating a separate beta for the two periods and then estimating a combined beta based on a weighted average of the two betas.⁵⁷³ However, the CAA considered that using OLS on a single pooled dataset was preferable. The CAA noted that beta estimation on a pooled time series of returns is a widely adopted statistical technique and that the cross-check method loses some of the inherent statistical properties of the data used.⁵⁷⁴
- 6.141 Third, we note that the two methods are likely to produce different beta estimates. The Flint May 2022 report includes a simple example to illustrate this.⁵⁷⁵

For two (adjacent) six-month periods with six-month betas of 0.5 and 1, the averaging method would lead to an estimated 1-year beta of 0.75. However, taking an OLS regression of the full 1-year dataset would likely obtain a beta different from this. The 1-year beta could be higher or lower than 0.75 because of the characteristics of the daily data in one of the six-month periods that have greater or lesser influence on the overall OLS beta estimate.

- 6.142 The pooled OLS beta will depend on the exact share price and market behaviour during the one-year period. For example, if the six-month period with the higher beta of 1.0 was a period of higher market volatility and more extreme share price movements than the other six-month period, the observations during the higher volatility period would get a greater weight in OLS estimation by design leading to a higher beta from a pooled OLS regression than the simple average of 0.5.⁵⁷⁶ In response to our Provisional Determination, the Airlines submitted that this example illustrates why the CAA/Flint approach is wrong ie it is not correct to estimate an

⁵⁷² 'AlixPartners WACC Report, 17 April 2023, paragraphs 53–54.

⁵⁷³ Flint, [Support to the Civil Aviation Authority: H7 Updated Beta Assessment](#), May 2022, Appendix 2.

⁵⁷⁴ [Final Proposals, Section 3](#), paragraphs 9.107-9.109.

⁵⁷⁵ Flint, [Support to the Civil Aviation Authority: H7 Updated Beta Assessment](#), May 2022, footnote 24.

⁵⁷⁶ This effect is also clearly illustrated by the AENA example discussed in Lonie 1, paragraphs 223-227.

average beta from two structurally different periods with different levels of beta and market volatility.⁵⁷⁷

- 6.143 In its response to the Airlines' NoAs, Flint (on behalf of the CAA) submitted that it had considered a similar approach to that proposed by the Airlines but that it rejected it on the basis that it captured only the 'scale of the beta' and not the 'scale and strength of the beta relationship experienced during the different periods of [its] two (COVID-19 and non-COVID-19) datasets'.⁵⁷⁸ Flint then explained in some detail what this means, which is to preserve the fact that periods of higher volatility have a greater impact on how investors perceive risk, while the approach proposed by the Airlines does not do this (according to Flint).⁵⁷⁹
- 6.144 In undertaking our assessment of the CAA's approach to this piece of econometric analysis, we first consider the CAA's overarching task. That task is to use historical data to determine an estimate that reflects a forward-looking, balanced view of the future.
- 6.145 Had a major shock like the COVID-19 pandemic not occurred, then a conventional approach to determining the asset beta may have been that proposed by HAL in which regressions are run over different time periods and frequencies.⁵⁸⁰
- 6.146 If periods of higher market volatility coincide with periods of higher betas, the OLS beta using a single 'pooled' data series will produce a higher beta than the averaging method proposed by AlixPartners. Flint provided an example of this using data for AENA. For illustration, if it were assumed that historical data was representative of the relative likelihood of pandemic and non-pandemic events, there would be no need to re-weigh the data and practitioners and regulators would estimate the equity beta using the combined dataset (producing a value of 0.94). Adopting the Airlines' approach and splitting the dataset would produce a lower beta of 0.85.⁵⁸¹
- 6.147 We consider this example to be informative in assessing the CAA's approach. While the underlying beta and stock market behaviour may differ over time, practitioners and regulators will typically estimate a single beta which captures periods of both benign markets and periods of heightened market volatility, without splitting the dataset into multiple periods (ie estimating an equity beta of 0.94 in the example above). In other words, the conventional approach has been to use standard OLS on the pooled dataset.

⁵⁷⁷ Airlines Response to PD, paragraph 3.17.

⁵⁷⁸ Lonie 1, paragraph 210.

⁵⁷⁹ Lonie 1, paragraphs 220-232. The statement about the 'strength of the relationship' does not refer to the statistical confidence interval around the estimate, as suggested by the Airlines Response to PD, paragraph 3.18).

⁵⁸⁰ As set out in further detail in HAL, First Witness Statement of Peter Hope (Hope 1), 17 April 2023.

⁵⁸¹ Lonie 1, paragraph 233-238.

- 6.148 We do not need to take a view on whether OLS beta estimates on pooled data is superior to splitting the dataset in all circumstances. Rather, we are focused on ensuring that the CAA used an appropriate estimate of the forward-looking asset beta based on historical data in this case.
- 6.149 We recognise the Airlines' submission (set out at paragraph 6.100 above) that the betas are structurally different between the COVID-19 and non-COVID-19 periods. However, for the reasoning set out above, this in itself does not indicate that the only appropriate way to estimate a single beta for both periods is to estimate a separate beta for each and then take some form of average of the two. If 'structural breaks' are representative of future risks, then estimating a single beta over the full dataset is a relatively standard, and in our view reasonable and not clearly inferior, approach.⁵⁸²
- 6.150 The novel part of the CAA/Flint approach is the assignment of different weights to the historical datapoints, to reflect its view of the likely probability of such 'structural breaks' in future. In response to our Provisional Determination, the Airlines submitted that Flint's approach would only give acceptable estimates if the weights in its WLS approach were based on the actual volatility in the two periods (which the Airlines say Flint did not do).⁵⁸³ This is based on the Airlines' assumption that the CAA/Flint re-weighting approach is concerned with capturing the differences in statistical confidence intervals in the two periods. As discussed above (at paragraph 6.143), CAA/Flint do not agree with this assumption.
- 6.151 We understand there to be no dispute that an OLS regression, by design, overweighs data points when market volatility is high. However, our view is that this is broadly consistent with the intuition behind the CAPM. The sensitivity of the stock (beta) during a crisis period is likely to be more important than the beta when the market is stable when assessing forward-looking risks and which would be also consistent with investors being risk averse. Therefore, our view is that the CAA was not wrong to adopt an approach which preserves the impact of higher volatility periods on the beta.
- 6.152 In this context, our view is that the CAA/Flint approach (utilising WLS rather than OLS), was not materially different to recent regulatory practice, with the only difference being that the CAA re-weighted pandemic datapoints to capture its view that the likelihood of future pandemics will be lower than observed in the historical data set.
- 6.153 We also note that the circumstances in which the CAA had to estimate the beta were relatively unusual compared with regulatory precedent and it had to adapt its approach in response. Further, we take into account that, as we noted earlier, Flint

⁵⁸² The Airlines submitted that the single beta over the pooled dataset would be statistically less efficient. This point is about confidence intervals around the beta estimate, and not the beta estimate itself.

⁵⁸³ Airlines Response to PD, paragraph 3.19.

considered the cross-check method and in fact estimated the pandemic effect using this method. Both Flint and AlixPartners when using the cross-check method estimate a slightly lower pandemic effect, which would have the impact of moving the CAA's overall asset range from 0.44-0.62 to 0.43-0.58.

- 6.154 Given the degree of judgement involved in the various component parts of the range, and that the different methodologies make only a small difference to the range, we are of the view that the CAA was not wrong on the basis that the alternative econometric approach advanced by AlixPartners for the Airlines was the only reasonable approach open to the CAA, and as such, was clearly superior to that it adopted.

Impact of gearing

- 6.155 As set out at paragraph 6.101 above, the Airlines argued that the CAA made a methodological error in its adjustment to reflect the effects of the pandemic by combining pandemic and non-pandemic periods, and in turn not appropriately considering the impact of gearing on the beta estimates. They argued that roughly half of Flint's estimate of the asset beta increase was due to higher gearing of comparator companies during the pandemic.
- 6.156 The CAA explained that it reviewed the levered equity betas for comparator companies. In order to determine the asset beta, it was required to 'un-lever' equity betas (to adjust for the comparator company's gearing) and then 're-lever' the betas (to adjust for the notional company's gearing). It noted that its approach to un-lever and re-lever the betas was consistent with regulatory practice and consistent with how it calculated the equity beta in the overall cost of equity assessment.
- (a) Flint noted that when estimating betas using the reweighting method it reflected the equivalent weighted average gearing observed over the (reweighted) dataset. It told us that its estimates therefore 'faithfully and consistently' captured the effect of gearing observed during the COVID-19 period within its de-gearing calculations. It submitted that the model did this in the same way that regulators would ordinarily undertake an equity beta estimate and de-gear this to convert it into an asset beta estimate.⁵⁸⁴
- (b) The CAA submitted that its asset beta calculation 'faithfully reflects and addresses this, through the offsetting effect within the de-gearing calculations, with due weight given to the relevant statistics in line with the

⁵⁸⁴ Lonie 1, paragraph 262.

modelled assumptions and approach.’ On this basis, it submitted that it did not erroneously attribute any increase in asset beta to the pandemic.⁵⁸⁵

6.157 As set out at paragraph 6.101(c) above, the Airlines have proposed that the beta analysis should be split between pandemic and non-pandemic periods. This forms the basis for their argument that the gearing calculation should also be split into two parts to adjust for different levels of gearing in pandemic and non-pandemic periods. The Airlines appear to attribute half of the difference between their estimates and Flint’s estimates of the pandemic impact to changes in gearing. However, as we noted in paragraph 6.153 above, it seems that the main driver of the difference is simply the choice of the econometric approach since the Flint ‘cross-check’ method produces very similar results to the Airlines’ estimates. Noting our conclusion set out at paragraph 6.154 above that the CAA was not wrong in its econometric method,⁵⁸⁶ and taking into account the CAA’s reasoned explanation of what it did, our further view is that the CAA’s approach to gearing is part of a consistent and coherent assessment. On this basis, we find no error in the CAA’s approach to estimating the pandemic effect on HAL’s asset beta.

Conclusions on stage 1 and stage 2

6.158 For the reasons given above, we determine that the CAA was not wrong in respect of its setting the pre-pandemic asset beta or in calculating the impact of the pandemic on HAL’s asset beta (stages 1 and 2 of the CAA’s asset beta assessment). We determine that the CAA was not wrong in law, in fact or in the exercise of a discretion in this regard.

Section B: stage 3 (the TRS adjustment)

The CAA’s Final Decision

6.159 We have summarised the CAA’s decision to apply a TRS adjustment and the process by which it quantified the adjustment to be applied at paragraphs 6.26 to 6.31 above.

The Parties’ submissions

HAL’s appeal on the TRS adjustment

6.160 HAL submitted that the CAA had erred in applying a downward adjustment at stage 3 of its asset beta calculation. HAL submitted that the CAA was wrong in law to apply an arbitrary (downward) adjustment to the asset beta on account of the

⁵⁸⁵ Hoon 2, paragraphs 20.40 and 20.41.

⁵⁸⁶ In which it considered pandemic and non-pandemic periods together.

TRS mechanism. It told us that the adjustment was irrational and lacked evidential support for key assumptions, and that the CAA failed to take account of relevant considerations, including by disregarding risk sharing mechanisms already in place at comparator airports. HAL submitted that this meant that there was no need to make a direct adjustment to the observed comparator asset betas as those comparators already had their own shock mitigation measures in place.⁵⁸⁷ HAL also submitted that the TRS adjustment suffered from factual errors in respect of its coverage of non-aeronautical charges and the protection rate achieved by the TRS mechanism, and that the CAA made an error in the exercise of a discretion by departing further from best regulatory practice and applying a disproportionate adjustment to the asset beta.⁵⁸⁸

- 6.161 HAL said the CAA's application of a downward adjustment to HAL's asset beta on the basis of the impact of the TRS mechanism was fundamentally flawed for two key reasons: (i) the TRS adjustment does not meaningfully reduce systematic risk; and (ii) the magnitude of the TRS adjustment is arbitrary.

The TRS adjustment does not meaningfully reduce systematic risk

- 6.162 First, HAL submitted that the TRS mechanism is unsuitable meaningfully to reduce systematic risk. Whilst the TRS mechanism would enable HAL to earn back a share of revenues lost to demand shock, HAL may not be able to do so, especially in the event of severe demand shocks. As the payback offered by the TRS mechanism is neither certain nor immediate enough, it fails meaningfully to reduce HAL's exposure to systematic risk.⁵⁸⁹

- 6.163 In particular, HAL submitted that:

- (a) The TRS mechanism does not offer HAL immediate, guaranteed compensation. Rather, it permits HAL to earn higher revenues by applying higher charges over a 10-year period to earn back losses. However, these revenues depend on future passenger volumes, which are uncertain. The vast majority of these revenues would be earned across the H8⁵⁹⁰ and later control periods (through the application of a closing RAB adjustment) and subject to the same level of risk as the rest of HAL's cashflows, which depend on future passenger demand.⁵⁹¹
- (b) HAL's ability to apply higher charges may be constrained by the price-elasticity of demand, ie raising prices may further depress volumes.⁵⁹²

⁵⁸⁷ HAL, First Witness Statement of Michael King (King 1), 17 April 2023, paragraphs 109–114.

⁵⁸⁸ [HAL NoA](#), paragraphs 211–213.

⁵⁸⁹ [HAL NoA](#), paragraphs 195.1, 197 and 202.

⁵⁹⁰ 'H8' is the price control for Heathrow following H7.

⁵⁹¹ [HAL NoA](#), paragraph 198.

⁵⁹² [HAL NoA](#), paragraph 199.

- (c) The TRS mechanism increases perceived regulatory risk as it might be renegotiated in extreme circumstances.⁵⁹³
- (d) The TRS mechanism is likely to be more effective at capping windfall gains than insuring against windfall losses as the matters mentioned in subparagraphs (a) to (c) above would not apply in the event of an upside demand shock. Further, any upside demand shock would likely be much smaller in scale than any downside demand shock.⁵⁹⁴
- (e) The TRS mechanism is unsuitable to reduce Heathrow's systematic risk (and therefore asset beta) meaningfully as it defers recovery over a long time period and acts through future higher charges that will themselves be subject to the same systematic and regulatory risks.⁵⁹⁵
- (f) Even if recovery were not delayed as set out in subparagraph (e), the impact of the TRS mechanism can be gauged by examining its impact on operational gearing and then – using academic literature – evaluating the link between operational gearing and systematic risk. This assessment indicates that the impact of the TRS mechanism is close to zero.⁵⁹⁶

6.164 In other words, HAL has argued that this structure of the TRS mechanism means that it is unsuitable to meaningfully reduce HAL's systematic risk (and therefore asset beta) because it lacks the immediacy and certainty of payback that would be required for that purpose, ie because payback takes the form of an ability to earn higher returns in future based on an increased RAB.

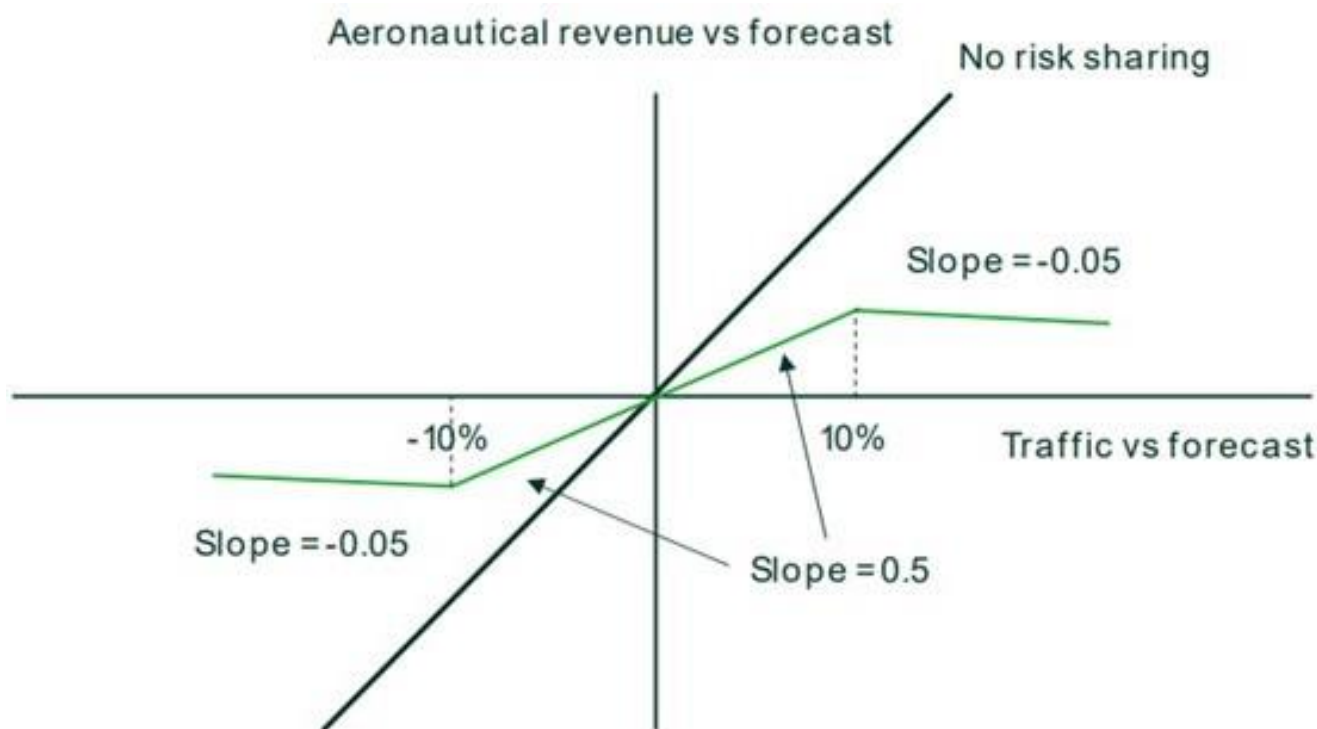
⁵⁹³ [HAL NoA](#), paragraph 200.

⁵⁹⁴ [HAL NoA](#), paragraph 201.

⁵⁹⁵ [HAL NoA](#), paragraph 195.1.

⁵⁹⁶ [HAL NoA](#), paragraph 203, HAL, Second Witness Statement of Michael King (**King 2**), 22 May 2023, paragraphs 5.8–5.9.

Figure 6.5: Oxera's assessment of the impact of the TRS mechanism on aeronautical revenues



Original source was from Oxera based on the CAA's H7 Final Proposals.
 Source: Hope 1, H7 appeal: cost of capital, Oxera, 13 April 2023, Figure 4.1.

- 6.165 With reference to Figure 6.5 HAL noted that without a risk-sharing agreement, the aeronautical revenues of HAL change in proportion with the differences between the forecast and outturn traffic (slope = 1). With a TRS mechanism in place and assuming 105% protection for large traffic deviations, the slope of the payoff function for HAL's aeronautical revenue is changed to be mildly negative (slope = -0.05) for deviations below -10%, equal to 0.5 for deviations between -10% and 10%, and mildly negative (slope = -0.05) for deviations above 10%. It noted that while the payoff function of HAL is flatter with the TRS than without the TRS, it is wrong to conclude that HAL's cost of capital is reduced.⁵⁹⁷
- 6.166 HAL submitted that the design of the TRS mechanism has a 'fundamental difference' to the design of an insurance contract (or a 'collar' contract, often used in economic regulation) on the basis that an insurance contract will provide compensation for losses with a high degree of certainty and immediacy. However, in the case of the TRS, HAL submitted that HAL must earn back the incurred losses by increasing its airport charges in future years. As a result, HAL submitted that the compensation therefore carries the same level of risk as the rest of HAL's cash flows, which depend on future passenger demand. It told us that because its demand is price-sensitive, it will be harder for HAL to generate the additional

⁵⁹⁷ Hope 1, paragraph 4.11.

revenue required (as a result of the increased charges deriving from the higher RAB) after applying a price increase.⁵⁹⁸

- 6.167 In summary, HAL has argued that the effect of this structure is that any compensation is subject to systematic risk facing HAL in the future, and therefore the TRS mechanism does not have the effect of reducing systematic risk but is simply deferring payment into the future.

The magnitude of the TRS adjustment is arbitrary

- 6.168 Second, HAL submitted that the magnitude of the TRS adjustment is essentially arbitrary because it relies on five unevicenced or incorrect assumptions that substitute pure discretion for a total absence of evidence.⁵⁹⁹
- 6.169 Specifically, the CAA compared the asset betas of listed comparator airports with the asset betas of network utilities. The CAA assumed that network utilities are a good starting point for analysing an airport's asset beta (assumption one) and that comparator airports do not benefit from any risk sharing mechanism when, in fact, they do, and this is reflected in their asset betas (assumption two). It then assumed 50-90% of the difference in the betas between the network utilities and the comparator airports is explained by volume risk faced by airports (assumption three), and that the TRS will reduce the volume risk by 50% (assumption four). The final assumption is that any reduction in volume risk results in a commensurate reduction in the asset beta (assumption five). HAL submitted that these assumptions are all wrong:
- (a) Assumption one is wrong because HAL's business differs fundamentally from that of a network utility, meaning they do not provide a good starting point. Unlike network utilities, HAL has regulated and unregulated activities; HAL faces structural factors beyond traffic risk; and HAL operates within a regulatory environment subject to greater change.⁶⁰⁰ We set out our assessment of assumption one at paragraphs 6.238 and 6.239.
 - (b) Assumption two is wrong because many of the comparator airports (AENA, Fraport, ADP) benefit from risk sharing mechanisms which afford a degree of protection against volume risk. This reduced risk is reflected in their asset betas. The CAA incorrectly failed to account for these risk sharing mechanisms that operated differently to the TRS.⁶⁰¹ We set out our consideration of assumption two at paragraphs 6.210 to 6.214.

⁵⁹⁸ Hope 1, paragraph 4.13.

⁵⁹⁹ [HAL NoA](#), paragraphs 204–210.

⁶⁰⁰ [HAL NoA](#), paragraph 207.

⁶⁰¹ [HAL NoA](#), paragraph 208.

- (c) Assumptions three and four are wrong because there is no evidence in support of them.⁶⁰² We set out our consideration of assumption three at paragraphs 6.230 and 6.231, and assumption four at paragraphs 6.232 to 6.237.
- (d) Assumption five is wrong because one should not assume that any reduction in volume risk leads to a commensurate reduction in the asset beta, and that the asset beta response to demand risk is not linearly related to the level of demand risk. HAL submitted that there is a lack of supporting evidence from the CAA in its quantification of volume risk as compared to water and energy utilities. HAL told us that beta differentials could be driven by non-aeronautical activities which are not regulated and are therefore exposed to demand risks in addition to traffic risks. It told us that HAL may also be exposed to changing forms of economic regulation in future due to market power assessments. It told us that this difference is likely to imply higher regulatory risks for HAL and cannot be discounted as a source of differences between the betas of airports and utilities. Further, HAL submitted that the use of utilities as a base for the estimation of HAL's 'mitigated' beta appears inconsistent with the CMA's decision not to use the betas of UK utilities in calculating an estimate of NERL's beta, which also has a TRS mechanism.⁶⁰³ We set out our consideration of assumption five at paragraphs 6.240 to 6.245.

Alternative evidence on the magnitude of the TRS adjustment

- 6.170 HAL submitted that the scale of the impact of the CAA's approach to the TRS on the asset beta and the cost of equity indicated that the TRS adjustment is too large. HAL estimated the annualised benefit from the TRS (based on the CAA's approach to the asymmetric risk allowance) is £81 million per annum (in 2020 prices). It told us that the impact of the TRS adjustment on the asset beta and knock-on impact on the overall WACC results in an expected reduction in revenue of £98 million per annum (in 2020 prices). HAL submitted that the expected reduction in return is therefore greater than the expected benefit from the TRS mechanism. HAL submitted that for this to be rational, investors would have to value each expected pound from the TRS at a higher rate than the certain pound reduction in revenue. However, HAL submitted that in practice investors would value a 'certain pound' much more highly than an 'expected pound' associated with a wide range of outcomes. On this basis, HAL submitted that the CAA's approach 'significantly overestimated the likely benefit on WACC from the TRS.'⁶⁰⁴ It told us that 'in practice, the impact on systematic risk will depend upon the correlation of expected TRS revenues with the market' and that 'given that the

⁶⁰² [HAL NoA](#), paragraphs 205 to 206.

⁶⁰³ [HAL NoA](#), paragraph 209, Hope 1, paragraphs 4.19-4.21 and King 2, paragraph 5.5.

⁶⁰⁴ King 1, paragraph 94.

correlation is likely to be very low, any reduction in return would be expected to be only a small proportion of the expected benefit from the TRS'.⁶⁰⁵

- 6.171 Further, HAL submitted that the structure of the TRS means that the impact of the TRS on HAL's cashflows during the acute phase of a pandemic-type shock will be limited, and its ability to recover funds even after that period may be constrained by other factors, such as where traffic continues to be depressed for a long period. HAL also submitted that revenue recovery post-2026 is not clear 'as the unrecovered amount is included in the RAB and actual recovery through revenue will depend upon the approach taken on regulatory depreciation.'⁶⁰⁶
- 6.172 On the basis of the points set out in paragraphs 6.170 and 6.171, HAL concluded that the TRS may not allow recovery of revenue to the extent the CAA assumes, it has no or minimal short term cash flow effects, and it is primarily reducing asymmetric risk exposure to severe downside risks, which would not be expected to be reflected in asset beta under the CAPM.⁶⁰⁷
- 6.173 HAL further submitted the TRS could be regarded as a reduction in expected operational gearing in that the long-term impact of shocks is mitigated by the revenue correction.
- 6.174 HAL noted that there is academic evidence on the relationship between reductions in operational gearing and systematic risk. HAL cited academic evidence⁶⁰⁸ which estimated an elasticity of 0.11 between changes in operational gearing and beta. In this paper, operational gearing was defined as the relationship between the change in a firm's earnings before interest and tax (**EBIT**) and the change in revenue. HAL told us that applying this elasticity in this case results in an expected reduction in asset beta of 1.1% which is around 0.0006 on the CAA asset beta.⁶⁰⁹
- 6.175 Further, HAL referred to the CMA's PR14 Final Determination⁶¹⁰ for Bristol Water as 'regulatory precedent.'⁶¹¹ It noted that in the CMA's PR14 Final Determination the CMA increased the asset beta for Bristol Water to reflect its higher operational gearing. HAL submitted that an increase in operational gearing of 82% led to an increase in asset beta of 13% in PR14. HAL noted that the CMA set out four approaches to measuring operational gearing.⁶¹² HAL estimated that the TRS would reduce HAL's operational gearing by 1.3% (using HAL's estimate of the expected benefit of the TRS of £81 million per annum as described at paragraph

⁶⁰⁵ King 1, paragraph 94.

⁶⁰⁶ King 1, paragraph 95.

⁶⁰⁷ King 1, paragraph 96.

⁶⁰⁸ HAL Exhibit "MK1" B6 (Expert Reports) to King 1: 'The impact of operating and financial risk on equity risk', Richard Lord, Journal of Economics and Finance, Volume 20, 1996, pages 27-38.

⁶⁰⁹ King 2, paragraph 5.8.

⁶¹⁰ CMA, [Bristol water plc price determination](#) (CMA PR14 Final Determination), 6 October 2015.

⁶¹¹ King 1, paragraph 106.

⁶¹² These are opex to RAB, revenue to RAB, opex to (return and depreciation), and opex to revenue.

6.170), or by 2.8% if one of the CMA's measures is excluded.⁶¹³ HAL submitted that applying the framework used in the PR14 decision would imply a reduction in the asset beta of 0.002 based on the CAA's beta estimate, which is less than 3% of the adjustment proposed by the CAA.⁶¹⁴

6.176 HAL then concluded, given that the correlation of the expected revenue from the TRS is expected to be lower than the correlation with a direct operational gearing impact, the actual impact on systematic risk is likely to be even smaller and consistent with no downwards adjustment being made to the asset beta to reflect the TRS mechanism.⁶¹⁵ HAL also relied on Oxera's submissions that the TRS cannot meaningfully reduce systematic risk (which we discussed earlier at paragraphs 6.204 to 6.209 below).

There are many factors to differentiate HAL from network utilities other than volume risk

6.177 HAL presented supporting evidence which explained its position that there are many interacting variables that are likely to differ between HAL and network utilities, including: cost risk; revenue risk; business specific asset characteristics; the degree of operating leverage; regulatory design and implementation; and market dynamics.⁶¹⁶ HAL quoted CEPA and noted that, compared to regulated water and energy networks, HAL is potentially exposed to 'changing forms of economic regulation in future due to market power assessments'. HAL noted that this difference is likely to imply higher regulatory risks for HAL and cannot be discounted as a source of differences between the betas of airports and utilities.⁶¹⁷

The CAA's response to HAL's appeal on the TRS

6.178 The CAA submitted that it accepted there was a significant degree of uncertainty around the amount by which the TRS will reduce HAL's exposure to systematic risk. The TRS adjustment to asset beta accordingly involved the exercise of judgement, and the CAA submitted that it was not wrong for the CAA to prefer an inevitably imprecise TRS adjustment (albeit informed by analysis) to the alternative of fixing a zero adjustment because a positive adjustment could not be fixed with certainty.⁶¹⁸

6.179 The CAA submitted that the grounds upon which HAL said that it fell outside the CAA's margin of appreciation to apply an adjustment for the TRS mechanism do not withstand scrutiny:

⁶¹³ The revenue to RAB measure implies an increase in operational gearing. King 1, paragraph 107.

⁶¹⁴ King 1, paragraph 107.

⁶¹⁵ King 1, paragraph 107 and 108.

⁶¹⁶ King 1, paragraph 101.

⁶¹⁷ Hope 1, paragraph 4.20.

⁶¹⁸ [CAA Response](#), paragraph 159.

- (a) The CAA said that HAL's argument, that the TRS mechanism lacks the immediacy and certainty of payback that would be required to reduce systemic risk, is based on a false premise. With respect to a CAPM derived asset beta, in general the timing of cashflows is not relevant providing that they are preserved in net present value terms, and the TRS mechanism achieved this. The CAA has also addressed the issue of cashflows being subject to systematic and regulatory risks through the risk premium contained within the WACC.⁶¹⁹
- (b) The CAA submitted that it has always accepted that it lacked viable benchmarks with which to precisely quantify the TRS adjustment, but this did not mean the TRS adjustment was arbitrary, and the CAA had clearly set out its reasoning for the adjustment in the Final Proposals.
- (c) The CAA submitted that the Final Proposals (at paragraph 9.127) explained that none of HAL's comparators benefit from a risk-sharing mechanism equivalent to the TRS.
- (d) The CAA submitted that it did not introduce the TRS adjustment to 'reflect how beta may change in the future' as HAL contended, but rather to reflect a material difference in risk exposure between HAL and comparator airports. The CAA said that the TRS was a major component of the H7 price control framework, and it was entirely reasonable, and certainly not wrong, to take account of the likely impact of the TRS on asset beta.
- (e) The CAA submitted that it did not accept HAL's allegation the TRS mechanism lacks credibility because of a perception of regulatory risk, for which it says no proper evidence was cited. However, the CAA submitted that in any event, even if there were such concerns, it did not follow that the TRS would have no impact on the asset beta (which is HAL's case).
- (f) The CAA did not agree with the analysis presented by HAL that the impact of the TRS on the asset beta must be small.
- (g) The CAA submitted that it was highly likely that demand risk exposure explained a significant proportion of the difference in systematic risk exposure between airports and network utilities.
- (h) The CMA submitted that HAL had misrepresented the CAA's approach – the CAA did not assume that a reduction in volume risk resulted in a commensurate reduction in the asset beta.⁶²⁰

⁶¹⁹ [CAA Response](#), paragraph 160.1.

⁶²⁰ [CAA Response](#), paragraphs 160–160.8.

- 6.180 The CAA also noted that HAL's argument that the CAA was wrong to make an adjustment to the asset beta for the TRS was inconsistent with HAL's own approach to the RAB adjustment.⁶²¹
- 6.181 On HAL's operational gearing submissions, the CAA responded that the principal mechanism through which the TRS affects HAL's asset beta is not the resulting reduction in operational gearing, but through the amelioration of underlying demand risk. This, the CAA submitted, is a far more direct transmission mechanism, and consequently is likely to have a far more significant impact.⁶²²

Interveners' response to HAL's submissions on the TRS

- 6.182 The Airline Interveners made submissions in support of the CAA:
- (a) Given the principle of net present value neutrality, the TRS adjustment would have the same impact on HAL's risk overall even if revenue recovery were delayed.
 - (b) The CAA's reliance on the asset betas of other regulated entities in the UK in its methodology was reasonable because Heathrow airport shares many similarities with those network utilities.
 - (c) HAL's comparison of the TRS mechanism with the asymmetric risk allowance was misplaced.
 - (d) The TRS mechanism does provide HAL with certainty. Regarding immediacy, the mechanism is designed to protect consumers from higher prices where there might be lower demand (in accordance with the CAA's primary duty to protect the interests of consumers).
 - (e) The incorporation of the TRS into HAL's Licence conditions ensures regulatory commitment going forward.
 - (f) HAL was wrong to submit that traffic risk accounts for less of the differential between Heathrow airport and network utilities than the CAA's assumption of 50% to 90%. The non-aeronautical activities to which HAL referred will mostly be indirectly related to passengers via the relationship to aircraft movements.
 - (g) HAL's analysis of the benefit the TRS mechanism provides HAL was misconceived since it is limited to the H7 period and not beyond.⁶²³

⁶²¹ [CAA Response](#), paragraph 161.

⁶²² Hoon 2, paragraph 21.25.

⁶²³ [BA Nol](#), paragraph 3.4.3; and [Delta Nol](#), paragraph 3.25.

The Airlines' appeal on TRS

- 6.183 The Airlines submitted that the CAA erred in stage 3 of its asset beta calculation (on the TRS mechanism) because:
- (a) The CAA concluded that traffic risk accounts for 50-90% of the differential between HAL's and comparator utilities' asset betas. The CAA noted that there might be other factors which could account for the difference but did not provide any further rationale and failed to explain what other risks HAL is plausibly exposed to compared to other regulated entities.
 - (b) There are relevant similarities between HAL and regulated utilities (which also: operate under price controls and receive returns on an indexed-RAB; operate under output and service quality regimes; and have similar cost structures).
 - (c) It is accordingly logical to conclude that traffic risk accounts for a far higher percentage of the differential between HAL and the regulated utilities' asset betas than 50%-90%. 90%-100% is a more appropriate figure.⁶²⁴
- 6.184 The Airlines provided supporting evidence from AlixPartners for their position on the latter of the above points (that 100% would be the correct upper end of the range). This report submitted that the lower end of the range (50%) is implausible and erroneous as it assumes that only 50% of that difference is due to the volume risk that HAL faces. To demonstrate their position, the Airlines submitted the following points.
- (a) **Similarities in regulatory regimes:** The Airlines highlighted similarities in the regulatory regimes between HAL and water/energy networks for the following reasons:
 - (i) The Airlines highlighted the similarity in timeframe of water/energy networks and HAL's price control period (5 years) and noted that returns are provided on a RAB indexed to UK inflation in each regime. The Airlines submitted that HAL's investors (in common with investors in other UK regulated companies) benefit from complete inflation risk protection of past investments. The Airlines noted that this is a difference between HAL and comparator airports.⁶²⁵
 - (ii) HAL and water/energy networks operate under similar output and service quality regimes, which the Airlines submitted would not affect the cost of equity.⁶²⁶

⁶²⁴ [BA NoA](#) paragraph 5.7.19(c) [Delta NoA](#) paragraphs 5.55–5.61, [VAA NoA](#) paragraphs 5.53–5.59.

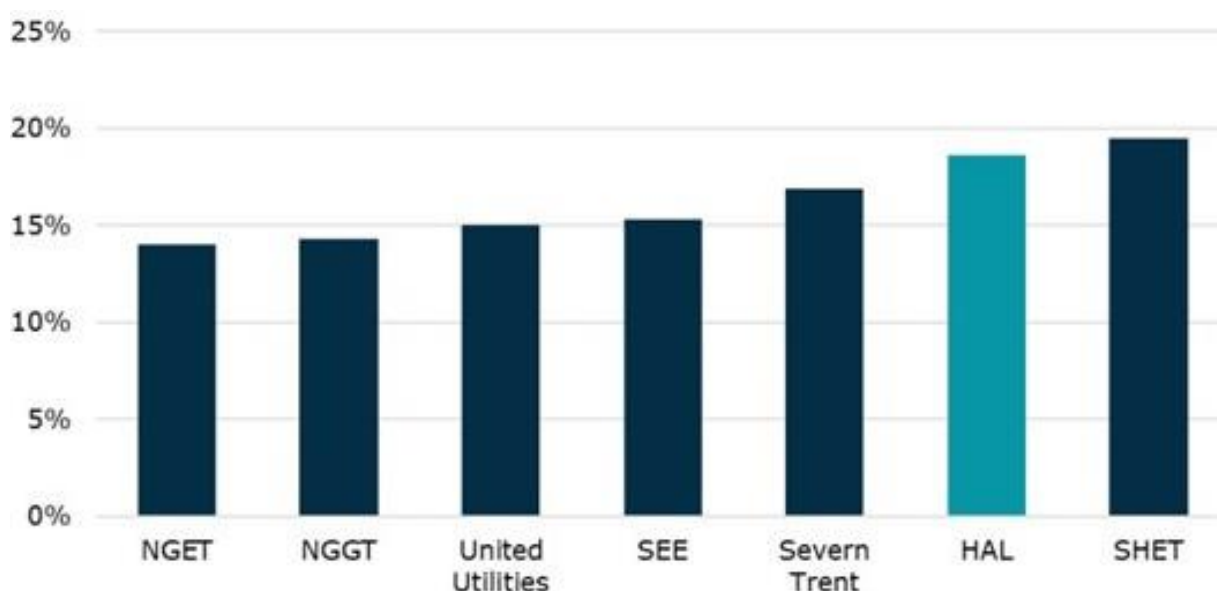
⁶²⁵ AlixPartners WACC Report, 17 April 2023, paragraph 64.

⁶²⁶ AlixPartners WACC Report, 17 April 2023, paragraph 66.

- (iii) The Airlines submitted that there are some residual differences in the economic regulatory regimes in terms of the approach to cost sharing. For example, some regimes have total expenditure (**totex**) sharing, while HAL has full operating expenditure (**opex**) exposure, but relatively low capital expenditure (**capex**) risk exposure. The Airlines submitted that these cost risks are non-systematic and therefore these differences in regulatory regime do not contribute to the asset beta assessment.⁶²⁷

6.185 The Airlines also submitted that HAL’s ratio of regulated revenue to RAB lies within the range of the other regulated utility benchmark companies, as set out in Figure 6.6 below.

Figure 6.6: AlixPartners’ calculation of regulated revenues as a proportion of RAB



Original source was calculations by AlixPartners based on company regulatory accounts. HAL: 2019 (prior to Covid-19 pandemic effects). Others: 2021-22.

Source: AlixPartners WACC Report, 17 April 2023, Figure 2.

6.186 The Airlines submitted that HAL’s position towards the upper end of the range is indicative of a lower level of operational gearing (which, it submitted, should reduce the volatility in its profits with respect to volume changes), since HAL’s RAB value is relatively small compared to its annual revenue. On this basis, the Airlines submitted that other than demand risk, they would expect HAL to have approximately the same asset beta as the other utilities referenced in Figure 6.6. Further, the Airlines submitted that the England and Wales water companies and GB energy networks carry relatively low volume risk, and that this would be the same as HAL were the TRS calibrated to pass all the volume risk onto airlines. However, the Airlines submitted, since the TRS is a ‘sharing mechanism’, HAL will

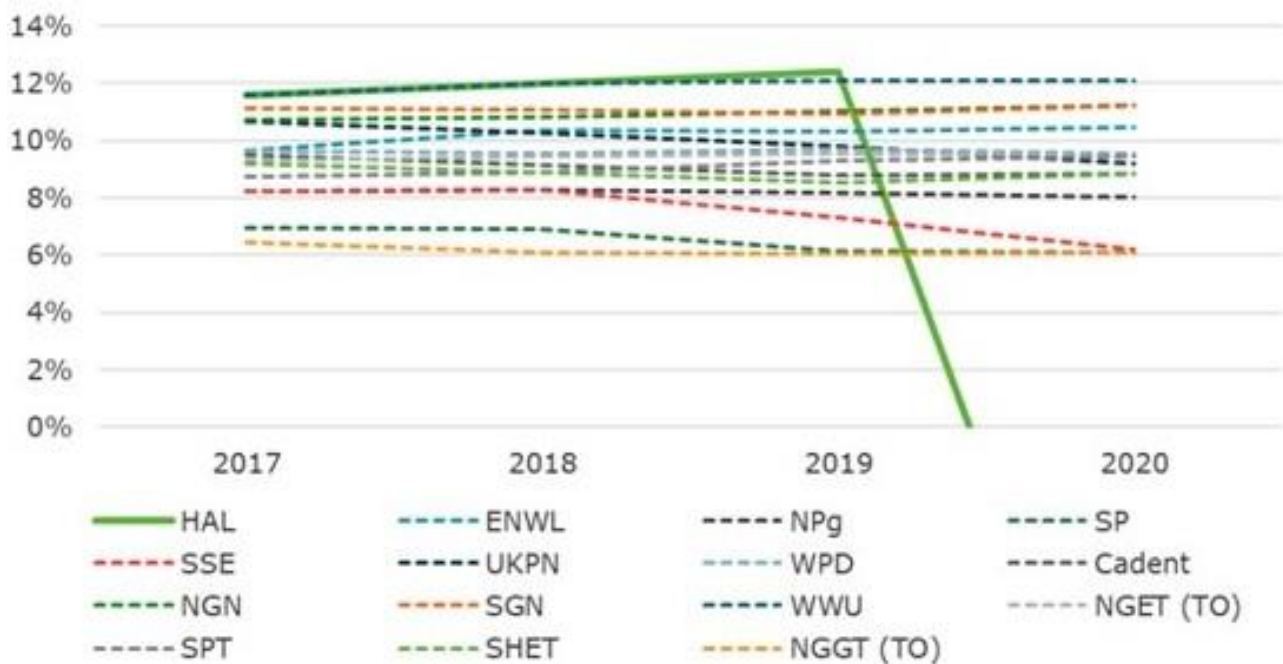
⁶²⁷ AlixPartners WACC Report, 17 April 2023, paragraph 65.

retain a proportion of the volume risk and so the convergence in asset betas is not complete.

6.187 On the basis of the points set out at paragraphs 6.183 to 6.186, the Airlines submitted that there is no reason why, other than traffic risk, HAL is exposed to more systematic asset beta risk than the regulated water and energy networks.

6.188 The Airlines submitted that between 2017 and the start of the pandemic, HAL’s return on regulated equity exceeded the top end of the RIIO-1 range and, other than during the pandemic year of 2020, displayed similar, limited volatility as the energy networks, as set out in Figure 6.7 below.

Figure 6.7: AlixPartners’ calculation of Return on Regulated Equity



Original source was calculations by AlixPartners from HAL regulatory accounts and Ofgem RIIO-1 performance reports
 Source: 'AlixPartners WACC Report, 17 April 2023, Figure 3.

6.189 The Airlines therefore concluded that a range of 90% to 100% should be used for comparing HAL’s risk with that of utility networks (following the consideration of volume and pandemic risk elsewhere in the asset beta calculation).

6.190 The Airlines agreed with the CAA’s assumption that 50% of the traffic risk is mitigated through the TRS.⁶²⁸

⁶²⁸ AlixPartners WACC Report, 17 April 2023, paragraph 71(c).

The CAA's response to the Airlines' appeal on the TRS

6.191 The CAA denied that it had erred as the Airlines alleged. The CAA submitted that it was obviously right that volume risk was the principal (but not only) driver of the difference of asset betas.⁶²⁹

Intervener's response to the Airlines' submissions on the TRS

6.192 HAL submitted that its NoA set out its position that the CAA was wrong to assume that the TRS mechanism is able to meaningfully reduce HAL's asset beta but, notwithstanding this, it considered that the Airlines' arguments on the TRS adjustment are misconceived because:

- (a) The Airlines presented no evidence in support of their position that all of the difference in the asset beta between HAL and network utilities is related to demand risk. HAL submitted that its evidence shows there to be clear differences between network utilities and HAL which would be expected to increase systematic risk (including 35% of HAL's revenue relating to commercial activities), and that there are many reasons why systematic risk varies between industries and caution needs to be applied before assuming that an asset beta differential is wholly attributable to any specific difference.
- (b) The Airlines wrongly assume that the asset beta response to demand risk is linearly related to the level of demand risk, which HAL considers to be unlikely to be the case due to the effects of investor risk aversion. For example, HAL submitted, the impact of increasing from zero demand risk to 50% demand risk is likely to be greater on asset beta than the impact of increasing from 50% to 100%.
- (c) The Airlines implicitly assume that the demand risk for utilities makes no contribution to systematic risk. However, HAL submitted that this contribution is likely to be negative (ie 'a significant addition to the beta of network utilities might be required in order to get an equivalent asset beta for a company with zero systematic risk related to demand').⁶³⁰

6.193 HAL submitted that the impact of the TRS is effectively to reduce the expected operational gearing of HAL, but neither the Airlines nor the CAA referred to the evidence concerning the relationship between operational gearing and changes in revenue. As a result, HAL disputed the estimates put forward by the CAA and the Airlines.⁶³¹

⁶²⁹ [CAA Response](#), paragraphs 162-163.

⁶³⁰ [HAL NoI](#), paragraph 137.

⁶³¹ [HAL NoI](#), paragraph 138.

Our assessment – TRS

Summary of our approach and conclusions (stage 3)

HAL's appeal

- 6.194 We have considered whether the Final Decision was wrong because it was based on an error of fact, was wrong in law or the CAA made an error in the exercise of a discretion as HAL submitted.
- 6.195 In the light of our detailed review and assessment of the Parties' submissions and supporting evidence, we find that the CAA did not err by applying a (downward) adjustment to the asset beta on account of the TRS mechanism.
- 6.196 In our judgement, in making a further adjustment to HAL's asset beta on account of the TRS mechanism the CAA did not err because it had made factual errors in respect of the mechanism's coverage of non-aeronautical charges and the protection rate achieved by it; nor did the CAA err in law because its decision was irrational, lacking in evidential support for key assumptions or because the CAA failed to take account of relevant considerations; and nor did the CAA make an error in the exercise of a discretion by departing from best regulatory practice and applying a disproportionate adjustment.
- 6.197 Accordingly, we determine that the CAA's Final Decision was not wrong because it was based on an error of fact, because it was wrong in law or because the CAA made an error in the exercise of a discretion, as HAL alleged.

Airlines' appeals

- 6.198 We have also considered whether the Final Decision was wrong because it was based on an error of fact, was wrong in law or the CAA made an error in the exercise of a discretion as the Airlines alleged.
- 6.199 In the light of our detailed review and assessment of the Parties' submissions and supporting evidence, we find that the CAA did not err in concluding that traffic risk accounts for 50-90% of the differential between HAL's and regulated utilities asset betas, rather than 90-100%.
- 6.200 In our judgement, the CAA did not make errors of fact in calculating the TRS adjustment by relying on flawed evidence and assumptions or reaching conclusions without a reasonable basis. Nor do we find that the CAA was wrong in law in calculating the TRS adjustment because, in doing so, the CAA failed properly to enquire, failed to take proper account of relevant considerations, relied on flawed evidence and assumptions, made methodological errors, reached conclusions without adequate supporting evidence or acted in defiance of logic.

- 6.201 We also find that the CAA was not wrong in law in calculating the TRS adjustment because it failed reasonably to account for the mitigation of HAL's risk exposure in the Final Decision as a whole and made an adjustment outside the range it could reasonably have made. Nor did the CAA make an error in the exercise of a discretion because it erred in its approach to determining where HAL lay on the risk spectrum.
- 6.202 Accordingly, we determine that the CAA's Final Decision was not wrong because it was based on errors of fact, was wrong in law or an error was made in the exercise of a discretion in calculating the TRS adjustment as the Airlines submitted.

Our approach

- 6.203 In assessing the CAA's downward adjustment of between 0.08 and 0.09 to the asset beta, we have considered first whether the CAA was wrong to make an adjustment to the asset beta to reflect the introduction of the TRS mechanism (this is a point which only HAL raises). Second, we have considered whether the quantification of the TRS adjustment was wrong (this is a point on which both HAL and the Airlines have made different submissions).

Adjustment to reflect TRS mechanism

The principle of whether the TRS mechanism reduces systematic risk

- 6.204 The CAA's adjustment to reflect the TRS mechanism gives effect to the view that the introduction of the TRS mechanism reduces systematic risk facing HAL. The TRS mechanism compensates HAL for revenue variations which arise due to outturn passenger numbers being different to forecast. The key consideration in relation to the estimation of beta is whether the TRS mechanism also has the effect of reducing systematic risk facing HAL.
- 6.205 Our view is that systematic shocks to the market are most likely to impact HAL via fluctuation in passenger numbers – for example, a systematic drop in spending power within the economy will have the effect of a reduction in the number of passengers travelling for leisure. Conversely, a systematic increase in spending power will likely result in an increase in the number of passengers travelling, and their overall spending power on such flights.
- 6.206 The TRS mechanism has been introduced to reduce the volatility of cash flows facing HAL in response to changes in traffic, by: (i) allowing HAL to recoup a portion of unrecovered revenue when volumes are lower than forecast; and (ii) requiring HAL to give money back when volumes are higher than forecast. The adjustments (as discussed in the previous chapter) are applied in two ways:

- (a) **Within the H7 period:** the adjustment is implemented through an additional term in the H7 price control formula.
- (b) **Beyond the H7 period:** an adjustment is made to HAL's RAB, leading to higher or lower charges in future control periods.

- 6.207 In our view, HAL's argument that a mechanism that relies partly on deferred contribution could not be sufficient to reduce systematic risk is not right. The TRS mechanism allows for compensation of lost revenues in the case of negative traffic shocks in a way that would not be the case were the TRS mechanism not in place. While some risk remains on the certainty of recovery, the opportunity for HAL to earn the return that would not exist absent the mechanism must be expected to reduce the impact of the overall shock on the value of the business. With such a mechanism in place, the loss in profits due to a volume shock (which is a systematic shock) would be proportionately smaller relative to the overall net present value of future cash flows, and this is what is relevant for the beta assessment.
- 6.208 HAL's second point around the risk of non-recovery due to higher prices relates to the elasticity of demand. On this point, we have not received evidence from HAL to suggest that such an increase would in fact have a material negative impact on HAL's ability to recover funds. In particular, HAL itself noted that regulated charges do not materially affect the ticket price charged by airlines, and that demand generally exceeds supply at Heathrow (with the exception of the COVID-19 period).⁶³² Further, HAL's logic implies that any revenue or cost-sharing mechanism in a regulatory setting cannot meaningfully reduce systematic risk unless payback is immediate. However, in our view, the CAA's position (as set out at paragraph 6.179(a)) that the timing of cashflows is not relevant providing they are preserved in net present value terms is not wrong. In turn, we do not agree with HAL's position on a lack of certainty due to timing.
- 6.209 On this basis, our view is that the implementation of the TRS mechanism has clear potential to reduce HAL's systematic risk. The CAA's decision that a downwards adjustment to HAL's asset beta is appropriate in this context is accordingly not wrong for being based on an error of fact, being wrong in law or because the CAA made an error in the exercise of a discretion. It was a decision within the range the CAA was entitled to make based on the facts and evidence and not one made at the expense of a clearly superior alternative advanced by HAL (ie that there would be no effect on such risk).

⁶³² HAL, First Witness Statement of John Holland-Kaye 1 (**Holland-Kaye 1**), 17 April 2023 paragraphs 4.3-4.4.

Consideration of whether an adjustment is necessary in the context of comparator data

- 6.210 HAL submitted that the comparator airports already had traffic risk adjustment measures in place equivalent to the TRS Mechanism. On this basis, we understand HAL to be arguing that an adjustment to the asset beta estimate is unnecessary because the effect is already captured in the observed data.
- 6.211 HAL submitted that the CAA made no adequate allowance for comparator airports themselves already having their own shock mitigation measures. According to HAL, this led the CAA to overestimate the impact of the proposed TRS mechanism. In more detail:
- (a) HAL noted that two of the comparator airports (Fraport and ADP) operated one-year price controls allowing annual recalculation of their price caps and submitted that this mitigated traffic risk.
 - (b) HAL noted that a third comparator airport (AENA) operated under five-year price controls and bears all traffic risk 'other than in exceptional circumstances' defined as reductions in traffic volume greater than 10% of forecast. AENA had applied for recovery of COVID losses for 2021 and 2022, which showed 'that AENA's expectation of its TRS was that it would work in a similar way to that proposed by the CAA for Heathrow' albeit HAL noted that AENA's regulator had denied the request and that appeals of that denial were pending.⁶³³
- 6.212 In its Final Proposals (and subsequent Final Decision) the CAA had dismissed HAL's representations.
- (a) Regarding Fraport and ADP, the CAA accepted that these airports operated under one-year price controls but noted in its Final Proposals that neither airport had been permitted to increase charges by more than 5% in nominal terms during the pandemic. This led it to conclude that the one-year price controls in place did not provide for material risk sharing in practice.
 - (b) Regarding AENA, the CAA noted that the Spanish government had rejected the application for recovery of funds. It therefore concluded that no material traffic risk sharing arrangements were in place at AENA.⁶³⁴
- 6.213 In its appeal before us, HAL reiterated its view that the comparator airports benefitted from traffic risk sharing mechanisms. It criticised the CAA's dismissal of these representations in the Final Decision on the basis that the CAA had only considered whether comparator airports had risk sharing that would mitigate

⁶³³ King 1, paragraph 110.

⁶³⁴ [Final Proposals](#), Section 3, paragraph 9.127. See also [Final Decision, Section 3](#), paragraph 9.86.

- (a) **Within the H7 period:** the adjustment is implemented through an additional term in the H7 price control formula.
- (b) **Beyond the H7 period:** an adjustment is made to HAL's RAB, leading to higher or lower charges in future control periods.

- 6.207 In our view, HAL's argument that a mechanism that relies partly on deferred contribution could not be sufficient to reduce systematic risk is not right. The TRS mechanism allows for compensation of lost revenues in the case of negative traffic shocks in a way that would not be the case were the TRS mechanism not in place. While some risk remains on the certainty of recovery, the opportunity for HAL to earn the return that would not exist absent the mechanism must be expected to reduce the impact of the overall shock on the value of the business. With such a mechanism in place, the loss in profits due to a volume shock (which is a systematic shock) would be proportionately smaller relative to the overall net present value of future cash flows, and this is what is relevant for the beta assessment.
- 6.208 HAL's second point around the risk of non-recovery due to higher prices relates to the elasticity of demand. On this point, we have not received evidence from HAL to suggest that such an increase would in fact have a material negative impact on HAL's ability to recover funds. In particular, HAL itself noted that regulated charges do not materially affect the ticket price charged by airlines, and that demand generally exceeds supply at Heathrow (with the exception of the COVID-19 period).⁶³² Further, HAL's logic implies that any revenue or cost-sharing mechanism in a regulatory setting cannot meaningfully reduce systematic risk unless payback is immediate. However, in our view, the CAA's position (as set out at paragraph 6.179(a)) that the timing of cashflows is not relevant providing they are preserved in net present value terms is not wrong. In turn, we do not agree with HAL's position on a lack of certainty due to timing.
- 6.209 On this basis, our view is that the implementation of the TRS mechanism has clear potential to reduce HAL's systematic risk. The CAA's decision that a downwards adjustment to HAL's asset beta is appropriate in this context is accordingly not wrong for being based on an error of fact, being wrong in law or because the CAA made an error in the exercise of a discretion. It was a decision within the range the CAA was entitled to make based on the facts and evidence and not one made at the expense of a clearly superior alternative advanced by HAL (ie that there would be no effect on such risk).

⁶³² HAL, First Witness Statement of John Holland-Kaye 1 (**Holland-Kaye 1**), 17 April 2023 paragraphs 4.3-4.4.

Consideration of whether an adjustment is necessary in the context of comparator data

- 6.210 HAL submitted that the comparator airports already had traffic risk adjustment measures in place equivalent to the TRS Mechanism. On this basis, we understand HAL to be arguing that an adjustment to the asset beta estimate is unnecessary because the effect is already captured in the observed data.
- 6.211 HAL submitted that the CAA made no adequate allowance for comparator airports themselves already having their own shock mitigation measures. According to HAL, this led the CAA to overestimate the impact of the proposed TRS mechanism. In more detail:
- (a) HAL noted that two of the comparator airports (Fraport and ADP) operated one-year price controls allowing annual recalculation of their price caps and submitted that this mitigated traffic risk.
 - (b) HAL noted that a third comparator airport (AENA) operated under five-year price controls and bears all traffic risk 'other than in exceptional circumstances' defined as reductions in traffic volume greater than 10% of forecast. AENA had applied for recovery of COVID losses for 2021 and 2022, which showed 'that AENA's expectation of its TRS was that it would work in a similar way to that proposed by the CAA for Heathrow' albeit HAL noted that AENA's regulator had denied the request and that appeals of that denial were pending.⁶³³
- 6.212 In its Final Proposals (and subsequent Final Decision) the CAA had dismissed HAL's representations.
- (a) Regarding Fraport and ADP, the CAA accepted that these airports operated under one-year price controls but noted in its Final Proposals that neither airport had been permitted to increase charges by more than 5% in nominal terms during the pandemic. This led it to conclude that the one-year price controls in place did not provide for material risk sharing in practice.
 - (b) Regarding AENA, the CAA noted that the Spanish government had rejected the application for recovery of funds. It therefore concluded that no material traffic risk sharing arrangements were in place at AENA.⁶³⁴
- 6.213 In its appeal before us, HAL reiterated its view that the comparator airports benefitted from traffic risk sharing mechanisms. It criticised the CAA's dismissal of these representations in the Final Decision on the basis that the CAA had only considered whether comparator airports had risk sharing that would mitigate

⁶³³ King 1, paragraph 110.

⁶³⁴ [Final Proposals](#), Section 3, paragraph 9.127. See also [Final Decision, Section 3](#), paragraph 9.86.

pandemic-like shocks by reference to the COVID-19 pandemic. With regard to Fraport and ADP, the CAA responded that the length of the price control does not carry automatic implications for risk exposure in either direction. A shorter price control merely substitutes regulatory reset risk for the risk associated with forecast error. With regard to AENA, the CAA submitted that AENA did not benefit from any meaningful traffic risk sharing mechanism at all.⁶³⁵

6.214 We consider that the CAA was entitled to take the view that the comparator airports did not benefit from shock mitigation mechanisms:

- (a) With regard to Fraport and ADP, we agree with the CAA that the one-year price controls in place in those airports are not of a nature that protect these airports from traffic risk in a comparable way to the TRS. We have not been provided with evidence that there is any explicit mechanistic commitment to share revenue gains or losses in response to traffic shocks. We also note that both Fraport and ADP were used as comparators to estimate the beta for HAL at Q6 (which did not include the TRS) without any adjustment for differences in risk sharing arrangements.
- (b) With regard to AENA, we do not agree with HAL that the fact that AENA made an application for the recovery of funds (which would be an economically rational thing to do even if the application had a low chance of success) shows that investors would expect that the arrangements applying to that airport were equivalent to those the CAA proposes for HAL. We also note the CAA's observation that the Spanish Government rejected that application. We therefore agree that there is no explicit mechanistic protection against traffic risk which is comparable to the TRS for HAL.

Quantification of the TRS adjustment

6.215 Next, we turn to a consideration of the quantification of the TRS adjustment. As set out above, HAL submitted that the TRS adjustment is too large, while the Airlines submitted that the adjustment is too small. We consider each of the appellants' arguments in turn, with consideration of the relevant subpoints raised by each.

6.216 The CAA explained that due to there not being observable benchmarks with which to estimate the extent of the reduction in systematic risk exposure (since no other listed hub airport has a similar TRS mechanism in place), it relied on:

- (a) benchmarks from other regulated sectors that are not exposed to demand risk, namely, recent asset beta determinations from Ofgem's transmission and gas distribution price reviews (RIIO-T2/GD2) and PR19;

⁶³⁵ Hoon 2, paragraph 21.14.

- (b) a judgement regarding the proportion of the difference between airport and utility asset betas that is attributable to volume risk alone. This was based on an observation by the CAA that volume risk was likely to be the predominant driver of differences in asset beta between network utilities and airports, but that other factors (such as commercial revenue risk) could also have a non-trivial impact; and
- (c) a judgement regarding the extent to which the H7 TRS mechanism would reduce volume risk. This was based on analysis the CAA conducted of the impact of the TRS in the event of simulated pandemic and non-pandemic shocks.⁶³⁶

6.217 HAL and the Airlines made detailed submissions (as set out in the submissions section above) in relation to points (a) and (b), which we consider in turn. In assessing the arguments, we note that the absence of a share price listing for HAL makes quantifying the TRS adjustment inherently challenging and a matter of appreciation rather than objective observation, and therefore inevitably requires a significant degree of regulatory judgement.

Benefit of TRS mechanism compared to scale of asset beta adjustment

6.218 We note the submissions made by HAL with regard to a comparison of the 'cost versus benefit' of the TRS adjustment as set out at paragraph 6.170 above.

6.219 The CAA responded that HAL was not comparing like with like. The estimated benefit from the TRS represented an avoided expected loss whereas the reduction in the asset beta represented an avoided risk premium. In the absence of the TRS, the asset beta would need to be increased by an equivalent of £98 million per year and the asymmetric risk allowance would need to be increased by £81 million per year, such that the total benefit of the TRS is the sum of these two figures, which the CAA has passed on in full through lower charges. The relative scale of these adjustments was not informative of whether the estimated impact of the TRS on the asset beta was too large (or too small).⁶³⁷

6.220 We agree with the CAA's observation that HAL's is not a like-for-like comparison. HAL compares a risk premium to the expected cash flow from the TRS. We also note that for symmetric non-pandemic type risks the expected 'benefit' from the TRS is zero assuming traffic forecasts are unbiased. However, it would still be appropriate to reflect the reduced variance in expected cash flows in response to lower (non-pandemic) demand risk in the asset beta. This illustrates why this type

⁶³⁶ Hoon 2, paragraph 7.18.

⁶³⁷ Hoon 2, paragraph 21.8.

of 'cost versus benefit' analysis is not informative of the likely impact of the TRS on the asset beta.

Operational gearing

- 6.221 Our starting point is that the TRS reduces the volatility of cash flows in response to demand shocks by reducing losses/limiting gains in downside and upside scenarios. Given the level of protection offered by the TRS, this impact on the beta is likely, in our view, to be material. We discussed our reasoning regarding the overall decision to apply a downward adjustment at paragraphs 6.204 to 6.209 above.
- 6.222 We next consider HAL's submissions on operational gearing. As set out earlier (see paragraph 6.173), HAL's submission on this point was that the TRS mechanism would only reduce its operational gearing by 1.3%. That, HAL said, implied a reduction of only 0.002 on the CAA's beta estimate.
- 6.223 We begin by noting that there is not a single definition of operational gearing, but in simple terms, if a firm has relatively low profit margins (eg low EBIT margins), a revenue shock will have a proportionately bigger impact on its profits than for a firm with higher profit margins. Therefore, firms facing similar demand risk might have different betas depending on their cost structure.
- 6.224 However, we also observe that the principal way in which the TRS reduces risk is by reducing revenue volatility in response to (systematic) demand shocks, ie it reduces exposure to demand risk. While the TRS can be thought of as having a similar effect as a reduction in operational gearing, we consider that the evidence HAL provided to quantify the impact is of relatively limited relevance and does not indicate a clearly superior assessment to that applied by the CAA. The evidence cited by HAL is context-specific and highlights the challenges of calibrating the adjustment to the beta in this way. Further, this is complicated by the fact that the change in the sensitivity of profits to traffic shocks is not constant across all traffic scenarios – the TRS does not operate to change HAL's operational gearing in a deterministic way. We explain these points as to the nature and relevance of the evidence cited by HAL in more detail below.
- 6.225 First, HAL's reference to academic literature is based on one paper from 1996 which uses data for US firms from the 1960s to the 1980s in three industries: utilities, automobile manufacturers, and airlines. While the paper finds a positive relationship between operational gearing and systematic risk, we do not consider that the estimated elasticities are in any way informative of the likely quantitative impact of the TRS on HAL. At best, this evidence suggests that there is some empirical support for the intuition that changes in operational gearing might be correlated with the beta.

- 6.226 Second, HAL references the PR14 regulatory precedent. HAL argued that the analysis from PR14 illustrates that higher operational gearing translates to a higher asset beta, and that the scale of the change in operational gearing as compared to the asset beta adjustment is incorrect based on the PR14 precedent. Again, we consider the analysis from PR14 to be context-specific – it was recognised at the time to be a subjective exercise, and in the PR19 Bristol Water appeal, such an adjustment was not applied at all.⁶³⁸
- 6.227 In response to our Provisional Determination, HAL submitted that the PR19 decision illustrates that the CAA was wrong because in that case higher operational gearing was not translated into an uplift in asset beta.⁶³⁹ In our view, this further shows why such analysis needs to be considered in the context of the specific case. In the case of Bristol Water, the main question was whether, as a smaller water-only company, there was evidence that equity investors demanded a higher rate of return relative to the bigger water and sewerage companies in the sector. While some arguments were considered through the lens of operational gearing, there were other relevant factors, and at PR19 the available evidence did not provide support for the argument that investors needed a higher return to invest in Bristol Water. This highlights that adjustments in other cases are liable to have little relevance when it comes to assessing the likely impact of the TRS on HAL’s asset beta.
- 6.228 The CAA’s approach, while inevitably based on its judgement, draws on evidence that is more specific to HAL, in particular, the CAA’s assessment of the impact of a reduction in demand risk on asset beta by linking to its assessment of the impact of the TRS on HAL’s cash flows (discussed at paragraphs 6.218 to 6.220 above).
- 6.229 Accordingly, given the limitations of the evidence cited by HAL in support of an alternative assessment, our view is that the CAA’s downward adjustment was not an error.

Quantification of the volume risk differential between HAL and network utilities

- 6.230 We have considered the points put forward by both the Airlines and HAL (as intervener) in making our assessment on the CAA’s quantification of the TRS adjustment to the asset beta. We agree with the Airlines that demand risk is likely to be the key differentiator between HAL and network utilities for the reasons they advanced. However, we also consider that there is merit in HAL’s argument that there are other variables that are likely to impact the beta of HAL. For example,

⁶³⁸ See: CMA, [PR19 Final Report](#).

⁶³⁹ HAL Response to PD, paragraph 114(f). In this regard, we also note an inherent inconsistency in HAL’s arguments. In other parts of its case, HAL submitted that operational gearing is a factor affecting systematic risk, and one that clearly points to HAL being higher risk than comparator airports by some margin. For example, see: King 1, paragraphs 106–107.

other factors such as cost risks and different drivers of long-term demand may impact beta, meaning that we do not judge it appropriate to conclude that the beta of HAL and network utilities would align in the absence of demand risk.

6.231 On this basis, we find that the CAA was not wrong to decide that traffic volume was the predominant driver of the differential, but also not wrong to choose an upper bound of less than 100%. We also conclude that the CAA was not wrong to adopt a range of 50-90%. The CAA had to exercise regulatory judgement in this regard. It did so based on its reasoned view as to traffic volume risk as the predominant driver of the relevant differential, but with reasons for assessing that difference to be less than 100%. The evidence advanced by the Airlines and HAL does not show that the CAA's reasoning and approach was wrong. The CAA did not therefore err in fact or law and nor did it make an error in exercising a discretion. It made a judgement within its margin of discretion for which there was not a clearly superior alternative that it should have adopted. We set out relevant elements of our assessment in more detail in the following paragraphs.

Impact of the TRS on volume risk

6.232 HAL submitted that it was unclear how the CAA reached its view that 50% of systematic traffic risk is mitigated by the TRS.⁶⁴⁰

6.233 The CAA assumed that the TRS would reduce HAL's exposure to traffic risk by 50%, on the basis that the TRS sharing factors insulate HAL from approximately half of possible traffic-related cash-flow losses/gains under plausible (non-pandemic) traffic shocks (paragraph 6.28(c)). The CAA stated in its Response that the TRS would protect HAL from around 43 to 45% of the expected impact on its EBITDA of traffic levels being up to 10% higher or lower than expected. The CAA further stated in its Response that it had estimated that the TRS would insulate HAL from 83% of EBITDA impact of a future pandemic-like event, that would occur once every 20-50 years, which would further increase the protection by 3% (based on a 3.5% annual probability of a pandemic occurring), implying a total level of protection of 46 to 48%. To avoid spurious accuracy, the CAA rounded the figure to the nearest 10%.⁶⁴¹

6.234 We note that Oxera, on behalf of HAL, submitted various analyses implying that the level of protection from the TRS is much smaller. For example, it estimated that under CAA's low traffic scenario, the EBITDA protection would be only c.13.9% during the H7 price control period, with the remainder accrued as part of end-of-period RAB adjustment.⁶⁴²

⁶⁴⁰ King 1, paragraph 103.

⁶⁴¹ Hoon 2, paragraph 21.37.

⁶⁴² Hope 1, paragraph 4.25.

- 6.235 In our view, while the precise impacts on EBITDA are unknown and require making some assumptions about the relative elasticities of costs and commercial revenues in response to a volume shock, the CAA based its estimate on the available evidence specific to HAL and there is no other clearly superior evidence on which it could have relied.
- 6.236 Oxera's analysis focuses exclusively on the impact in H7 and ignores the net present value of losses that can be recovered in future price controls. The asset beta captures the sensitivity of overall firm value to systematic shocks. In our view it is therefore important to take into account the full impact on the net present value of future cash flows. The CAA's approach is clearly more appropriate in this regard.
- 6.237 We discussed our views in relation to the uncertainty of recovery of losses in future price controls at paragraphs 6.207. In this context, we note the CAA's observation that, earlier in the H7 process, HAL argued that a RAB adjustment (of the type similar to the end-of-period closing RAB adjustment as part of the TRS) would lead to a material reduction in the asset beta.⁶⁴³

Choice of network utilities as comparators

- 6.238 HAL disagreed with the use of network utilities as comparators. As set out at paragraphs 6.169 and 6.177, HAL highlighted a number of reasons as to why it did not consider network utilities to be an appropriate benchmark. HAL submitted its view that the market characteristics and regulatory frameworks of those utilities mean that they are not 'robust' reference points. Further, HAL disagreed with the CAA's position that the nature of network utilities being 'asset heavy' and having 'long-lived assets' makes them a useful comparator for HAL.⁶⁴⁴
- 6.239 We acknowledge that network utilities and HAL operate in different industries, and that the nature of the service provided differs (for example, network utilities provide essential goods while HAL provides a discretionary service), meaning that any comparison will be imprecise.⁶⁴⁵ However, there are also similarities between network utilities and HAL, which the CAA took into account.⁶⁴⁶ Further, there is also a relatively established view on the level of the asset betas for network utilities (to the extent that there are regulatory decisions which can be relied upon), which can at least form a starting point in any assessment of the potential reduction in risk due to HAL facing lower demand risk under the TRS. Having

⁶⁴³ Hoon 2, paragraph 21.10.

⁶⁴⁴ King 1, paragraph 98.

⁶⁴⁵ King 1, paragraphs 97–102.

⁶⁴⁶ Those include, as the CAA noted at [Final Proposals, Section 3](#), paragraph 9.154, 'that they are asset-heavy businesses with significant operating margins under normal business conditions; their assets are generally long-lived, with a correspondingly long payback period and duration; they are natural monopolies subject to price caps that are reset with similar frequency to HAL's; and they are subject to incentive regulation that encourage them to reduce cost and service quality with corresponding opportunities to earn additional rewards if they outperform regulatory assumptions.'

regard to those points, the CAA cannot, in our view, be said to have been wrong to treat them as comparators in the way that it did as part of an assessment of how volume risk may impact HAL.

Translation of volume risk to the asset beta

- 6.240 HAL stated that the CAA's approach which assumes that any reduction in volume risk leads to a commensurate reduction in the asset beta has no support.⁶⁴⁷ HAL also said that the CAA wrongly assumed that the contribution of demand risk for utilities to systematic risk is non-negative, and that there is no fixed relationship between asset beta and variance of revenue under CAPM.⁶⁴⁸
- 6.241 The CAA responded that HAL had misrepresented the CAA's approach. In particular, while the CAA assumed that the TRS reduced volume risk by 50%, this only resulted in a 14% reduction in the asset beta.⁶⁴⁹
- 6.242 In considering this subground, we note that the CAA reduced its stage 2 asset beta range of 0.51 to 0.72 by 0.08 to 0.09 to account for the impact of the TRS. The assumed impact on the asset beta is clearly less than the 50% stated by HAL, which is useful for context.
- 6.243 Having said this, there is an implicit assumption in the CAA's analysis that the gap between network utilities' betas and HAL which arises due to volume risk (and is estimated at 50 to 90%) could be closed by 50% given the introduction of the TRS.
- 6.244 We acknowledge that the CAA has estimated the 50% reduction in volume risk from the TRS using its estimates of total cash-flow protection from the TRS. We accept that not all traffic shocks will necessarily be systematic, and as such, this assumption is inevitably an approximation. However, it was a judgement the CAA was entitled to make based on its reasonable estimates of the relevant protection in the absence of other clearly superior evidence.
- 6.245 We observe in support of our assessment that the CAA's post-TRS asset beta range (0.44 to 0.62) and the H7 point estimate (0.53) are still some way above the network utilities', providing a high-level sense check on the CAA's approach. This still leaves sufficient margin for other risk factors explaining the difference between utilities and HAL.

Our view on the CAA's quantification of the TRS adjustment

- 6.246 We draw the above points together as follows. The quantification of the TRS adjustment was an exercise which entailed a significant element of judgement on

⁶⁴⁷ [HAL NoA](#), paragraph 209.

⁶⁴⁸ King 2, paragraphs 5.5-5.6.

⁶⁴⁹ Hoon 2, paragraph 21.34.

the part of the CAA. We consider that its reasoning was underpinned by appropriate facts and evidence and that neither HAL nor the Airlines have demonstrated that there was a clearly superior alternative which the CAA ought to have adopted. Accordingly, we conclude that the CAA was not wrong to estimate that the impact of TRS was to reduce HAL's asset beta by 0.08 to 0.09.

Conclusions on stage 3 (TRS)

6.247 For the reasons given above, we find that the CAA was not wrong as alleged by either HAL or the Airlines in relation to the TRS and stage 3 of its asset beta calculation. We determine that the CAA was not wrong in law, in fact or in the exercise of a discretion in this regard.

Section C: HAL's additional submissions

HAL's submissions

6.248 Having considered the individual steps comprising the calculation of the asset beta, we turn next to the points raised by HAL on the consideration of the asset beta point estimate. HAL raised three key points in relation to this:

- (a) The implied unlevered cost of equity is lower than the cost of debt;
- (b) The CAA should have 'aimed up' in the asset beta range for consumer welfare reasons; and
- (c) Broader changes in the market demonstrate that the asset beta should be higher. In particular: (i) comparison to the NATS decision; (ii) comparator betas; and (iii) structural changes in the market.

6.249 In more detail, HAL made the following submissions:

- (a) The CAA's overall cost of equity estimate was demonstrably wrong because the unlevered cost of equity was below HAL's (and other companies') observed cost of long-term debt, which HAL considered breached economic and corporate finance first principles.⁶⁵⁰ That was borne out by a more systematic comparison of asset and debt risk premia (the 'ARP-DRP differential') carried out by Oxera. HAL said the most important contributing factor to this was the CAA's estimate of Heathrow's asset beta.⁶⁵¹

⁶⁵⁰ [HAL NoA](#), paragraph 151–152.

⁶⁵¹ [HAL NoA](#), paragraphs 3.2 and 150–152.

- (b) For the above reason, and for reasons of consumer welfare and relative risk, the CAA should have chosen a point estimate for the asset beta that sat well above the midpoint of the observed ranges.⁶⁵²
- (c) The CAA's asset beta did not stand up against reasonable comparators, implicitly assuming that, from an investor's perspective, Heathrow was less risky than other airports or than it was before the COVID pandemic.⁶⁵³ HAL's asset beta is at the bottom of the range of 0.49–0.84 of comparator airports' observed asset betas, well below the observed values of 0.68–0.84 for Aena, the airport operator with the most comparable regulatory framework, and at the bottom end of the range the CMA identified for airports in February 2020, pre-Covid. It is in line with the asset beta of 0.50 assumed in the previous price control period, based on pre-2014 data, despite significant structural changes since then including the break-up of BAA and the resulting increase in competition for Heathrow.

6.250 In response to our Provisional Determination, HAL reiterated its position by noting that if the cost of unlevered equity is below the cost of debt, the cost of equity is too low and will lead to consumer detriment irrespective of the notional 'rightness' of the approach that got to that position. It submitted that the CAA's decision fails this cross-check and it is down to the asset beta (which HAL considers to be 'built up from poorly evidenced and arbitrary assumptions') being too low.⁶⁵⁴

6.251 HAL told us that the CAA failed to consider how the unlevered cost of equity compared to the cost of debt, and that in not giving the ARP/DRP analysis sufficient review, the CAA did not consider the impact of its choice of asset beta on financeability, which is an error.⁶⁵⁵

CAA response to HAL's additional submissions

6.252 Regarding HAL's implied cost of equity argument (paragraph 6.248(a) above), the CAA denied that HAL had demonstrated that its overall cost of equity calculation was wrong. The CAA submitted that Oxera's framework was not capable of accurately estimating the relevant variables on a consistent basis. In particular, the CAA submitted that Oxera's framework was unstable and that if different time-frames for analysis were adopted the CAA's decision provided an adequate return.⁶⁵⁶

6.253 Regarding HAL's 'aiming up' argument (paragraph 6.248(b) above), the CAA submitted that there was common ground between HAL and the CAA that welfare

⁶⁵² [HAL NoA](#), paragraph 186–190.

⁶⁵³ [HAL NoA](#), paragraph 155–156.

⁶⁵⁴ HAL Response to PD, paragraph 108.

⁶⁵⁵ HAL Response to PD, paragraphs 96–97.

⁶⁵⁶ [CAA Response](#), paragraphs 136–139.

effects can represent a prima facie reason for aiming up, but the choice of point estimate must ultimately be a regulatory judgement taking into account the relevant facts and views rather than a mechanistic process.⁶⁵⁷ The CAA had explained its view on systematic risk in addressing HAL's other arguments, and that there was no skew in the CAA's estimate of asset beta that required remedying by aiming up. CAA also submitted that asymmetry in systematic risk was addressed through the application of the Shock Factor to the passenger forecast and the asymmetric risk allowance. In addition, HAL's argument that the length of the price control period is relevant was misguided, because shorter price controls would substitute regulatory reset risk for forecasting risk. Lastly the CAA submitted that there was no evidence that exposure to domestic traffic mitigated systematic risk.⁶⁵⁸

- 6.254 Regarding HAL's 'comparators' argument (paragraph 6.248(c) above), the CAA submitted that the comparators put forward by HAL were not appropriate. The CAA also submitted that HAL placed unreasonable weight on pandemic-affected data.⁶⁵⁹

Interveners' submissions in response to HAL's additional submissions

- 6.255 The Airline Interveners submitted that HAL's arguments that the nominal cost of equity should, as a matter of principle, be greater than the cost of debt were flawed.⁶⁶⁰
- 6.256 As regards HAL's arguments that it would be appropriate for the CMA to aim up, the Airline Interveners submitted that not only did the factors suggested by HAL fail to evidence a need for aiming up, but HAL failed to consider other key factors which were critical to a decision of aiming up or down in the context of consumers' interest (and which supported a case for aiming down).⁶⁶¹
- 6.257 We now consider each of the points noted at paragraph 6.248 above in turn.

Comparisons to the cost of debt

- 6.258 HAL submitted that the CAA should have cross-checked its estimate of the cost of equity, by considering how the unlevered cost of equity compares to the cost of debt. HAL stated that since the risk associated with the unlevered equity is higher than the risk associated with investing in debt, the cost of unlevered equity should be higher than the cost of debt.⁶⁶²

⁶⁵⁷ [CAA Response](#), paragraph 186.2.

⁶⁵⁸ [CAA Response](#), paragraph 186.3.

⁶⁵⁹ [CAA Response](#), paragraphs 140-141.

⁶⁶⁰ [BA Nol](#), paragraph 3.2.2a and Delta Nol paragraph 3.14.

⁶⁶¹ [BA Nol](#), paragraph 3.2.2e(iii) and Delta Nol paragraph 3.18(c).

⁶⁶² King 1, paragraph 23.

- 6.259 We observe that, as a matter of principle, this type of comparison is intuitively appealing and may provide a useful cross-check on the CAA's analysis, but we also note that that it is very difficult to produce a like-for-like comparison, meaning the results need to be interpreted with caution.
- 6.260 We first consider HAL's submission that the CAA's asset beta estimate can be demonstrated to be wrong by comparing HAL's overall unlevered cost of equity and the current cost of debt. We then consider Oxera's asset risk premium – debt risk premium (**ARP-DRP**) framework. The ARP is the asset beta multiplied by the equity risk premium (**ERP**), and represents the unlevered cost of equity less the risk-free rate. The DRP is the expected cost of debt less the risk-free rate.

Comparisons to the current cost of debt

- 6.261 HAL compared the CAA's unlevered nominal cost of equity to the cost of HAL's two bonds issued on 14 November 2022 (but which were priced in October). HAL inferred that the CAA's Retail Price Index (**RPI**)-real cost of equity of 3.38% would translate into a nominal cost of equity of 6.2% based on the CAA's long-term inflation assumption of 2.73%. The two HAL bonds were issued at a cost of 7.03% (30-year) and 7.11% (10-year) respectively. Since HAL bonds were issued at a higher cost than 6.2%, HAL stated that it showed why the CAA's estimate of the cost of equity is too low.⁶⁶³ Oxera (on behalf of HAL) also noted that the yield on the iBoxx non-financials BBB 10+ index was 6.07% in November, which was only marginally below the CAA's cost of equity.⁶⁶⁴
- 6.262 We identify two limitations of such analysis. First, the comparison of the unlevered cost of equity is to the promised cost of debt and not the expected cost of debt, meaning that the comparison is not undertaken on a like-for-like basis. The expected cost of debt is lower than the promised yield, to account for the probability of default and loss given default. Second, we are also of the view that nominal bond yields at the point of comparison may have been affected by heightened uncertainty around long-term inflation and that nominal bonds yields would also include an inflation risk premium.⁶⁶⁵ A comparison to the nominal cost of equity based on the CAA's long-term inflation assumption is therefore not a like-for-like comparison which should properly be used to indicate that the CAA's asset beta estimate was wrong.

ARP-DRP framework – methodology and evidence presented

- 6.263 The ARP-DRP analysis put forward by Oxera on behalf of HAL provides a more sophisticated (and potentially more accurate) comparison than the simple

⁶⁶³ King 1, paragraph 27 and table 2.

⁶⁶⁴ Hope 1, paragraph 2.5.

⁶⁶⁵ The CAA and AlixPartners make similar points in their submissions.

comparison between the unlevered cost of equity and the cost of debt. We note the following points about it.

- 6.264 First, Oxera accounts for the difference between the promised and the expected cost of debt by subtracting 30bps from the observed yields. HAL submitted that the 30bps was estimated with reference to Moody's and academic data and 'consistent with a similar exercise conducted by the [Competition Commission].'⁶⁶⁶
- 6.265 In our view, there is no widely accepted methodology for estimating the underlying debt risk premium observed in bond yields. We note that while there are methodologies for estimating the probability and the loss given default, estimating the underlying debt risk premium is not without uncertainty or judgement. In that same report cited by HAL, the Competition Commission (**CC**) also estimated a separate liquidity premium for corporate debt, to be deducted from the observed yields, implying that there could be other factors which drive a difference between the promised yield and the underlying debt risk premium.⁶⁶⁷
- 6.266 Second, Oxera uses nominal gilt yields as a measure of the risk-free rate to calculate the ARP. This may partially address the inflation comparability issue as inflation uncertainty would affect both nominal government bond and corporate bond yields. However, Oxera then estimates the ERP by subtracting this nominal RFR from a nominal Total Market Return (**TMR**) derived using the CAA's long-term inflation assumption of 2.73%. This leads Oxera to use an ERP of 4.67% in its ARP-DRP analysis rather than the 5.26% figure from the H7 decision.⁶⁶⁸
- 6.267 Based on this amended framework, Oxera estimated an ARP-DRP differential of 70bps compared to the iBoxx index and a negative differential of 30bps compared to HAL's bond issuances. Had Oxera used an ERP of 5.26%, consistent with the H7 decision, the estimated ARP-DRP differential would be higher, at 1.0% compared to the iBoxx index and zero relative to HAL's bonds.
- 6.268 The CAA responded that October and November 2022 was a period of significant market turbulence that followed the Chancellor's autumn mini-budget and this was a 'highly atypical' period in gilt and bond markets. It noted that it would have been more appropriate to examine data from the first few months of 2023 instead.⁶⁶⁹
- 6.269 Oxera also estimated the ARP-DRP differential for Q6 to be 2.05%. It suggested that the reduction in the ARP-DRP differential since Q6 was further evidence why the CAA's estimate of the cost of equity is too low. It stated that the increase in

⁶⁶⁶ HAL Response to PD, Annex section B1 (row 5), page 3.

⁶⁶⁷ Competition Commission, [BAA Ltd Report on the economic regulation of the London airports companies \(September 2007\), Appendix F: Cost of Capital](#), Table 5.

⁶⁶⁸ [Final Decision, Section 3](#), Table 9.6.

⁶⁶⁹ Hoon 2, paragraphs 17.5 and 17.6.

yield spreads is reflective of the increase in risk of airport assets in the market and that the CAA has not compensated for that in its cost of equity allowance.⁶⁷⁰

6.270 The CAA responded to the foregoing point by providing an equivalent calculation for Q5, which it noted was calibrated by the CMA's predecessor, the CC, observing that interest rates were broadly at a similar level to today. The CAA estimated an ARP-DRP differential of 1.20%.⁶⁷¹ The CAA stated that the implication of this assessment is that the ARP-DRP differential, and the gap between the cost of equity and the cost of debt more generally, while smaller than in the recent past, is merely reverting to its normal level as interest rates revert back to their normal levels.⁶⁷²

6.271 We now turn to our assessment of the various evidence and arguments.

The relationship between the ARP, the DRP and the ERP

6.272 The ARP is a function of the asset beta and the ERP. The CAA's methodology (consistent with other regulators and recent CMA precedent) assumes that the TMR is relatively stable through time (a 'through the cycle' approach), leading to a relatively stable real cost of equity allowances between regulatory decisions. The implication is that the ERP falls when interest rates rise and vice-versa. This means that the ARP (for a given level of the asset beta) will generally fall when interest rates rise and vice-versa. The interest rate environment is also likely to affect the DRP as debt spreads, for a given credit rating, are unlikely to be constant over time and are likely to be affected by the general macroeconomic environment.

6.273 Turning to the specific evidence presented by HAL and the CAA, the implied ARP was 2.04% in Q5, 2.78% in Q6 and 2.40% in H7 (or 2.70% if we correct for the ERP issue identified above). The corresponding levels of the DRP presented to us by HAL and Oxera for the same set of decisions are 0.84%, 0.73% and 1.71%.⁶⁷³

6.274 While the implied ARP-DRP differential is narrower in H7 compared to Q6, it is broadly similar to the differential in Q5.

6.275 Had the ARP-DRP framework been used to cross-check recent regulatory determinations which post-date Q6 when interest rates were very low, it would have likely shown a significant difference between the allowed cost of equity and the spot cost of debt at the time. The observation that the ARP-DRP is narrowing

⁶⁷⁰ Hope 1, paragraph 2.22 and 2.23.

⁶⁷¹ Hoon 2, paragraph 17.9.

⁶⁷² Hoon 2, paragraph 17.10.

⁶⁷³ See Hoon 2, table 3 and Hope 1, table 2.1.

reflects our earlier observation that it will change depending on the prevailing macroeconomic conditions.

- 6.276 In response to our Provisional Determination, HAL stated that there is a circularity to this logic and that on occasions where the risk premium in the cost of equity is too low such that the cost of equity falls below the cost of debt, it follows that the asset beta should be increased. HAL also said that if we were to uphold the CAA decision, this would imply the CMA has not correctly appreciated the impact of the cross-checks on the CAA's estimates for the asset beta and the cost of equity.⁶⁷⁴
- 6.277 In our view, all the evidence shows is that the differential is unlikely to be constant over time (which we do not find surprising), but it is not clear to us that we can infer anything specific about the level of the asset beta from this comparison. The implied ARP in the cost of equity allowances for HAL has been relatively stable over time (a movement of less than one percentage point given the underlying uncertainty in the ERP is not particularly surprising or unusual). While debt spreads are currently relatively higher compared to Q5/Q6 levels, some fluctuation over time is also to be expected and there could be many factors behind that. Working out the underlying debt risk premium from the observed spreads is not without its challenges, and the estimates which have been provided to us are still below the implied risk premium in the cost of equity.

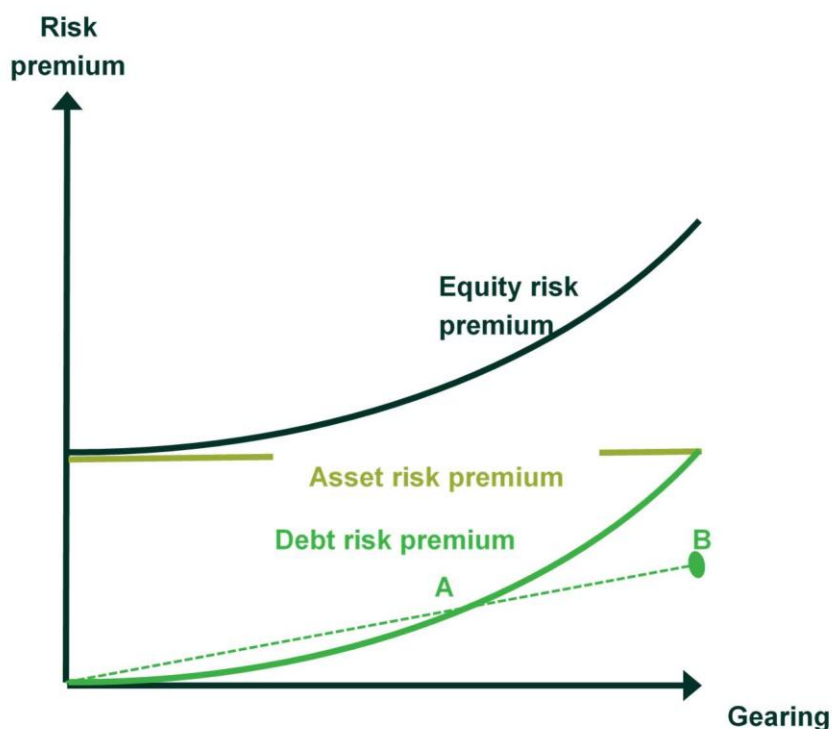
ARP-DRP framework – Oxera's argument that linear extrapolation provides a minimum bound

- 6.278 Oxera suggested using the implied DRP at 100% gearing as a minimum bound for the ARP, by assuming a zero DRP at 0% gearing and interpolating between the origin and the DRP at 60%. HAL submitted that the correct conclusion from this analysis is that linear extrapolation provides a minimum bound. It told us that, as the ERP and DRP are convex functions, this linear extrapolation is useful to impose a floor to the ARP, which should be strictly greater than the extrapolated DRP. HAL submitted that where the ARP is below this floor, the cost of equity would be too low.⁶⁷⁵ This is illustrated in Figure 6.8 below.

⁶⁷⁴ HAL Response to the PD, paragraphs 99-101.

⁶⁷⁵ HAL Response to PD, paragraph 106.

Figure 6.8: The relationship between risk premia and gearing



Source: Hope 1, H7 appeal: cost of capital, Oxera, 13 April 2023, Figure 2.2.

6.279 In relation to this argument we note that Oxera relies on a single observation (point A in the graph) to estimate the linear DRP function. This data point is based on yields on the iBoxx BBB+ index less 30bps. The yield on the iBoxx index reflects yields on bonds included in the index issued by companies, while all rated BBB, but with somewhat different risk profiles and different levels of gearing. Therefore, there is significant uncertainty as to which gearing level the DRP calculated by Oxera should correspond to in Figure 6.8 above. Further, as noted by AlixPartners on behalf of the Airline Interveners, it is unlikely that the first tranche of debt for a previously unlevered company will be at (or near close to) the risk-free rate.⁶⁷⁶ Taken together, these factors imply that the slope of the dotted line can be quite different to the example above, and that the value of point B in the graph is also very uncertain.

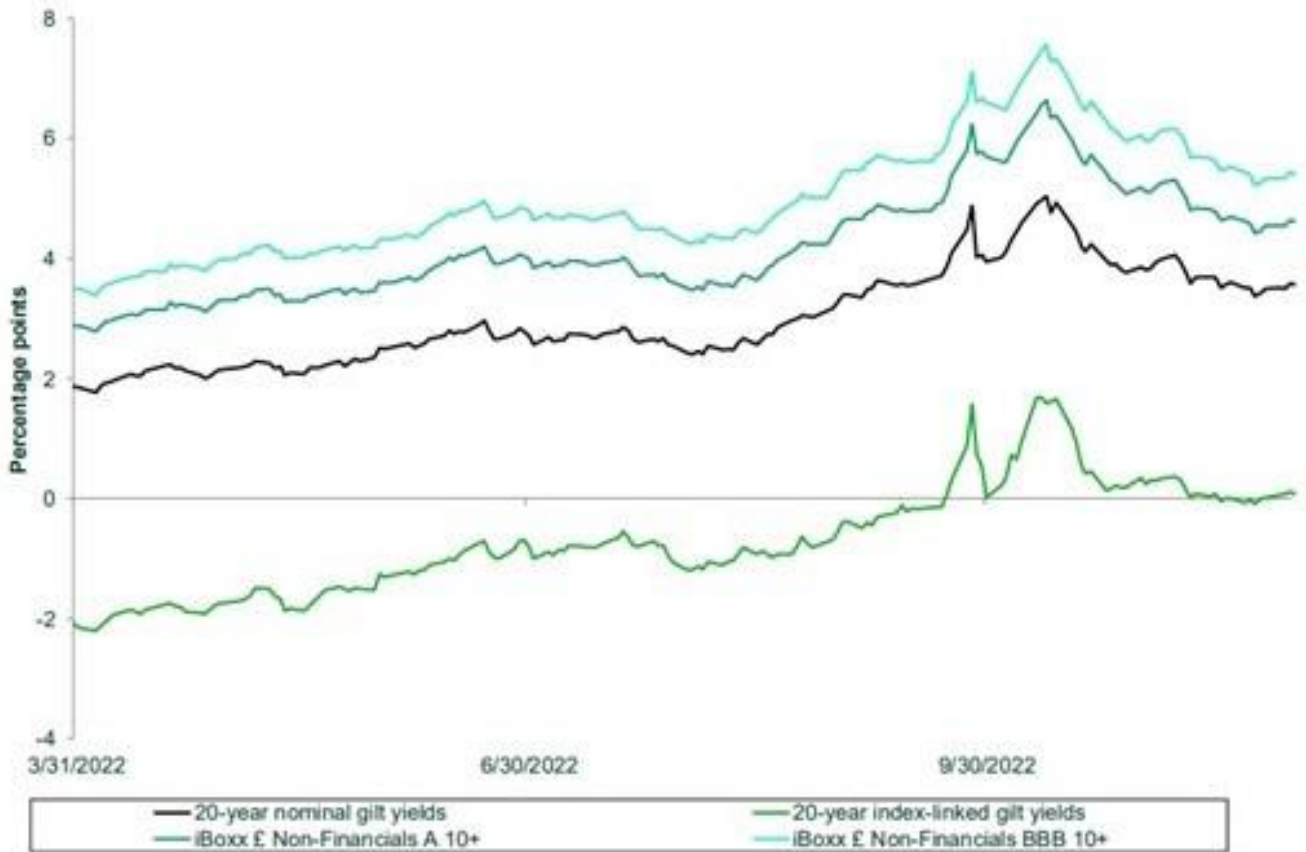
6.280 In our view, this further shows that estimating the underlying debt risk premium in the observed cost of debt – which is truly comparable to the risk premium in the cost of equity – is subject to significant uncertainty. Therefore, we do not place much weight on Oxera's arguments relating to linear extrapolation providing a minimum bound. We do not consider that we can rely on these arguments to infer that the asset beta (and the cost of equity) estimated by the CAA was wrong.

⁶⁷⁶ AP Intervention Report, paragraph 49(b).

Recent market volatility

6.281 As the CAA progressed through the H7 consultation process, the interest rate environment changed significantly (as can be seen in Figure 6.9 below).

Figure 6.9: Gilt yields and iBoxx GBP non-financials A and BBB 10+ indices yields (%)



Note: 31/03/2022 shows the cut-off date for the CAA's analysis underlying the Final Proposals. Source: Oxera analysis based on data from Thomson Reuters Datastream and Bank of England

Original source was an analysis by Oxera based on data from Thomson Reuters Datastream and Bank of England.

Source: Hope 1, H7 appeal: cost of capital, Oxera, 13 April 2023, Figure 2.1.

6.282 HAL submitted that the one-month's data between 18 October and 17 November 2022 was the same data period which the CAA used to estimate the risk-free rate and the cost of new debt, and that it is not credible for the CAA to now argue that the same period is not appropriate for assessing the difference between the cost of equity and debt.⁶⁷⁷

6.283 While we agree that it would not be appropriate to completely disregard the data in that one-month period, we also note that the data clearly shows that the interest rate environment continued to be uncertain in the lead up to the CAA's Final Decision. It also clear from the data that the ARP calculated at any other point in the lead up to the CAA's Final Decision would have produced a higher ARP than

⁶⁷⁷ HAL Response to PD, paragraph 102.

the values calculated by Oxera.⁶⁷⁸ Further, the ARP-DRP was still positive even using the November data when using the iBoxx non-financials BBB 10+ index as the cost of debt. We would not place much weight on the actual cost of HAL's bonds as the pricing of specific debt issues could be affected by many factors specific to those bonds, for example, the demand for that specific bond.

6.284 In its response to our Provisional Determination, HAL also referred to a 10-year Euro denominated bond it issued on 5 July 2023. HAL calculated that (swapping into sterling and extending it to a 20-years' tenor) this produces an estimated yield of 6.67%, which it submitted was again higher than the CAA's unlevered cost of equity.⁶⁷⁹ We do not consider that this evidence is likely to have an important effect on the outcome of the appeal, either by itself or taken together with other matters, information or evidence. This is for the same reasons set out in the preceding two paragraphs which explain why we do not consider the HAL-issued bonds referred to therein to constitute persuasive evidence. We consider, therefore, that this evidence is inadmissible as it does not meet the criterion, contained in paragraph 23(3)(b) of Schedule 2 to the Act, and we do not comment upon it further.

ARP-DRP: conclusion

6.285 Taking account of the above points, our view is that while there is some evidence of a narrowing of the ARP-DRP differential, that evidence is not informative of whether the asset beta estimated by the CAA is too low.

6.286 The assumption that real equity returns do not respond one-for-one with the RFR is a generally accepted regulatory principle. This means when interest rates rise, the ARP is likely to fall. Comparing the ARP to the DRP is further complicated by the difficulty in isolating the underlying debt risk premium from the observed debt yield.

6.287 Accordingly, our view is that meaningful conclusions cannot be drawn on the appropriateness of the asset beta component of the cost of equity from the size of the ARP-DRP differential.

⁶⁷⁸ Alongside its Response, the CAA submitted an analysis of data from 25 March 2023 (which post-dated the CAA's Final Decision of 8 March 2023) which it submitted showed that the ARP-DRP differential by this point in time was clearly above Oxera's estimate of the minimum differential (Hoon 2, paragraph 17.6). In its Reply to the Response, HAL contended that this material was inadmissible pursuant to paragraph 23 of Schedule 2 to the Act. In addition, HAL submitted further data from 9 June 2023 which it contended undermined the CAA's evidence (HAL's Reply, Annex B(a)). In our Provisional Decision we did not comment upon the data post-dating the Final Decision as we did not rely upon it to reach our provisional view that HAL's ARP-DRP argument should fail. In its response to our Provisional Decision HAL reiterated its view that the CAA data was inadmissible (HAL Response to PD, paragraph 103). For the avoidance of doubt, we continue to consider that HAL's ARP-DRP argument should fail and neither the 25 March 2023 data nor the 9 June 2023 data have an important impact on this decision (either alone or together with other evidence). Accordingly, for completeness we consider both items of data to be inadmissible under paragraph 23 of Schedule 2 of the Act. If the data were admissible, then on balance we consider it would be marginally supportive of the CAA's case (but of no real significance).

⁶⁷⁹ HAL Response to PD, paragraph 104.

6.288 We therefore conclude that the ARP-DRP cross-check does not demonstrate that the CAA's estimate of HAL's asset beta was too low and thus wrong on any of the grounds HAL contended.

Aiming up for consumer welfare

6.289 We next consider HAL's submission that the CAA should have aimed up in the asset beta range for consumer welfare reasons.

6.290 In its Final Proposals, the CAA noted the analysis in the 2018 UKRN paper which suggested that the distribution of risks in welfare issues may be asymmetric and that the consequences of setting the WACC too low may outweigh those resulting from a WACC that is too high. Consequently, the CAA indicated that aiming up in the WACC range may be warranted on the basis of welfare considerations.⁶⁸⁰

6.291 Oxera, on behalf of HAL, submitted analysis which sought to quantify the degree of aiming up based on different assumptions around the potential proportion of investment at risk and the elasticity of demand.⁶⁸¹ As we discuss in more detail in chapter 8 (Ground B3 – Point estimate), we agree that welfare effects can be a reason to aim up. However, we observe that the numerous inputs required for such detailed calculation methodologies essentially require judgement themselves and a range of different assessments may reasonably be made of them. Further, we note that other mechanisms may also support investment incentives and these need to be factored into the choice of estimate. Consequently, the choice of point estimate is a matter for regulatory judgement and our view is that, on its own, the Oxera analysis is not sufficient to show that the CAA's choice of one specific parameter of the cost of equity (namely the asset beta) was wrong.

6.292 We set out our position on selecting the point estimate within the WACC range more fully in chapter 8. This later section provides our full assessment of issues related to aiming up or down and we do not repeat the discussion here.

Changes in the market

6.293 As set out at paragraph 6.249 above, HAL provided a number of broader comparisons which it said indicated that the asset beta (and cost of equity more broadly) was wrong. It referred to the NATS decision, comparator betas, and structural changes in the market. We note the CAA's position (as set out at paragraph 6.254 above) that it considered each of these points but came to the conclusion that they did not indicate a higher asset beta.

⁶⁸⁰ [Final Proposals, Section 3](#), paragraph 9.400-9.406.

⁶⁸¹ Hope 1, section 3D.3.

6.294 Our view is that, while these broader comparisons can provide useful cross checks on the asset beta/cost of equity, there are many different factors that can feed into an estimate of the asset beta. As we have been careful to note, estimating the asset beta is an exercise in which regulatory judgement must be applied to reach the best estimate with the available information. In this context, alternative estimates with different values can be calculated. Again, therefore, our view is that while these comparisons can provide useful cross checks, they do not indicate that the CAA made an error in determining its asset beta/cost of equity estimate.

Conclusions on HAL's additional submissions

6.295 HAL's additional submissions considered in this section were said to demonstrate that the CAA's estimate of the asset beta was wrong (too low). For the reasons outlined above, our view is that HAL's additional submissions do not indicate that the CAA has made an error in estimating HAL's asset beta.

Determinations on asset beta

6.296 For the reasons given above, and as set out in:

- (a) paragraphs 6.94, 6.247 and 6.295 in respect of HAL's appeal; and
- (b) paragraphs 6.158 and 6.247, in respect of the Airlines' appeals,

we determine that none of the appeals are allowed, and we confirm the Final Decision, in respect of the asset beta.

7. Ground B2: Cost of debt

Introduction

7.1 This chapter covers the errors the appellants alleged that the CAA committed in relation to the calculation of HAL's cost of debt within the estimation of the overall allowed WACC contained in the price control.

Background

7.2 The cost of debt component of the WACC reflects the return required to compensate debt investors for lending to a business. Unlike the forward-looking cost of equity, the majority of debt costs which are included in regulated charges are typically accounted for by interest costs on historical (embedded) debt already held by the business.

7.3 In contrast to the cost of equity, the cost of debt is more readily observable. However, there are numerous methodological and empirical issues associated with estimating the cost of debt. With debt typically representing more than half of total capital in regulated firms (and often significantly more), the impact of the various methodological choices can be material for the overall WACC.

7.4 The CAA estimated a cost of debt allowance to reflect the debt financing costs that the notional company is expected to incur in H7. It includes:

- (a) the cost of embedded debt (that is, debt that the notional company is assumed to have already issued at the start of H7);
- (b) the cost of new debt; and
- (c) issuance and liquidity costs (costs associated with issuing debt that are not captured directly within the base cost of debt allowance).

The Final Decision on cost of debt

7.5 The CAA's overall approach was to estimate the cost of debt by reference to costs that would be incurred by HAL under a notional capital structure.⁶⁸²

7.6 The CAA estimated a total RPI-real cost of debt of 0.67% for H7, based on:⁶⁸³

⁶⁸² [Economic regulation of Heathrow Airport Limited: H7 Initial Proposals, October 2021 - Civil Aviation Authority - Citizen Space](#) (Initial Proposals), paragraph 9.133.

⁶⁸³ [Economic regulation of Heathrow Airport Limited: H7 Final Decision Section 3: Financial issues and implementation \(caa.co.uk\)](#) (Final Decision), Table 9.6.

- (a) an RPI-real cost of embedded debt of -0.08%, accounting for 88.39% of total debt over H7;
- (b) an RPI-real cost of new debt of 4.22%, accounting for 11.61% of total debt over H7; and
- (c) issuance and liquidity costs of 25 basis points (**bps**).⁶⁸⁴

7.7 The CAA assumed that 70% of embedded debt of the notional company was nominal fixed-rate debt and 30% was index-linked debt.⁶⁸⁵ It also assumed that any new debt in H7 would be issued according to this 70:30 split.⁶⁸⁶

The cost of embedded debt

The cost of nominal fixed-rate debt

7.8 In the Final Decision, the CAA estimated the nominal cost of fixed-rate embedded debt as the sum of:

- (a) the 13.5-year trailing average of the yields on the iBoxx non-financials A- and BBB-rated 10+ year indices; and
- (b) a HAL-specific premium of 8bps calibrated based on a comparison of spreads on HAL's Class A bonds relative to the contemporaneous spreads on the above iBoxx indices.⁶⁸⁷

7.9 The CAA then deflated the nominal cost of embedded fixed-rate debt by the Office for Budget Responsibility's (**OBR**) November 2022 forecast of RPI inflation for H7 (equating to an average of 4.9% over the H7 period).⁶⁸⁸

The cost of index-linked embedded debt

7.10 In the Final Decision, the CAA estimated the 'nominal' cost of index-linked embedded debt as the sum of:

- (a) the nominal cost of fixed-rate debt set out above; and
- (b) an index-linked premium of 15bps.

⁶⁸⁴ One basis point is equal to 0.01% or 0.0001 in decimal form.

⁶⁸⁵ [Final Proposals, Section 3](#), paragraph 9.313.

⁶⁸⁶ [Final Proposals, Section 3](#), paragraph 9.349.

⁶⁸⁷ [Final Decision, Section 3](#), paragraph 9.92.

⁶⁸⁸ [Final Decision, Section 3](#), paragraph 9.40 and table 9.2.

7.11 The CAA then deflated the nominal cost of index-linked debt by an estimate of historical long-term RPI inflation expectations of 2.73%.⁶⁸⁹

The cost of new debt

7.12 As discussed in the next section, the only element of the cost of new debt which is subject to appeal is the cost of new index-linked debt.

7.13 Consistent with the approach taken to the cost of embedded index-linked debt, the CAA first estimated a cost of new 'nominal' fixed-rate debt and then added a premium of 15bps to arrive at its estimate of the cost of new index-linked debt.⁶⁹⁰

Grounds of appeal and issues for determination

7.14 HAL and the Airlines both appealed the Final Decision on the cost of debt, but on different aspects of the CAA's calculation.

HAL's appeal

7.15 In its NoA, HAL contended that the CAA's estimate of HAL's cost of embedded debt of -0.08% RPI real was unreasonably low and failed to provide HAL with an appropriate allowance to service that debt.⁶⁹¹

7.16 HAL alleged that the CAA made three specific errors:

- (a) an error of law and/or in the exercise of a discretion in using 'short-term' inflation forecasts to deflate the nominal cost of fixed-rate embedded debt (and therefore making a decision that was incompatible with its duties to act in a manner which will further the interests of users of air transport services, its 'Better Regulation Duties' (**Better Regulation Duties**) to act consistently and proportionately, and its duty to have regard to HAL's ability to finance itself);
- (b) an error of law, of fact and/or in the exercise of a discretion in calculating a HAL-specific yield premium of 8bps over the iBoxx corporate debt indices it used as a benchmark, relying on an approach which was not consistent with the credit rating of the notional company and instead used the cost of HAL's Class A debt, and underestimated the costs associated with foreign currency debt; and
- (c) an error of law, of fact and/or in the exercise of a discretion in basing its assessment of the cost of embedded debt on observations of the iBoxx

⁶⁸⁹ [Final Decision, Section 3](#), paragraphs 9.93, 9.94 and 9.95.

⁶⁹⁰ [Final Decision, Section 3](#), paragraph 9.181.

⁶⁹¹ [HAL NoA](#) paragraphs 3.3, 222, 247, 254 and 259-262.

indices it used for comparison that are averaged over 13.5-years, which was inconsistent with HAL's actual embedded debt and assumptions underlying other elements of the charge control.

- 7.17 On the basis of the above, the overall statutory questions for determination are as follows.
- (a) Was the Final Decision wrong because the CAA was wrong in law and/or in the exercise of a discretion in using short-term inflation forecasts to deflate the nominal cost of HAL's fixed-rate embedded debt?
 - (b) Was the Final Decision wrong because it was based on an error of fact, or was wrong in law, or because the CAA erred in the exercise of a discretion, in calculating the Heathrow-specific cost of debt premium?
 - (c) Was the Final Decision wrong because it was based on an error of fact, or was wrong in law, or because the CAA erred in the exercise of a discretion, in relation to the averaging period used as a basis for the assessment of the cost of embedded debt?
- 7.18 In order to address the statutory questions set out above and taking account of the submissions made by HAL, we have considered a number of subsidiary questions.
- (a) In using short-term inflation forecasts to deflate the nominal cost of HAL's fixed-rate embedded debt, was the CAA wrong in law and/or in the exercise of a discretion because it failed to carry out its functions in a manner which it considered would further the interests of users of air transport services regarding the range, availability, continuity, cost and quality of airport operation services?
 - (b) In using short-term inflation forecasts to deflate the nominal cost of HAL's fixed-rate embedded debt, was the CAA wrong in law and/or in the exercise of a discretion because it failed to have regard to the principle that regulatory activities should be carried out in a way which is proportionate and consistent?
 - (c) In using short-term inflation forecasts to deflate the nominal cost of HAL's fixed-rate embedded debt, was the CAA wrong in law and/or in the exercise of a discretion because it failed to have regard to the need to secure that each holder of a licence under Chapter 1 of Part 1 of the Act⁶⁹² is able to finance its provision of airport operation services in the area for which the licence is granted?

⁶⁹² [Civil Aviation Act 2012 \(legislation.gov.uk\)](http://legislation.gov.uk).

- (d) In calculating the HAL-specific yield premium relying solely on the cost of HAL's Class A debt and disregarding its Class B debt, was the CAA wrong in law and/or in the exercise of a discretion because that approach is irrational or inconsistent with the assumptions made for the notional company made elsewhere in the CAA's assessment?
- (e) In calculating the HAL-specific cost of debt premium, did the CAA make errors of fact in its assessment of the costs of foreign currency debt?
- (f) In basing its assessment of the cost of embedded debt on observations of the iBoxx indices over a 13.5-year average, did the CAA make errors of fact in that its approach was based on erroneous statements about maturity of HAL's actual embedded debt?
- (g) In basing its assessment of the cost of embedded debt on observations of the iBoxx indices over a 13.5-year average, was the CAA wrong in law or did it make an error in the exercise of a discretion because its approach was inconsistent with the assumptions it made for the notional company considered in its assessment?

Airlines' appeal

- 7.19 In their NoAs, the Airlines contended that the Final Decision was wrong because the CAA made two errors in relation to the calculation of the cost of debt.
- (a) The CAA was wrong to include a premium added to the cost of HAL's index-linked debt when calculating its WACC (**the premium principle error**),⁶⁹³ and
 - (b) The CAA misstated the magnitude of the adjustment required to calculate the cost of HAL's index-linked debt (**the premium calibration error**).⁶⁹⁴
- 7.20 The Airlines submitted in relation to the premium principle error that the Final Decision was wrong because, in including a premium for the cost of HAL's index-linked debt in the calculation of its WACC, the CAA made a decision based on errors of fact or was wrong in law for the following reasons:
- (a) The adjustment was not justified and no such premium has been included in other recent regulatory decisions,⁶⁹⁵

⁶⁹³ [BA NoA](#), paragraph 5.8.1(a), [Delta NoA](#), paragraphs 5.3(b) and 5.65, and [VAA NoA](#), paragraphs 5.3(b) and 5.63.

⁶⁹⁴ [BA NoA](#), paragraph 5.8.1(b), [Delta NoA](#), paragraph 5.68, and [VAA NoA](#), paragraph 5.66.

⁶⁹⁵ [BA NoA](#), paragraphs 5.8.2 and 5.8.6, [Delta NoA](#), paragraph 5.66, and [VAA NoA](#), paragraph 5.64.

- (b) The CAA compared the spreads of five HAL index-linked bonds with iBoxx spreads and its interpretation of the data is wrong;⁶⁹⁶
- (c) The CAA's statistically invalid comparison of the spread of the five HAL index-linked bonds used resulted in an error of fact which undermined its analysis;⁶⁹⁷
- (d) The CAA used a weighted average approach but it should have applied a simple average;⁶⁹⁸
- (e) Investors generally require a lower return on index-linked debt as it does not carry inflation risk, so a premium should be subtracted from, not added to, HAL's cost of debt;⁶⁹⁹ and
- (f) The decision to add a premium cannot be reasonably supported and was irrational.⁷⁰⁰

7.21 The Airlines argued, in relation to the premium calibration error, that the Final Decision was wrong because, by applying a premium that added 15bps to the cost of HAL's index-linked debt rather than deducting one which reduced that cost by up to 10bps, the CAA made a decision based on errors of fact or was wrong in law.⁷⁰¹

7.22 The Airlines submitted that the CAA erred because:

- (a) it is inappropriate to add a premium of 15bps where HAL will also receive a benefit of lower costs from issuing its own index-linked bonds;⁷⁰²
- (b) the CAA should have compared the yields on index-linked and nominal bonds issued in the market more widely;⁷⁰³
- (c) the CAA should have calculated any index-linked premium by applying the orthodox methodology described in the AlixPartners WACC Report they provided in support of their NoAs;⁷⁰⁴ and
- (d) the CAA has not explained why it departed from the orthodox approach, nor is it possible to understand its approach, so its methodology is opaque,

⁶⁹⁶ [BA NoA](#), paragraphs 5.8.2, [Delta NoA](#), paragraph 5.66, and [VAA NoA](#), paragraph 5.64.

⁶⁹⁷ [BA NoA](#), paragraphs 5.8.2, [Delta NoA](#), paragraph 5.66, and [VAA NoA](#), paragraph 5.64.

⁶⁹⁸ [Delta NoA](#), paragraph 5.66, and [VAA NoA](#), paragraph 5.64.

⁶⁹⁹ [BA NoA](#), paragraph 5.8.3, [Delta NoA](#), para 5.67, and [VAA NoA](#), paragraph 5.65.

⁷⁰⁰ [BA NoA](#), paragraph 5.8.4.

⁷⁰¹ [BA NoA](#), paragraphs 5.8.2, [Delta NoA](#), paragraph 5.72, and [VAA NoA](#), paragraph 5.70.

⁷⁰² [Delta NoA](#), paragraph 5.71, and [VAA NoA](#), paragraph 5.69.

⁷⁰³ [Delta NoA](#), paragraph 5.69, and [VAA NoA](#), paragraph 5.67.

⁷⁰⁴ [BA NoA](#), paragraph 5.8.5.

contrary to orthodox practice and not one which can reasonably be supported.⁷⁰⁵

7.23 On the basis of these submissions, we have examined the following statutory questions in arriving at our determination of the Airlines' appeals.

- (a) Was the Final Decision wrong because it was based on an error of fact, and/or was wrong in law, in including a premium for HAL's index-linked debt when calculating the WACC?
- (b) Was the Final Decision wrong because it was based on an error of fact, and/or was wrong in law, in the calculation of the magnitude of HAL's index-linked debt?

7.24 To determine the first of those statutory questions as regards the premium principle error, we have examined whether the Final Decision was wrong because it was based on errors of fact in that:

- (a) the CAA wrongly interpreted the bonds data used as the basis for its calculation of the premium because, for three of the five bonds considered, the issuance spread is lower for HAL's index-linked bonds and the simple average difference is that HAL's index-linked bonds have a negative premium of over 10bps;⁷⁰⁶
- (b) the CAA applied a statistically invalid comparison between the spread of five of HAL's index-linked bonds as against recognised benchmarks (ie used the weighted average, instead of a simple average);⁷⁰⁷ or
- (c) the CAA failed to recognise that investors generally require a lower return on index-linked debt as it does not carry an inflation risk, meaning that a premium should be subtracted from, not added to, HAL's cost of debt, and the CAA thereby reached a conclusion without a reasonable basis.⁷⁰⁸

7.25 We have also asked ourselves, in order to determine the first of those statutory questions as regards the premium principle error, whether the Final Decision was wrong in law on the basis that:

- (a) the CAA failed to take proper account of relevant considerations, made methodological errors and/or reached conclusions without adequate supporting evidence by placing no weight on the simple average difference between HAL's index-linked bonds and iBoxx spreads, basing its calculations on a weighted average difference between HAL's index-linked bonds and

⁷⁰⁵ [BA NoA](#), paragraph 5.8.6.

⁷⁰⁶ [BA NoA](#), paragraph 5.8.8, [Delta NoA](#), paragraph 5.66, and [VAA NoA](#), paragraph 5.64.

⁷⁰⁷ [BA NoA](#), paragraph 5.8.2, [Delta NoA](#), paragraph 5.66, and [VAA NoA](#), paragraph 5.64.

⁷⁰⁸ [BA NoA](#), paragraphs 5.8.3-5.8.6, [Delta NoA](#), paragraph 5.67, and [VAA NoA](#), paragraph 5.65.

iBoxx spreads, rather than the simple average, and basing its conclusions on a flawed methodology;⁷⁰⁹

- (b) the CAA relied on flawed evidence and assumptions by incorrectly interpreting the bonds data used as the basis for its calculation of the premium;⁷¹⁰
- (c) the CAA acted inconsistently with the approach adopted by other regulators;⁷¹¹
- (d) The CAA was irrational in adding a positive index-linked premium of 15bps to the return from nominal gilts, with the further assumption that 30% of debt was index-linked;⁷¹² or
- (e) the CAA misunderstood the nature of index-linked debt and did not consider the lower return required by investors in such debt as they no longer bear inflation risk, and reached a decision to add a positive premium that cannot reasonably be supported and is irrational.

7.26 The subsidiary questions we have considered in order to determine the second of the statutory questions in the Airlines' appeals, as regards the premium calibration error, are as follows.

- (a) Was the Final Decision wrong because it was based on errors of fact in that the CAA failed to recognise that it was inappropriate to add a premium of 15bps in circumstances where HAL would also receive a benefit of lower costs from issuing its own index-linked bonds?
- (b) Was the Final Decision wrong because it was wrong in law, in that:
 - (i) the CAA made methodological errors in calculating any index-linked premium by considering a sample of five HAL index-linked bonds, rather than comparing the yields on index-linked and nominal bonds issued in the market more widely;⁷¹³ or
 - (ii) the CAA made methodological errors in calculating any index-linked premium by not taking the 20-year nominal gilt yield from the Bank of England's yield curve calculations, deducting the long-term expected RPI inflation of 2.9% and then further deducting the 20-year index-linked gilt yield from the Bank of England's yield curve calculations, and

⁷⁰⁹ [Delta NoA](#), Annex 2 and [VAA NoA](#), Annex 5.

⁷¹⁰ [Delta NoA](#), Annex 2 and [VAA NoA](#), Annex 5.

⁷¹¹ [Delta NoA](#), paragraph 5.71 and [VAA NoA](#), paragraph 5.69.

⁷¹² [BA NoA](#), paragraph 5.8.4.

⁷¹³ [BA NoA](#), paragraph 5.8.2, [Delta NoA](#), paragraph 5.69 and [VAA NoA](#), paragraph 5.67.

instead applied an opaque and unorthodox methodology which cannot reasonably be supported?⁷¹⁴

Structure of this chapter

7.27 We address each of these issues for determination below, considering in turn the CAA's approach to the following:

- (a) the use of short-term inflation forecasts (Section A);
- (b) the estimation of the nominal cost of embedded debt (Section B); and
- (c) the inclusion and calculation of an index-linked premium (Section C).

7.28 For each topic, we set out the appellants' submissions supporting their grounds of appeal, the CAA's Response and any submissions from interveners, before providing our assessment of the issues for determination and our decisions.

7.29 Before we set out that detailed analysis, we set out a summary of our approach and the conclusions we have reached based on that analysis.

Summary of our approach and conclusions

HAL's appeal

7.30 We have considered HAL's submissions that the CAA's decision was wrong because it was based on an error of fact, was wrong in law or because the CAA made an error in the exercise of a discretion, in line with the legal framework described in chapter 3.

7.31 In relation to HAL's appeal on the CAA's use of short-term inflation forecasts to deflate the nominal cost of HAL's fixed-rate embedded debt, we have assessed in particular, given HAL's submissions as to the ways in which the CAA erred in law or in the exercise of a discretion, whether the CAA:

- (a) acted in a way that it considered would further the relevant interests of users of air transport services;
- (b) had regard to the principle that regulatory activities should be carried out in a way which is proportionate and consistent; and
- (c) had regard to the need to secure that each holder of a relevant licence is able to finance its provision of airport operation services in the relevant area.

⁷¹⁴ [BA NoA](#), paragraph 5.8.5.

- 7.32 Our assessment has also included making a judgement about whether the CAA made an error in the exercise of a discretion because it made a choice, albeit a rational one, where a clearly superior alternative, in particular the use of longer-term inflation expectations as advanced by HAL, was available to it.
- 7.33 Following an in-depth review and assessment of the Parties' submissions and supporting evidence, and on the basis of the considerations set out in further detail below, we have determined that the CAA was not wrong to use 'short-term' inflation forecasts to deflate the nominal cost of HAL's fixed-rate embedded debt in the H7 period. The CAA was considering how to apply the real returns framework for estimating the WACC (see paragraph 7.58) in unusual circumstances – where there was a significant upward spike in short-term inflation forecasts, with no basis to think that a negative spike would off-set these in future, and it had to decide between the competing alternatives of using short or long term forecasts.
- 7.34 The CAA made a reasoned assessment of these alternatives and made a judgement that it should adopt the former. In the circumstances, that was a regulatory judgement it was entitled to make: one that fell within the margin of appreciation to be afforded to it as the expert regulator. In so doing, the CAA:
- (a) considered whether the different circumstances in which it made its decision warranted a different approach to that taken in previous price controls;
 - (b) took account of its primary duty to further relevant end-users' interests and, having considered the consequences and risks liable to result from the alternative approaches, made the judgement that using the short-term inflation forecasts would ensure that efficient financing costs are reflected in the price control, better matching the objectives of the real returns framework in the H7 period and meaning that charges for end-users are no higher than necessary (whereas using long-term forecasts was liable to result in higher charges);
 - (c) had regard to the interests of and effects on investors and investment decisions of using short-term inflation forecasts and placed greater weight, as it was entitled to do in light of its primary statutory duty, on an approach which would result in prices no higher than necessary for end-users in H7; and
 - (d) considered and concluded that a relevant licence holder (the notional company) would be able to finance its provision of airport operation services in the relevant area.
- 7.35 Accordingly, the CAA was not wrong in law or in the exercise of a discretion in relation to the use of the short-term inflation forecasts. It made judgements balancing different considerations that it was entitled to make. It reached a conclusion that it considered would further end users' interests in line with its

primary statutory duty. It did not make an error in the exercise of a discretion by making a choice, albeit a rational one, where a clearly superior alternative, in particular the use of longer-term inflation expectations, was available to it.

- 7.36 Our assessment of HAL's appeal also included considering if the Final Decision was wrong because in calculating the Heathrow-specific cost of debt premium, or in relation to the averaging period used as a basis for the assessment of the cost of embedded debt:
- (a) the CAA based the decision on an error of fact;
 - (b) was wrong in law; or
 - (c) made an error in the exercise of a discretion because it made a choice, albeit a rational one, where a clearly superior alternative advanced by HAL was available to it.
- 7.37 Following an in-depth review and assessment of the Parties' submissions and supporting evidence, and on the basis of the considerations set out in further detail in Section B below, we determine that the CAA did not err in law, in fact or in the exercise of a discretion in these respects.

Airlines' appeals

- 7.38 We have also considered the Airlines' appeals that the Final Decision was wrong because it was based on an error of fact or was wrong in law, in line with the legal framework described in chapter 3. Our assessment included considering whether the decision was wrong as alleged in including a premium for HAL's index-linked debt when calculating the WACC, or in the calculation of the magnitude of such a premium.
- 7.39 Following an in-depth review and assessment of the Parties' submissions and supporting evidence, and on the basis of the considerations set out in further detail in Section C below, we determine that the CAA erred in fact and law in these regards. It made methodological errors, failed to take account of relevant considerations and reached a conclusion without a proper factual basis and foundation in the evidence such that its decision in this regard was irrational.

Section A: The use of 'short-term' inflation forecasts

HAL's submissions

- 7.40 HAL contended that the Final Decision was wrong as a result of errors by the CAA for two main reasons:

- (a) Using short-term forecasts was a departure from the well-established UK economic regulation regime which provides for real returns on an indexed RAB, which is undesirable and contrary to the interests of Heathrow's users;⁷¹⁵ and
- (b) The fundamental change in regulatory approach was in any event unnecessary and therefore disproportionate, since the windfall gains the CAA identified do not exist and the mechanism adopted would not in any event address them.⁷¹⁶

The change in approach is a departure from the well-established economic regulation regime in the UK

7.41 In support of the first reason, HAL stated that:

- (a) The CAA should have used long-term inflation forecasts that align with its previous approach.⁷¹⁷ That approach takes into account that regulated assets are usually financed by long-term debt, the price of which reflects correspondingly long-term inflation expectations, and allows for real returns that correlate with inflation. The CAA's change in its approach was a departure from the established real returns framework which:⁷¹⁸
 - (i) denied equity investors the intended exposure to inflation, in turn increasing regulatory risk and required rates of return;
 - (ii) decreased the attraction of Heathrow as an investable asset, such as by investors like pension funds which have index-linked liabilities; and
 - (iii) undermined long-term investment and financing decisions that were made on the basis of a settled understanding of the regulatory regime.
- (b) The CAA's approach gave HAL a choice between:
 - (i) the risk of significantly increased risk of cash flow volatility (because HAL's embedded debt is long-term, befitting its long-lived assets, but the CAA's allowance for such debt is based on short-term inflation estimates); or
 - (ii) to move towards short-term financing or reducing HAL's reliance on fixed-rate debt.

⁷¹⁵ [HAL NoA](#), paragraph 224.1.

⁷¹⁶ [HAL NoA](#), paragraph 224.2.

⁷¹⁷ [HAL NoA](#), paragraph 224.1.

⁷¹⁸ [HAL NoA](#), paragraphs 226-233.

(iii) HAL submitted that the latter would increase the financial risk and transaction costs in the long-term. As a result, the costs of re-structuring HAL's debt in the short-term would give rise to costs not provided for in the price control, would reduce real revenues by around £1.39 billion in 2022 and 2023 alone, and HAL would need to divert money from other parts of its business to service its debt, materially affecting its ability to deliver services to customers.⁷¹⁹

The change in approach is in any event unnecessary and therefore disproportionate

7.42 In support of the second reason set out in paragraph 7.40, HAL contended that:

- (a) The 'windfall gains' identified by the CAA do not exist. The OBR forecasts on which the CAA relied indicate that the current spike in inflation will be short-lived and that there are no windfall gains associated with the use of long-term inflation forecasts since they even out over the longer term. The CAA's calculation of the purported windfall gains was further exaggerated by its unjustified assumption that the notional company considered in its assessment had a significantly lower share of index-linked debt (and a higher share of fixed-rate debt) than HAL.⁷²⁰
- (b) The CAA's approach in any event failed to achieve its stated aim of avoiding windfall gains or losses due to a mismatch between forecast and outturn inflation. It merely replaced stable long-term expectations with volatile short-term forecasts which avoids a mismatch only if it is assumed that the outturn will match the forecast, and that is unlikely. Outturn inflation will demonstrably mean-revert to long-term expectations, but there is no reason to think that deviations between short-term forecasts and outturns will equal out over time, giving rise to a risk of systematic one-sided miscalibration.⁷²¹

7.43 HAL argued that because the CAA's approach appears motivated largely by achieving lower near-term price outcomes, to HAL's and users' detriments,⁷²² and seeks to remedy non-existent 'windfall gains' with an ineffective mechanism, the Final Decision is incompatible with the CAA's duties, including its duty to act in a manner which will further the interests of current and future users of air transport services, its Better Regulation Duties to act consistently and proportionately, and its duty to have regard to HAL's ability to finance itself.⁷²³ As to the latter, HAL contended that restructuring its debt portfolio, to shorten its duration, would result

⁷¹⁹ [HAL NoA](#), paragraphs 234-237.

⁷²⁰ [HAL NoA](#), paragraphs 238-243.

⁷²¹ [HAL NoA](#), paragraphs 244 and 245.

⁷²² Because it introduces volatility, incentivises poor long-term financing choices, gives rise to a funding short-fall during H7, and in the long-run makes Heathrow a less attractive investment.

⁷²³ [HAL NoA](#), paragraphs 225, 246 and 247.

in significant close-out costs on current debt positions that are not provided for in the price control.⁷²⁴

CAA Response

7.44 The CAA addressed each of these allegations on its treatment of inflation in its Response.

Allegation that the change in approach is a departure from the well-established economic regulation regime in the UK

7.45 The CAA did not accept that there is a ‘well-established UK regime of economic regulation’ that prescribes a single, uniform approach towards the treatment of inflation across all sectors and for all time or that HAL has provided persuasive evidence of the same. The CAA further considered that HAL had omitted various examples to the contrary, including the CMA’s decision in respect of NIE⁷²⁵ and for NERL at RP3.⁷²⁶ The CAA considered that the use of five-year forecasts in H7 was ‘eminently reasonable’ and within the bounds of regulatory precedent, although, in any event, even if there were not such precedent, this would provide no basis to conclude that the CAA was wrong in its treatment of inflation.⁷²⁷

7.46 The CAA did not consider that its approach would create incentives for HAL to move towards short-term financing but that the H7 framework was entirely neutral in its treatment of and impact on the tenor of HAL’s borrowing.⁷²⁸

7.47 In addition, in relation to HAL’s contention that cash flow volatility is likely to be higher within H7 as well as more broadly, the CAA submitted that this view was incorrect. On the contrary, the CAA submitted that, since the inflation assumption is fixed, the within-period cash flow volatility would be identical under both the CAA’s and HAL’s approaches. Further, the CAA considered that whilst there may be higher cash flow volatility between price control periods, total returns can be expected to be more stable under the CAA’s approach compared with the use of long-term inflation forecasts. In effect, the CAA submitted that any additional cash flow volatility under the CAA’s approach is offset by a compensating change in indexation of the RAB. Finally, the CAA submitted that its financeability test did not reveal any concerns in relation to the notional company as a result of the use of short-term inflation forecasts.⁷²⁹

⁷²⁴ [HAL NoA](#), paragraph 237.

⁷²⁵ CMA, [Northern Ireland Electricity \(NIE\) price determination](#), 2014 ([NIE](#)).

⁷²⁶ ‘NERL at RP3’ is the NATS En Route plc (NERL) Reference Period 3 price control that was originally expected to run from 1 January 2020 to 31 December 2024. See [NERL Price Determination](#) by the CMA ([NERL](#)).

⁷²⁷ [CAA Response to the NoAs](#), ([CAA Response](#)), paragraph 169.1.

⁷²⁸ [CAA Response](#), paragraph 169.2.

⁷²⁹ [CAA Response](#), paragraph 169.3.

Allegation that the change in approach is in any event unnecessary and therefore disproportionate

- 7.48 The CAA stated that windfall gains and losses are a concern, even if they do supposedly even out over the longer-term, and that whilst the concern may be temporary, it is significant. Nor is it obvious that windfall gains will even out in the long-term. The CAA contended that there is no guarantee that any deviations will necessarily be matched by equal and opposite deviations in the future and certainly not within any defined period. The CAA therefore considered that, as a consequence, consumers could potentially be asked to fund windfall gains to investors for a very long period of time and may never be fully repaid.⁷³⁰
- 7.49 As regards HAL's argument that the CAA's estimate of windfall gains was exaggerated by assuming the notional company possesses a smaller proportion of index-linked debt than HAL does in reality, the CAA did not consider that it is open to HAL to argue that it is unreasonable for there to be a difference between the actual and notional structure when the CAA is concerned with the notional structure and HAL has chosen to depart from that, and where the CAA's policy is designed to protect consumers.⁷³¹
- 7.50 As regards HAL's submission that the CAA's approach did not guarantee that windfalls will not occur, the CAA responded that this misstates the CAA's objective in that the goal was not to guarantee the recovery of efficient costs but rather that investors can expect to recover these costs.⁷³²
- 7.51 Finally, in relation to whether or not an inflation forecast represented a 'fair bet' for a company within the price control under consideration, the CAA considered that it had used a forecast in H7 for which the likelihood that inflation will be higher than expected is broadly balanced against the likelihood that inflation will be lower than expected which the CAA considered did constitute a 'fair bet' by contrast to the approach proposed by HAL.⁷³³

Interveners' submissions

- 7.52 Both BA and Delta (the **Airline Interveners**) intervened in support of the CAA in relation to its use of short-term inflation forecasts to deflate the cost of HAL's fixed-rate debt.
- 7.53 The Airline Interveners submitted that HAL was mistaken in its view that the CAA's approach was a significant departure from the established UK framework of a real

⁷³⁰ [CAA Response](#), paragraph 169.4.

⁷³¹ [CAA Response](#), paragraph 169.5.

⁷³² [CAA Response](#), paragraph 169.6.

⁷³³ [CAA Response](#), paragraph 169.7.

returns-based regulation and the use of long-term inflation expectations for the following reasons.

- (a) The current high inflation environment is extraordinary but despite this the CAA did not previously set out an intention to rely on long-term inflation expectations.
- (b) Precedents from other regulators lack relevance in circumstances where for the first time there is a material difference between short-term and long-term inflation.
- (c) There is no reason why setting a fixed cost of debt allowance for H7 based on expected H7 inflation should alter HAL's financing decisions.
- (d) HAL's suggested approach to use long-term inflation forecasts would be at the cost of higher prices to consumers at a time when inflation is higher and real personal incomes under pressure and would be contrary to the CAA's primary duty.⁷³⁴

7.54 The Airline Interveners further considered it to be entirely reasonable to use a five-year inflation forecast to calculate the allowed cost of debt for HAL in order to reduce any windfall gains or losses during H7 (thereby reducing any volatility in HAL's earnings) and consumers would not be exposed to a higher per passenger charge in real terms if inflation exceeds the average.⁷³⁵

Our assessment of the CAA's decision to use short-term inflation forecasts

7.55 In this section, we assess the CAA's use of short-term inflation forecasts in estimating the real cost of embedded fixed-rate debt in the Final Decision. We first provide some conceptual background to the issue, set out how the CAA's reasoning evolved in H7 and make some preliminary remarks of our own about the context in which this decision was made. We then address each of HAL's arguments in turn.

Conceptual points

7.56 As explained in paragraph 7.9, the CAA deflated the nominal cost of embedded fixed-rate debt using inflation forecasts over the price control period. Specifically, the CAA used the OBR's latest available RPI forecasts for each year of the price control, which averaged 4.9% over the 2022-26 period.

⁷³⁴ [BA, Application for permission to intervene and Notice of Intervention](#), (BA Nol), paragraph 3.5.3(a), [Delta, Application for permission to intervene and Notice of Intervention](#), (Delta Nol), paragraph 3.29(a)(c).

⁷³⁵ [BA Nol](#), paragraph 3.5.3 (b); [Delta Nol](#), paragraph 3.29(b).

- 7.57 While HAL described this approach in its submissions as ‘short-term’, it might be more accurate to describe it as ‘medium-term’ given that the forecasts span a five-year period. However, we will use ‘short-term’ throughout this chapter, for consistency with HAL’s submissions.
- 7.58 The regulatory framework which applies to HAL is one which provides for a real allowed rate of return (ie a real WACC) with inflation compensation coming through the annual indexation of the RAB based on outturn inflation in each year of the price control.
- 7.59 In general, when an inflation-linked asset is financed with nominal fixed-rate debt, equity investors have a ‘leveraged’ exposure to inflation. If outturn inflation deviates from expectations embedded into the nominal interest rate at which the debt was issued, there is a change in the market value of debt which effectively transfers to equity investors (this transfer of value could be positive or negative). This has the effect of amplifying real equity returns in response to inflation ‘surprises’. This is what is referred to as the ‘leveraging’ effect.
- 7.60 In the context of a regulated asset with a RAB indexed to outturn inflation, RAB indexation forms part of total returns to equity. The ‘share’ of RAB indexation which accrues to equity depends on the relative proportions of nominal fixed-rate and index-linked debt in the capital structure, and on how real debt costs are remunerated in the regulatory framework.⁷³⁶
- 7.61 In a real returns framework, the allowed return on the RAB is a real WACC. The estimation of the real WACC relies on both real and nominal inputs. Where nominal inputs are used, they need to be converted to real values using an appropriate inflation assumption. The cost of nominal fixed-rate debt is one such input. Since a regulated firm will have a portfolio of nominal fixed-rate debt instruments issued at different times and at different costs, there is a degree of judgement involved in deciding on the most appropriate measure of inflation to use to deflate the nominal cost of debt.
- 7.62 One option (as preferred by HAL in H7) is to use a long-term measure of expected inflation. This approach will not precisely match the inflation expectations embedded into the nominal yield of each individual bond issue. However, fixed-rate debt in regulated sectors tends to be of relatively long maturity (10-20 years). If inflation expectations are relatively stable in the long run, such an approach could be a reasonable proxy for the real cost of debt expected over the full tenor of the debt.
- 7.63 Another option (as adopted by the CAA in H7) is to use a forecast of inflation over the price control period. How well such an approach matches the real cost of debt

⁷³⁶ The ‘leveraging’ effect of inflation on equity returns is also explained in Hoon 2, paragraphs 24.11-24.12.

over the full tenor of the debt depends on whether short-term inflation expectations differ materially from the inflation expectations at the time the debt was issued.

7.64 Neither approach remunerates the regulated company for the exact real cost of debt expected at the time the nominal debt was issued. However, both approaches can provide for a cost of debt allowance which is expected to cover efficient financing costs. Under both approaches, the nominal costs required to service the debt are fixed over the price control period (and over the full tenor of each individual bond issue). Under both approaches, equity investors have a ‘leveraged’ exposure to inflation. However, the two approaches differ in that the outturn real return to equity investors will depend on the difference between outturn inflation over the full tenor of each bond and the inflation assumption used to deflate the real cost of nominal fixed-rate debt (which is reset every price control period).

The evolution of the CAA’s decision to use short-term inflation forecasts

The CAA’s approach in the Initial Proposals

7.65 In the Initial Proposals, the CAA considered several options for inflation forecasts, including options it had outlined in earlier consultations and options put forward by stakeholders. The CAA noted that approaches put forward by stakeholders were generally measures of long-term inflation. However, the CAA observed that ‘RPI inflation [was] expected to deviate materially from its long-run level over the course of H7, particularly during the early years’.⁷³⁷

Table 7.1: Initial Proposals – Inflation forecasts

	Average	2022	2023	2024	2025	2026
H7 Initial Proposals						
OBR March 2021 RPI forecast	2.6%	2.0%	2.4%	2.7%	3.0%	2.9%

Note: The CAA assumed that RPI inflation would revert to 2.9% in 2026, in line with the government’s CPI target plus a wedge of 0.9% as OBR forecasts only extended to 2025.

Source: [Initial Proposals](#), Section 2, paragraph 9.115.

7.66 The CAA posited that using long-term inflation could create a risk that HAL would not be able to recover its efficiently incurred nominal costs of embedded debt. This in turn could create a financeability challenge, and this may not be consistent with the CAA’s secondary duty to have regard to the need to secure that HAL is able to finance its licenced activities.⁷³⁸

⁷³⁷ [Initial Proposals](#), Section 2, paragraphs 9.114-9.115.

⁷³⁸ [Initial Proposals](#), Section 2, paragraph 9.116.

7.67 The CAA therefore proposed to deflate the nominal cost of fixed-rate debt by the average OBR RPI forecast for 2022-25 and an RPI assumption of 2.9% for 2026.⁷³⁹

The CAA’s approach in the Final Proposals

7.68 Stakeholders disagreed with various aspects of the CAA’s approach used in the Initial Proposals. HAL considered that use of short-term forecasts was inconsistent with good practice, since these forecasts are vulnerable to short-term swings in inflation expectations, and that the CAA should use long-term inflation instead.⁷⁴⁰

7.69 Nevertheless, in the Final Proposals, the CAA retained the use of OBR forecasts, by which point forecasts for 2026 had also become available.

7.70 The CAA noted that its approach to the cost of debt entails remunerating interest costs in full within the confines of each five-year regulatory period. In its (then provisional) view, the best estimate of the real cost of fixed-rate debt during the H7 period was therefore the nominal cost deflated using the best estimate of inflation over a five-year forecast period.⁷⁴¹

7.71 However, the CAA acknowledged that there had been a marked increase in expected inflation since the Initial Proposals (as shown in Table 7.2), and that this could have a substantial impact on several WACC parameters.

Table 7.2: Final Proposals – Inflation forecasts

	Average	2022	2023	2024	2025	2026
Final Proposals						
OBR March 2022 RPI forecast	4.6%	9.8%	5.5%	2.3%	2.5%	2.7%

Source: [Final Proposals](#), Section 3, paragraph 9.228 and CMA analysis

7.72 The CAA noted that:⁷⁴²

We are also experiencing significantly higher inflation than has been observed for some considerable time.

Higher inflation can be positive for RAB-regulated businesses such as HAL, since their RAB is indexed to inflation. If a significant proportion of debt financing is fixed in nominal terms, higher inflation will reduce the real cost of debt to the benefit of consumers. We consider it appropriate to reflect this fall in the real

⁷³⁹ [Initial Proposals](#), Section 2, paragraph 9.119.

⁷⁴⁰ [Final Proposals](#), Section 3, paragraph 9.203. Airline stakeholders continued to argue for the use of break-even inflation. [Final Proposals](#), Section 3, paragraph 9.202.

⁷⁴¹ [Final Proposals](#), Section 3, paragraph 9.206.

⁷⁴² [Final Proposals](#), Section 3, paragraphs 9.12-9.13.

cost of debt by allowing for a proportionate reduction in the assumed RPI-adjusted, real ('RPI-real') cost of debt.

- 7.73 The CAA provisionally concluded that using OBR forecasts remained appropriate.⁷⁴³ This reflected the CAA's assumption that the nominal cost of HAL's fixed-rate debt portfolio will not change significantly in H7, and hence its overall real cost of debt will fall due to higher inflation.⁷⁴⁴
- 7.74 The CAA put forward the view that its proposals for setting the WACC, including the use of the OBR forecasts, would be consistent with its statutory duties.⁷⁴⁵

The CAA's Final Decision

- 7.75 In response to the Final Proposals, HAL continued to argue for the use of long-term inflation forecasts. HAL put forward several arguments as to why the CAA's approach was inappropriate:⁷⁴⁶
- (a) it represented a deviation from a 'real return' regime, towards a regime based on setting a nominal return on debt;
 - (b) it did not eliminate the risk that the real cost of debt and real equity returns will deviate from forecast;
 - (c) annual inflation measured over the long run will be less volatile than annual inflation measured over the next five years;
 - (d) deflating nominal inputs for the cost of debt using long-term inflation spanning multiple price controls is consistent with how the cost of debt is determined in the market;
 - (e) changing from long-term to short-term inflation forecasts, when inflation is high, would be asymmetric as it would claw back the allowance for the cost of embedded debt;
 - (f) the position used in the Final Proposals is a change from the CAA's previous position on inflation from Q6, which HAL considered will lead to increased regulatory risk;
 - (g) the CMA had decided against adopting short-term inflation for the PR19 price controls in the water industry;

⁷⁴³ [Final Proposals](#), Section 3, paragraph 9.232.

⁷⁴⁴ [Final Proposals](#), Section 3, paragraph 9.231.

⁷⁴⁵ [Final Proposals](#), Section 3, paragraph 9.1.

⁷⁴⁶ [Final Decision](#), Section 3, paragraph 9.14.

- (h) regulators have not sought to intervene either in response to forecast, or actual, inflation being lower than the long-term average; and
- (i) the CAA's approach created a greater financeability issue than in previous price controls, by putting additional pressure on financeability at a time when the airport already faces significant risk.

7.76 The CAA considered the responses to its Final Proposals but decided to retain the approach put forward in those proposals: continuing to use the latest OBR RPI forecasts over H7. In support of its decision, it stated that:⁷⁴⁷

- (a) regulatory practice was not uniform in this area, and there are examples of other regulators, including the CMA, adopting forecasts over the price control period;
- (b) HAL has not been systematically under-remunerated under the CAA's previous approach of using long-term inflation forecasts;
- (c) the CMA has not considered the appropriate deflator to use in the context of the current inflationary environment; and
- (d) it is reasonable to change approach in circumstances where retaining the previous approach would lead to a material miscalibration of the price control that is not expected to reverse over any defined time period.

7.77 The CAA also stated that it was not persuaded that its approach materially increases risk to investors or that its approach constitutes a change from a 'real return' regime to a 'nominal return' regime.

7.78 The CAA acknowledged that some forecasting risk remains, but it also stated that risk is at least as material under HAL's proposed approach.

7.79 The CAA acknowledged the potential volatility of five-year forecasts but noted it is the nature of a five-year price control framework that key variables such as inflation would be periodically updated.

7.80 The CAA also noted that the objective of price control regulation is not to replicate the process by which the cost of debt was determined in the market. Instead, its approach ensures that the cost of debt allowance appropriately remunerates the forward-looking costs the CAA would expect to be incurred by the notional company.

7.81 Finally, the CAA did not accept that its approach created a financeability challenge. In that connection, the CAA used a combined assessment of qualitative and quantitative factors to conclude that the notional company would be

⁷⁴⁷ [Final Decision, Section 3](#) paragraphs 9.20-9.28.

financeable under the proposed price control arrangements. Specifically, the CAA concluded that the notional company would be able to access cost effective, investment-grade debt finance and equity in a timely way.⁷⁴⁸

7.82 As far as its broader set of statutory duties were concerned, the CAA noted, in the context of its judgement that its setting of the WACC including the use of the short-term inflation forecasts was appropriate, that:⁷⁴⁹

The WACC is the weighted average of HAL’s cost of equity and cost of debt finance. It represents a return on the RAB and acts as a payment to investors and creditors for the risk they incur by committing capital to the business. Setting an appropriate WACC furthers the interests of consumers by helping to secure that:

- HAL is able to finance the investment it needs to carry out its activities and meet the reasonable demands for AOS [Airport Operation Services] through providing a resilient and good quality airport experience; and
- efficient financing costs are reflected in the price control, which are no higher than necessary.

Setting an appropriate WACC is also one of the means by which we have regard to our financing duty and helps promote economy and efficiency on the part of HAL.

7.83 The CAA accordingly used the latest available OBR forecasts (shown in Table 7.3). Relative to the Final Proposals, inflation was forecast to be higher in the early years of H7 but falling more rapidly in the second half of the period.

Table 7.3: Final Decision – Inflation forecasts

	Average	2022	2023	2024	2025	2026
Final Decision						
OBR November 2022 RPI forecast	4.9%	11.6%	10.7%	1.5%	-0.4%	1.0%

Source: [Final Decision](#) Section 3, Table 9.2., CMA Analysis

Preliminary remarks about the context for this aspect of the CAA’s decision

7.84 It is clear that in H7 the CAA faced a different set of circumstances compared with previous reviews. As it moved from Initial Proposals to Final Proposals and then the Final Decision, the inflation outlook became more uncertain and inflation was expected to deviate materially from the long-term view over the H7 period, at least in the early years of H7.⁷⁵⁰ While the difference between short-term and long-term

⁷⁴⁸ [Final Decision, Section 3](#), paragraph 13.13.

⁷⁴⁹ [Final Decision, Section 3](#), paragraphs 9.1-9.2.

⁷⁵⁰ [Final Proposals, Section 3](#), paragraphs 9.215-9.218.

forecasts was relatively small at the Initial Proposals stage, the difference became much more significant as H7 progressed towards the Final Decision stage.

- 7.85 This meant that it was likely that adopting a long-term view of inflation to deflate the nominal cost of fixed-rate debt raised in the past (the cost of which is likely to reflect a more stable inflation environment) would lead to a real cost of debt allowance which could differ significantly from the outturn real cost of debt over H7.
- 7.86 This was an unusual set of circumstances, given the scale of the expected deviation between the long-term view and short-term view of inflation over H7. The CAA was making its decision in a rapidly changing and increasingly uncertain macroeconomic environment. This, in our view, is important context in which to consider the issues on appeal, in particular as to the circumstances in which the CAA had to make assessments and exercise regulatory judgement between competing alternative views and options open to it.
- 7.87 We now turn to the specific arguments raised by HAL in relation to the CAA's approach to deflating the nominal cost of fixed rate debt in the Final Decision.

Departure from the well-established economic regulation regime in the UK

- 7.88 We first consider the arguments advanced by HAL that the choice of a short-term inflation forecast represented a departure from a well-established approach, with adverse consequences, and that this represented an error.

Undermining past investment decisions

- 7.89 HAL contended (as set out in paragraph 7.41) that the CAA's approach was a departure from the established real returns framework and (a) denied equity investors their intended exposure to inflation, (b) decreased the attractiveness of Heathrow as an investable asset, and (c) undermined long-term investment and financing decisions.
- 7.90 In response, the CAA did not accept that there was a single, uniform approach towards the treatment of inflation and noted that HAL omitted various precedents that demonstrated this point (see paragraph 7.45). The CAA further responded that it did not think it was reasonable to expect that HAL and its investors will, over historical quinquennia, have formed the expectation that the CAA would take a particular technical approach to the inflation component of the cost of debt calculation. Rather, the CAA contended that investors would expect the CAA to ensure that efficiently incurred debt costs are remunerated in full at each new price cap reset.⁷⁵¹ The CAA also stated that the CAA's approach will provide investors

⁷⁵¹ CAA, Witness Statement from Jayant Hoon (**Hoon 2**), 31 May 2023, paragraph 24.15.

with greater confidence in the ability of the regulatory regime to recognise HAL's efficient financing costs, and will see less, not more, regulatory risk.⁷⁵²

7.91 In responding to our Provisional Determination, HAL further submitted that the CAA did not consider the impact on the actual company.⁷⁵³ As set out in HAL's original submissions, while the CAA decided to set the notional company's debt at 70% fixed-rate and 30% index-linked, in line with the Q6 approach, HAL contended that this decision took no account of the positioning that HAL had justifiably adopted to keep index-linked debt at higher levels to counter the risk of deflation on gearing.

7.92 HAL said that in not considering the impact on the actual company and the potential costs associated with changing its inflation exposure, the CAA's approach increases regulatory risk.⁷⁵⁴ It also said that the real cost of debt will be systematically under-recognised in the cost of debt allowance were the CMA to uphold the CAA's approach, as regulators would 'cherry pick' whatever approach provides the lower price for consumers in each review.⁷⁵⁵

1. Use of short-term forecasts in a real returns framework

7.93 In assessing HAL's arguments under this heading, we note that both the long-term approach advanced by HAL and the short-term approach adopted by the CAA are compatible with the real returns framework (as discussed in paragraphs 7.61 to 7.64). Both approaches provide for a fixed real WACC (and fixed real cost of debt) over the price control period.

7.94 As we discussed in paragraphs 7.61 to 7.64, neither the long-term nor the short-term approach matches precisely the real cost of debt expected at the time the debt was issued. On the one hand, the long-term approach might be argued to be more consistent with an assumption that investors have an investment horizon longer the price control period, and with the approach taken to estimating other WACC parameters.⁷⁵⁶ On the other hand, the short-term approach is likely to more closely match the outturn real cost of debt in a given price control period, which might be more consistent with ensuring financeability and ensuring charges reflect expected financing costs over the price control period.

7.95 A relevant question is then whether there is a generally accepted methodology for estimating the real cost of debt in this real returns framework such that investors could have reasonably formed specific expectations as to how the real cost of debt

⁷⁵² Hoon 2, paragraph 24.17.

⁷⁵³ HAL Response to PD, paragraph 121. HAL, First Witness Statement from Sally Ding (Ding 1), 17 April 2023, paragraph 5.17.

⁷⁵⁴ Ding 1, paragraphs 5.17-5.18.

⁷⁵⁵ HAL Response to PD, paragraphs 129-132.

⁷⁵⁶ For example, the risk-free rate is estimated with reference to instruments of 20-year maturity.

allowance will be set at each price review (and accordingly made long-term financing decisions reflecting that view).

- 7.96 The appendix to this Final Determination sets out our review of the regulatory precedents⁷⁵⁷ cited by the Parties. In our view, it is clear that the specific approach used to deflate the nominal cost of debt in previous regulatory decisions (by the CAA and other regulators) is far from uniform, consistent with the CAA's conclusion in the Final Decision. We note that most of these decisions come from sectors operating under a real returns framework.
- 7.97 We also note that, in Q6, the CAA examined a range of inflation sources most of which were 'long-term' in nature, but not all. The CAA stated that ideally the choice of inflation assumption needed to reflect the future inflation expectations at the same point in time as the market data on the bond and cover the period of time to that bond's maturity. It also noted, however, that on their own none of the sources of inflation estimates provided this information in the required detailed and reliable form. The CAA further noted that there were numerous approaches to estimating inflation and there was no single correct value. In addition, consistent with other historical regulatory decisions, the inflation forecasts from various sources and over different time horizons considered by the CAA in Q6 were not significantly different in value.⁷⁵⁸
- 7.98 Each of the immediately foregoing points shows that, while the CAA did adopt the long-term approach in Q6, some judgement was involved in how this approach was applied. It is also evident that the different approaches (long-term versus short-term) were not expected in Q6 to produce materially different outcomes.
- 7.99 Moreover, there are examples of regulators using short-term inflation forecasts. Both the CAA and the CMA used RPI forecasts over the relevant price control period in estimating the real cost of debt for NERL in RP3, for instance, as did the CC for NIE. It is also clear that even when the approach can generally be described as 'long-term', evidence is often drawn from multiple sources, including forecasts over shorter periods.
- 7.100 In response to our Provisional Determination, HAL noted that when the matter had been a matter for discussion at the CMA, the CMA had always considered the long-term inflation to be the correct approach, in particular noting the CMA discussion in its PR19 redetermination. HAL further stated that the two examples cited where the CMA/CC took a different approach (the CMA's NERL RP3 redetermination and the CC's NIE RP5 redetermination) were not appropriate comparators in this context. HAL stated that neither decision contained analysis of

⁷⁵⁷ Which term we use in this context to mean previous regulatory cases, not that they have a formally binding status relevant to this appeal.

⁷⁵⁸ CAP1155 [Estimating the cost of capital: technical appendix for the economic regulation of Heathrow and Gatwick from April 2014](#), paragraphs 5.24-5.34.

the impact of the inflation assumption; nor that the issue decided upon related to the inflation assumption. HAL further noted that both companies had no index-linked debt, which meant the decision was less material to their financial positions; and that in both cases the approach to inflation was consistent with previous price reviews in those sectors.⁷⁵⁹

7.101 We recognise that each previous regulatory decision is context-specific and that any particular precedent is not on its own sufficient to indicate whether or not the CAA made an error in its treatment of inflation. The specific circumstances are also relevant when it comes to previous CMA decisions. We note in that connection that the examples cited by HAL in support of its position are redeterminations operating under a different legal framework.

7.102 Nonetheless, in our view, regulatory precedent can be informative. Viewing the current and historical regulatory landscape as a whole, it illustrates that the interpretation of the real returns framework can vary, including over time and in specific circumstances. On that basis, our judgement is that:

- (a) the CAA's approach cannot be described as a fundamental departure from established regulatory practice;
- (b) the CAA was not wrong not to have concluded that there is a single codified approach to the treatment of inflation in the cost of debt estimation;
- (c) it is unlikely that investors would reasonably have formed specific expectations as to the approach to inflation which will be used to estimate the real cost of debt allowance at each price review; and
- (d) in making the assessment, and adopting the approach that it did, the CAA cannot necessarily be said to have failed to have regard to the principle that regulatory activity should be carried out in a way that is consistent.

2. Consistency with the real returns framework in the context of H7

7.103 We then consider whether there was an appropriate reason for the CAA taking a different approach to the treatment of inflation forecasts in H7 than in previous price control periods.

7.104 In reaching its decision, the CAA noted that between 2000 and 2021, UK inflation forecasts had only deviated from their long-term averages by a relatively small amount, implying that HAL had not been systematically under-remunerated under its previous approach of using long-term inflation forecasts. The CAA noted that retaining its previous approach for H7 would however have led to a material

⁷⁵⁹ HAL Response to PD, paragraphs 122-125.

miscalibration of the price control that is not expected to reverse over any defined period of time.⁷⁶⁰

- 7.105 The CAA's reasoning is clearly grounded in a view that the cost of debt allowance should (in expected terms) seek to match the real cost of debt over the price control period. This is evidenced by the CAA stating in the Final Decision that the objective of price control regulation is not to replicate the process by which the cost of debt is determined in the market, but instead to ensure that the cost of debt allowance appropriately remunerates the forward-looking costs expected to be incurred by the notional company.⁷⁶¹ This appears to be a change of focus from Q6 which was on matching the cost of debt over the full tenor of the debt (paragraph 7.97) to matching the cost of debt in the price control period. However, we also note the CAA's observation in the preceding paragraph that the long-term approach has not systematically under- or over-remunerated efficient financing costs in any given price control period.
- 7.106 In other words, the previous approach based on long-term forecasts had in previous price control periods proven relatively effective at achieving the CAA's stated objective of remunerating expected real debt costs within the regulatory period. The recent increased volatility of inflation meant, however, that the CAA considered that this long-term approach was no longer likely to be effective at achieving the CAA's objective in H7. The CAA assessed at length in chapter 9 of the Final Decision the consistency of its setting of the WACC, including the use of short-term inflation forecasts for H7, with its statutory duties.
- 7.107 In our view, consistency in the estimation of the individual components of the WACC over time is desirable. However, we also observe that consistency is not the same as identical treatment. The specific circumstances of each price control decision are also relevant and different circumstances can warrant different treatment.
- 7.108 The use of long-term inflation forecasts meant that, historically, returns to equity investors depended on the differences between outturn inflation and the long-term view of inflation. In H7, new information on the likely scale of the difference had become available (ie the divergence between short- and longer-term inflation expectations and the recent increase in the volatility of inflation). Continuing with the long-term approach to inflation would imply greater expected upsides for equity investors relative to the past, which is unlikely to have been anticipated or considered in choosing the appropriate approach to inflation in previous price reviews. This raises the question whether other options would be more consistent

⁷⁶⁰ [Final Decision, Section 3](#), paragraph 9.22.

⁷⁶¹ [Final Decision, Section 3](#), paragraph 9.27.

with the CAA's statutory duties, including ensuring that charges are no higher than necessary.

- 7.109 In this context, we do not consider the CAA was wrong to re-assess if past practice remained appropriate, nor to conclude that it was in consumer interests to seek to reflect the expected fall in the real cost of debt in regulated charges. This is one aspect of the regard the CAA had to the principle that regulatory activities should be carried on in a way that is consistent (and whether different circumstances warranted a different approach to that taken previously).
- 7.110 We also observe that, as set out in paragraph 7.65, the CAA's original concern was about leaving too much downside risk with equity investors, if inflation were to be below long-term expectations in H7, which it considered relevant to the discharge of its statutory duties. Therefore, we do not agree with HAL's characterisation that the CAA's decision was an opportunistic attempt to reduce equity returns and lower prices, and which would, in turn, increase regulatory risk.⁷⁶²
- 7.111 We take into account the CAA's observation that the use of long-term inflation forecasts would have led to a material miscalibration of the price control that is not expected to reverse over any defined period of time. We agree (and as we assess in more detail in paragraphs 7.145 to 7.152) that, while over time inflation is liable to revert to the mean, there is no guarantee that the current upward shock will be off-set by a negative one of a similar magnitude. In other words, using long-term inflation forecasts for H7 could lead to higher prices for consumers that are not offset in future. We also note that forecasting risks are, as discussed further below (see paragraph 7.161 to 7.162 in particular), liable to be at least as material were the CAA to have used long-term inflation forecasts. Each of these points indicates that using the long-term forecasts was not a clearly superior alternative.
- 7.112 Our view is that while clearly a different alternative (using long-term forecasts) was open to the CAA, deciding to use short-term inflation forecasts was a judgement it was entitled to make within its margin of appreciation as an expert regulator. It consulted on doing so and considered the responses and the use of the alternative forecasts. It noted the consequences and risks and exercised its regulatory judgement that using the short-term forecasts as part of its WACC calculation was consistent with the objectives of the real returns framework and its statutory duties (to which, as required, it plainly had regard).⁷⁶³ In making that judgement, the CAA

⁷⁶² In its response to the PD, HAL submitted that the CAA used an inflation forecast in the Initial Proposals which was 7 months out of date and that it should have been evident to the CAA at the time that inflation would be higher over H7 than the long-term view (paragraph 136). While we agree that the forecasts shown were relatively out of date by the time the Initial Proposals were published, we consider the statements made by the CAA provide reassurance that the CAA was having regard to its statutory duties, including financeability.

⁷⁶³ Including that forecasting risks, which we consider further below, were just as material using longer term forecasts.

did not, in deciding not to use long-term forecasts, reject a clearly superior alternative.

3. Investors' exposure to inflation

- 7.113 We next consider the extent to which the change denied equity investors their intended exposure to inflation and, if so, whether this was likely to increase regulatory risk and required rates of return.
- 7.114 The CAA's approach in H7 has the effect of reducing the potential additional return to equity in H7 due to the current inflationary shock (as explained earlier at paragraph 7.59). On an ex-ante basis, this may be expected to reduce the correlation between real equity returns and inflation and, consequently could change equity investors' residual exposure to inflation risk relative to an approach which uses 'long-term' forecasts.
- 7.115 We acknowledge that different investor groups may have different preferences regarding their overall exposure to inflation, and that a change in the expected correlation between real equity returns and inflation may be a relevant factor in making investment decisions.
- 7.116 However, we note that the significance of this impact will depend on whether the current inflationary shock is a temporary 'one-off' shock or whether it may have longer-term implications on the inflation outlook. Given the Bank of England's explicit inflation target, it is possible that following the current period of greater inflation volatility, the correlation between real equity returns and inflation will broadly return to what it was before this inflationary shock.
- 7.117 Given this, it is not clear to us that the change in CAA's approach as between Q6 and H7 will lead to a permanent shift in investors' exposure to inflation that would lead them to demand a higher rate of return. Moreover, as set out above, investors should reasonably expect elements of the methodology for estimating the various WACC components to evolve over time, where the regulator has a reason to make a change, for example because of changing circumstances.
- 7.118 HAL made several arguments as to why the change in approach would increase regulatory risk (as set out in paragraph 7.41). Most of them focus on the impact of the change on the actual company, specifically the issue of HAL having more index-linked debt in its funding mix. Because HAL's actual real cost of debt is not expected to fall in line with higher inflation, HAL's arguments in this regard imply that investors will be penalised for managing exposure to inflation in the way that they chose to do, and that HAL would be forced to incur significant costs to close out its hedging positions and move closer to the CAA's notional assumption of 30% index-linked debt. Arguing against this position, the CAA noted that HAL had not justified or explained the scale and cost of its portfolio of index-linked

derivatives, and separately why it is in consumers' interests to fund these costs through regulated charges.⁷⁶⁴

- 7.119 We consider that the CAA has been clear in its focus on the notional company in estimating the cost of debt. We are of the view that the CAA's approach is consistent with the principle that it is for shareholders of the regulated company to bear the costs and risks of its actual financing decisions. The observation that the CAA's approach leads to a lower real cost of debt allowance compared to what HAL needs to service its index-linked debt is simply a consequence of that approach, and one which cannot properly be argued to increase regulatory risk. We further note that HAL has not challenged the CAA's notional assumption of 30% debt being index-linked.
- 7.120 Accordingly, it does not appear to us that we should regard the CAA's decision as wrong on the grounds that it changed investors' exposure to inflation in the long run, denying equity investors their desired exposure to inflation (all the more so where the CAA had sound reasons, as set out above and below, for adopting the approach it did). Nor do we consider that this reasoned change in approach, as between price control periods, would necessitate higher rates of return for investors.
- 7.121 We recognise that, in adopting a short-term inflation forecast to calculate the cost of debt, it may have been possible for the CAA to have set out more clearly its views on how investors' risk exposure to inflation might be affected going forward and provide more reasoning behind its views. However, we also recognise that at the start of the H7 process, the potential for relatively high inflation occurring and then persisting into H7 was not fully evident. Assessing the impact of the evolving inflation environment on risk and investor preferences would have been challenging in those circumstances, and there is evidence that the CAA considered the potential impact on investors in making its final decision.
- 7.122 That is, the CAA considered the alternative option proposed by HAL of using long-term inflation forecasts. It took account of possible reasons for, and consequences of, using those forecasts (as set out in paragraphs 7.76 to 7.81). It considered HAL's points on investment decisions and regulatory risk. It concluded that it was not persuaded that the use of OBR forecasts materially increased the risk to investors (and which conclusion, for the reasons we have set out in paragraph 7.77, we do not find to have been wrong).⁷⁶⁵ It decided against the use of long-term inflation on the basis that it would lead to a material miscalibration of the price control that is not expected to reverse over any defined time period (which, again, for the reasons in paragraph 7.76(d) and 7.155, we do not consider was wrong).⁷⁶⁶

⁷⁶⁴ Hoon 2, paragraph 24.49.

⁷⁶⁵ [Final Decision, Section 3](#), paragraph 9.23.

⁷⁶⁶ [Final Decision, Section 3](#), paragraph 9.22.

It made judgements it was entitled to make in this regard and did not reject a clearly superior alternative approach.

Impact on cash flow volatility and financing choices

- 7.123 Another of HAL's key arguments under this heading was that the CAA's approach gives HAL a choice of accepting significantly higher cash flow volatility, or moving to shorter-term financing, or reducing reliance on index-linked debt (see paragraph 7.41(b)). We note that this argument was given limited prominence in HAL's submissions during the H7 price control process.
- 7.124 HAL contended that that the CAA's use of short-term inflation forecasts created additional cash flow volatility, in a way which was inconsistent with real world financing requirements.⁷⁶⁷ Such increased cash flow volatility would raise costs associated with managing liquidity, interest coverage, and the credit rating, according to HAL.⁷⁶⁸ Alternatively, HAL stated that it could move to shorter-term financing to more closely match the real cost of debt allowance in each price control period, but this would also increase transaction costs that are not provided for in the price control and would not be consistent with the long-term nature of assets in the sector.⁷⁶⁹
- 7.125 The CAA responded that while there may be higher cash flow volatility between periods, total returns to investors might be more stable, after accounting for the indexation of the RAB (see paragraph 7.47). The CAA also submitted that its approach was neutral in its treatment of and impact on the tenor of HAL's borrowing.⁷⁷⁰
- 7.126 We understand this argument as being about greater volatility of cash flows between regulatory periods, rather than greater cash flow volatility during the H7 price control period. The real WACC allowance is fixed for the price control period under both the long-term and the short-term approach to inflation, resulting in no additional cash flow volatility during the period.
- 7.127 However, there might be greater cash flow volatility between periods. For example, in H7 (which is expected to be a period of higher inflation on average) the use of a short-term forecast to deflate the nominal cost of debt leads to a lower real cost of debt, and therefore a lower real WACC allowance and lower cash flows compared to the approach based on long-term inflation. Conversely, an expected period of below-average inflation would lead to a higher real WACC

⁷⁶⁷ HAL, First Witness Statement of Michael King (**King 1**), 17 April 2023, paragraph 134(b).

⁷⁶⁸ HAL, First Witness Statement of Peter Hope (**Hope 1**), 17 April 2023, paragraph 6.46.

⁷⁶⁹ Ding 1, paragraph 5.11.

⁷⁷⁰ Hoon 2, paragraph 24.26.

allowance and higher cash flows compared to the approach based on long-term inflation.

- 7.128 In considering whether there was likely to be greater cashflow volatility using short-term inflation forecasts, compared with longer-term forecasts, and whether, consequently, the Final Decision was wrong, we note the following.
- (a) The most relevant consideration in a regulatory context is the impact of the CAA's approach on the notional company rather than the actual company;
 - (b) We agree that there might be more volatility in cash flows between regulatory periods for the notional company (for the reasons discussed in paragraph 7.127). The CAA also agreed with this, as does HAL in its more detailed submissions.⁷⁷¹ There is therefore general agreement on the potential impacts of the CAA's approach on inter-period cash flow volatility for the notional company;
 - (c) As is always the case under the real returns framework, there is a mismatch between nominal interest cash costs and the real cash return provided for in the WACC. If this mismatch is more variable between price control periods, this means that 'financing' this mismatch with long-term debt might lead to greater cash flow volatility for equity investors (or a possible solution to avoid this extra volatility would be to move to shorter-term debt).
- 7.129 However, as acknowledged by HAL, financing decisions are unlikely to be taken to seek to perfectly match expected revenues over the course of individual price controls.⁷⁷² Other components of allowed revenues are reset at every price control and so are also subject to 'reset' risk. The decision for HAL and its investors on the appropriate mix of fixed-rate and index-linked debt similarly will reflect a range of factors, including investors' preferences for inflation exposure. We therefore agree with the CAA that it is not clear that the CAA's approach to deflating the nominal cost of debt would necessarily lead to a need to change HAL's financing strategy, and even if it did, this would be a decision for HAL to make (with the associated risks and benefits residing with its shareholders).
- 7.130 The CAA also noted in its Response that total returns to equity might be more stable under its approach (see paragraph 7.47), and this might be more relevant for long-term investors.⁷⁷³ This would also be a relevant factor for financing decisions.
- 7.131 In addition, while identifying potential impacts, HAL has not presented any specific evidence to illustrate the likely scale of additional transaction costs or other

⁷⁷¹ Ding 1, paragraph 5.9, and [CAA Response](#) paragraph 169.3(b).

⁷⁷² Hope 1, paragraph 6.18.

⁷⁷³ [CAA Response](#), paragraph 169.3(b).

incremental costs to its business as a result of the change in CAA's approach. HAL simply asserted that it would need to divert money from other parts of the business to service its debt (see paragraph 7.41). We address this argument in the next section on financeability.

- 7.132 Based on the above, our view is that the potential for increased inter-period cash flow volatility and the potential impact on HAL's future financing decisions is not a basis to find that CAA was wrong in law to have adopted short-term inflation forecasts for the H7 price control. Given the balance of considerations and the judgements the CAA had to make, our further view is that there was not a clearly superior alternative approach, including retaining the long-term approach it used in Q6, that the CAA should have adopted instead.

Impact on financeability

- 7.133 HAL submitted that the CAA's approach was detrimental to financeability and would lead to HAL diverting funds from operational activities to service its debt (see paragraph 7.41). We understand this to relate back to the issue of HAL having significantly more index-linked debt in its funding mix, which in HAL's view clearly shows that the cost of debt allowance is insufficient to service its debt costs. Further, in response to our Provisional Determination, HAL stated that it provided extensive evidence showing the CAA's cost of capital was wrong, and that therefore the CAA's financeability assessment cannot be relied upon.⁷⁷⁴
- 7.134 We observe that the CAA carried out a financeability assessment of the notional company and concluded that, overall, the price control, including the WACC set using short-term inflation forecasts, was financeable. Specifically, the CAA responded that, in chapter 13 of the Final Decision, it assessed that HAL's modelled financial ratios were compatible with a strong investment-grade credit rating through to the end of the H7 period.⁷⁷⁵ The CAA formed this view even though HAL alleged that the WACC allowance was too low.⁷⁷⁶
- 7.135 The CAA also responded that its financeability assessment specifically factored in the financing required to fund the mismatch between nominal debt costs and real cash returns and its financeability assessment showed the notional company to be financeable over H7.⁷⁷⁷
- 7.136 As to whether the CAA was required to consider the actual costs of HAL's index-linked debt, including its portfolio of inflation derivatives, we set out our view earlier

⁷⁷⁴ HAL Response to PD, paragraph 94.

⁷⁷⁵ Hoon 2, paragraph 24.20.

⁷⁷⁶ All else equal, a higher WACC would lead to higher revenues and cash flows, making the business more financeable (and not less).

⁷⁷⁷ Hoon 2, paragraph 24.20-24.22.

in paragraph 7.119 that this would not be consistent with the CAA's notional assumption that only 30% of debt is index-linked (which HAL has not challenged).

7.137 In our view, the CAA has set out its approach to financeability in sufficient detail in the Final Proposals and in the Final Decision, and has considered a range of quantitative and qualitative factors to support its judgement.⁷⁷⁸ It plainly had regard to the need to secure financeability. HAL did not present any specific evidence to explain why the CAA's financeability assessment itself was wrong. HAL's contentions relating to the diversion of funds to service debts relate back to HAL's arguments on the impact on the actual company, whereas the focus of the financeability assessment is on the notional company. We are therefore of the view that HAL's argument around diverting operational funds does not demonstrate that the CAA was wrong.

The change in approach was unnecessary and therefore disproportionate

7.138 We next consider whether the CAA's change of approach to this matter in H7 was unnecessary and hence disproportionate.

The existence of so-called 'windfall gains'

7.139 This argument from HAL concerns the issue of whether the so-called 'windfall gains' arising from the misalignment between long-term inflation forecasts and outcomes is something that needs to be 'regulated away' or whether this should be treated as the natural consequence of capital structure and financing decisions taken by the regulated firm.

7.140 HAL submitted that it was wrong to characterise this as over-compensation and that instead it was a natural consequence of a regulatory regime under which inflation risk relative to long-run expectations has been allocated to equity.⁷⁷⁹ Further, HAL submitted that, as outturn inflation demonstrably mean-reverts around long-term expectations (aided by the Bank of England's inflation targeting mandate), this can be expected to even out over time with the result of ensuring the recovery of efficiently incurred financing costs over time.⁷⁸⁰ Oxera, on behalf of HAL, further noted that it is the use of short-term forecasts which leads to miscalibrations in the form of systematic, one-sided errors.⁷⁸¹

7.141 HAL further submitted that the CAA exaggerated the size of the purported 'windfall gains' due to its unjustified assumption that the notional company had a significantly lower share of index-linked debt than HAL (see paragraph 7.42(a)).

⁷⁷⁸ Final Proposals, Chapter 13.

⁷⁷⁹ King 1, paragraph 136.

⁷⁸⁰ [HAL NoA](#), paragraph 239.

⁷⁸¹ Hope 1, paragraph 6.40.

- 7.142 The CAA responded to this part of HAL's appeal stating that the so-called 'windfall gains' are necessarily problematic, regardless of whether they are expected to even out over time.⁷⁸²
- 7.143 The CAA also noted that the UK is currently experiencing a once-in-a-generation inflation shock, and that it was not aware of any forecast that shows that recent high inflation will be offset in future by equal and opposite period of negative inflation.⁷⁸³ In other words, there was an asymmetry of outcomes that the CAA took into account. The CAA also noted that action could be taken if the asymmetry of outcomes pointed in a different direction. An example of that would be the financeability challenge that could arise in the context of a low-inflation environment if a long-term inflation forecast was used, and that this what motivated the CAA's use of short-term forecasts for the Initial Proposals.⁷⁸⁴
- 7.144 We now turn to our assessment of HAL's arguments.
- 7.145 We explained earlier (in paragraph 7.59) that inflation 'surprises' (both upside and downside) have the effect of transferring value between different capital providers. Consequently, if inflation over the price control period is expected to be above long-term inflation, continuing with the 'long-term view of inflation to deflate the nominal cost of fixed-rate debt is likely to result in additional returns to equity investors. These potential additional returns to equity are what is being referred to as 'windfall gains'.
- 7.146 As we noted in paragraph 7.59, these value transfers are a natural consequence of financing an inflation-linked asset with nominal fixed-rate debt. The 'extra' returns to equity arise at the expense of nominal debt holders, and the effect is in principle symmetric. Equity investors can also lose out and nominal bond holders gain when inflation is low.
- 7.147 The CAA's approach to use short-term inflation has the effect of removing these potential expected 'extra' returns to equity holders, resulting in lower charges to passengers in H7 (see paragraph 7.114). The short-term inflation forecast of 4.9% used by the CAA is more than two percentage points higher than the CAA's long-term inflation assumption of 2.73%, implying the potential for significant upside to equity investors if outturn inflation is indeed as high as implied by the forecasts.⁷⁸⁵
- 7.148 The issues around the potential treatment of value transfers between capital providers in a regulated context are largely similar in our view to the issues we discussed earlier in relation to HAL's arguments around past investment decisions and risk. Both long-term and short-term approaches to inflation are consistent with

⁷⁸² [CAA Response](#), paragraph 169.4(a).

⁷⁸³ Hoon 2, paragraphs 24.32.

⁷⁸⁴ Hoon 2, paragraphs 24.31.

⁷⁸⁵ [Final Decision, Section 3](#) paragraphs 9.40 and 9.95.

real returns framework and retain equity investors' 'leveraged' exposure to inflation, but the level of that exposure may differ. When the extent of divergence between anticipated inflation and longer-term trends is expected to be significant during a price control period, this properly raises the question of whether using longer-term forecasts that are expected to be incorrect over the price control period would result in charges which are reflective of efficient financing costs over the period. We concluded that the balance between these factors did not indicate that the CAA was wrong in exercising its judgement to use short-term inflation forecasts (see paragraph 7.112).

- 7.149 We are also of the view that the CAA was not wrong to treat the expected asymmetry in outcomes as a relevant consideration in deciding which approach to take to deflating the nominal cost of debt. While the CAA was relatively confident that inflation would exceed the long-term average over H7, it is relatively unlikely that this would be matched by a negative inflation shock of a similar size in the future, so the CAA was not wrong to take an approach consistent with the low expected likelihood of such a scenario (the unlikelihood of which points to the use of the long-term forecasts not being a clearly superior alternative to the short-term forecasts the CAA chose to use).
- 7.150 In assessing the issue of potential asymmetry, it is also relevant to consider an opposite situation where inflation was forecast to be materially below the long-term view over a price control period. A regulator may be required to take action to reduce equity investors' downside exposure to low inflation, depending on the circumstances in which the regulator is making that decision, given its financeability duty.
- 7.151 HAL submitted that when the CC faced such opposing conditions in 2009 (and when a change to short-term inflation approach would help the company), the CC 'stuck' with the established long-term approach.⁷⁸⁶ The example refers to the CC's recommendations to the CAA on the 2009-2014 price control for Stansted Airport, and the CAA's final decision for that price control. However, it is important to note that the scale of deviation between long-term and short-term forecasts was relatively smaller than in the case of H7. In its final decision on Stansted, the CAA noted that 'the reduction in inflation expectations relevant to estimation of the cost of debt for the next five years might be in the region of 50 to 100bp'.⁷⁸⁷
- 7.152 By contrast, and as we noted earlier (at paragraph 7.84), the difference between average expected inflation in H7 and long-term inflation is significant in the context of H7 (the difference is greater than 200bps). The CAA clearly considered the alternative approach put forward by HAL but ultimately decided that using long-term inflation to deflate nominal yields would result in a 'windfall gain' for HAL

⁷⁸⁶ HAL Response to PD, paragraph 121.

⁷⁸⁷ [Economic regulation of Stansted Airport 2009-2014: CAA decision \(aerohabitat.eu\)](#), paragraph 3.131.

which the CAA considered would be at the expense of consumers, on the basis that HAL's option would lead to materially higher prices without a clear consumer benefit (there being, as we note in paragraphs 7.111 and 7.145 to 7.152, no indication that these price increases would be offset in future because of a negative inflation shock).⁷⁸⁸

- 7.153 On the basis of the above, we do not find that the CAA failed in its duty to have regard to the principle that regulatory activities should be carried out in a way that is, amongst other things, targeted only at cases where action is needed and proportionate.

The exaggeration of the so-called 'windfall gains'

- 7.154 As regards HAL's arguments regarding the size of the 'windfall gains' being exaggerated by the CAA's notional assumption on the amount of index-linked debt in the notional structure, our view is that this highlights that the implications of the CAA's approach will in practice differ for the actual company (HAL) compared to the notional company used in the CAA's assessment. This is consistent with the CAA estimating the WACC for a notional company in accordance with well-established regulatory practice, and again we note that HAL has not appealed the CAA's notional assumption that 30% of embedded debt is index-linked.⁷⁸⁹

- 7.155 We therefore consider that the CAA was not wrong to have regard to the possibility that inflation surprises could result in a material mismatch between long-term inflation forecasts and inflation outcomes during the price control period, and that it was not wrong to factor in potential 'windfall gains' and 'losses' into its decision. Again, we do not find to have been wrong on this account owing to a lack of regard to the principle that regulatory activities should be carried out in a proportionate way.

The issue of inflation mean-reversion

- 7.156 HAL further contended that, in any event, the CAA's approach would not eliminate 'windfall gains' as it has replaced a more stable long-term inflation forecast with more volatile short-term inflation forecasts (see paragraph 7.42(b)). In the long term, inflation clearly mean-reverts while using short-term forecasts can consistently over- or under-estimate inflation period after period.
- 7.157 The CAA stated that whether outturn inflation reverts to a supposed long-term level in the longer term is far less relevant than whether an inflation forecast represents a 'fair bet' for a company within the price control under consideration. In H7, the CAA has used a forecast for which, in the CAA's view, the likelihood

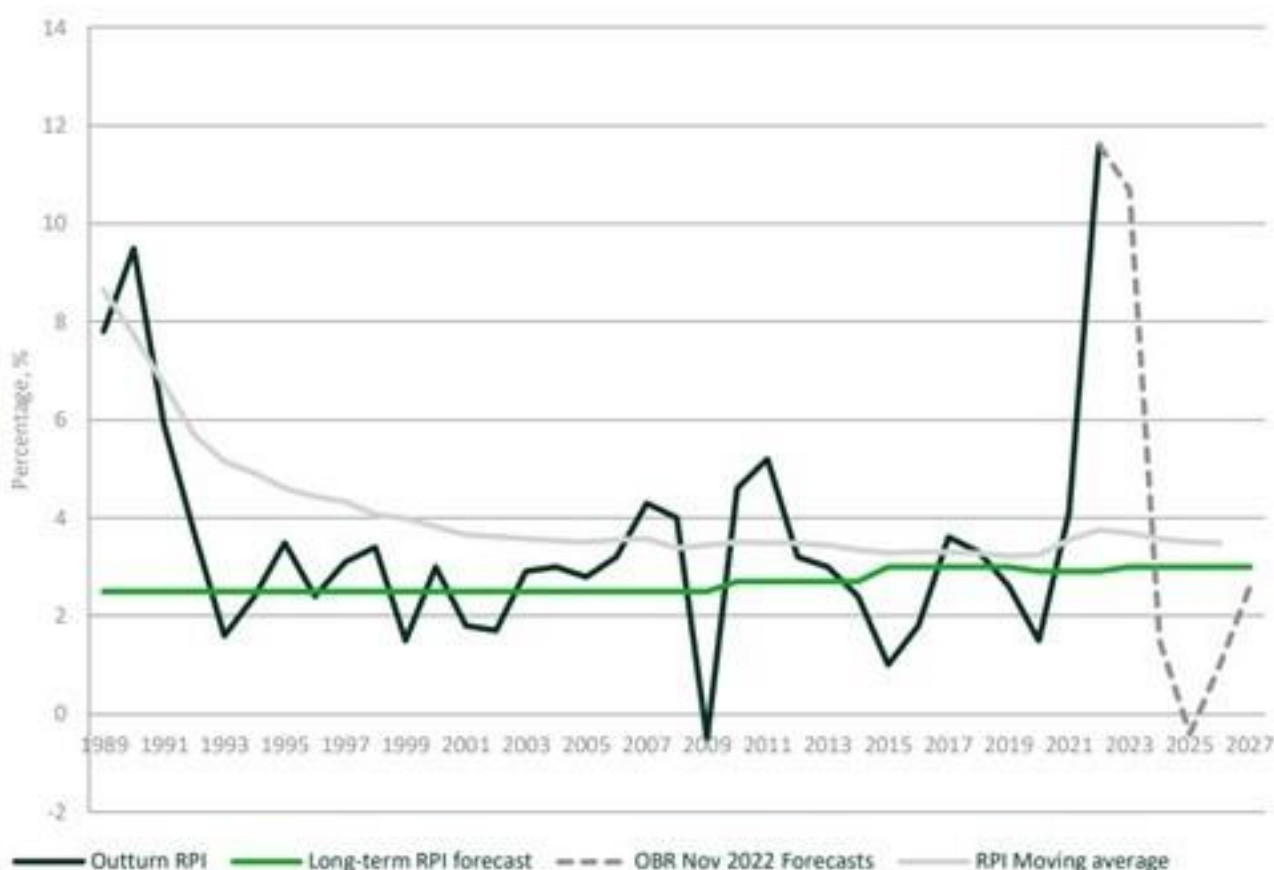
⁷⁸⁸ [Final Decision, Section 3](#), paragraph 9.22.

⁷⁸⁹ HAL's actual share of index-linked debt is 73%. Ding 1, paragraph 5.16.

that inflation will be higher than expected is broadly balanced against the likelihood that inflation will be lower than expected. By contrast, the CAA stated that HAL is proposing a forecast where the overwhelming likelihood is that inflation will be above the forecast. This would not be a ‘fair bet’ in any meaningful sense.⁷⁹⁰

7.158 Given the Bank of England’s inflation target mandate, we would expect inflation to generally revert to a level consistent with that target in the long-run, and this is broadly supported by the empirical evidence submitted by Oxera on behalf of HAL.⁷⁹¹ The evidence also illustrates, however, the atypical circumstances faced by the CAA given the magnitude of the current inflation shock experienced by the UK economy (see Figure 7.1).

Figure 7.1: HAL’s analysis of inflation forecasts



Note: The long-term RPI forecast is based on the RPI-CPI wedge of 50bp up to 2009, when it increased to 70bp. In 2015, this increased further to 100bp. In the OBR’s 2019 forecast evaluation report, its updated assumption was for a wedge of 90bp.
Source: Hope 1, H7 appeal: cost of capital, Oxera, 13 April 2023, Figure 3.4.

7.159 As the UK entered a period of significantly higher inflation, inflation forecasts changed dramatically between Initial Proposals, Final Proposals and then the Final Decision. These changes in forecasts at different stages of the H7 decision making process indicate that the UK might be in a period of high inflation but also

⁷⁹⁰ [CAA Response](#), paragraph 169.7

⁷⁹¹ Hope 1, H7 Appeal: cost of capital, Oxera, Figure 6.1.

in a period of inflation volatility. In paragraphs 7.65 to 7.83, we set out how the CAA's reasoning and interpretation of the inflation forecasts evolved at the different stages of the H7 process, in response to these changing circumstances.

- 7.160 In response to our Provisional Determination, HAL reiterated its view that the current spike in inflation is a temporary distortion and that the CMA previously chose not to take temporary distortions in inflation into account in its PR19 redetermination.⁷⁹² As we noted earlier, each regulatory decision is context-specific. The PR19 precedent cited by HAL did embody this view, but it is also important to note that the scale of the deviation between short-term and long-term inflation was much less significant in that decision. For example, the OBR forecasts of CPI over the price control averaged 1.88% relative to the long-term forecast of 2.0%.⁷⁹³
- 7.161 For reasons discussed earlier in paragraphs 7.84 to 7.86, 7.111, and 7.145 to 7.152, in our view, the CAA had good reasons to consider carefully whether continuing to use 'long-term' inflation was appropriate, regardless of whether inflation is assumed to mean-revert in the long-term. It was entitled in the circumstances it faced to make the judgement that the use of the short-term forecasts in H7 was consistent with the real returns framework and its statutory duties and, in doing so, did not reject a clearly superior alternative.
- 7.162 With regard to forecasting risk, the CAA acknowledged in the Final Decision that five-year inflation forecasts are, by definition, more volatile than long-term forecasts. However, our view is that the CAA's assessment that, at the time of making the decision, a five-year forecast is likely to be more reflective of inflation expectations over the forthcoming regulatory period, rather than long-term inflation assumptions, was not wrong. We note the CAA's assessment in the Final Decision that the forecasting risk would be at least as material were it to use long-term inflation forecasts.⁷⁹⁴
- 7.163 We take into account that, given the higher than average short-term inflation forecasts, had the CAA used the lower long-term forecasts it would have been more likely that out-turn inflation would have been significantly higher than the figure used to deflate debt costs. That, we agree with the CAA, is less likely to have amounted to a 'fair bet' and more likely to have led to higher charges for consumers than necessary to fund efficient financing costs over the period. It was not, in light of that point amongst others, a clearly superior alternative.
- 7.164 We therefore conclude that the CAA was not wrong in using short-term forecasts on the basis of the arguments relating to volatility and the potential for such

⁷⁹² HAL Response to PD, paragraphs 134-135.

⁷⁹³ CMA (2021), [Anghian Water Services Limited, Bristol Water plc, Northumbrian Water Limited and Yorkshire Water Services Limited price determinations](#), paragraphs 9.24 and 9.35.

⁷⁹⁴ [Final Decision, Section 3](#), paragraph 9.24.

forecasts to be systematically wrong. It is not evident that a clearly superior forecasting option was available to the CAA and none has been put forward by HAL.

Conclusion on the CAA's use of a short-term inflation forecast

- 7.165 In the light of our detailed review and assessment of the Parties' submissions and supporting evidence, and as set out above, we determine that the CAA did not err in law or in the exercise of a discretion in using short-term inflation forecasts to deflate the nominal cost of HAL's fixed-rate embedded debt.
- 7.166 We find in particular that the CAA:
- (a) acted in a way that it considered would further the relevant interests of users of air transport services;
 - (b) had regard to the principle that regulatory activities should be carried out in a way which is proportionate and consistent; and
 - (c) had regard to the need to secure that each holder of a relevant licence was able to finance its provision of airport operation services in the relevant area.
- 7.167 The CAA was considering how to apply the real returns framework in unusual circumstances. There was a significant upward spike in short-term inflation forecasts, with no basis to think that a negative spike would off-set these in future, and the CAA had to decide between the competing alternatives of using short- or long-term forecasts. The CAA made a reasoned assessment of these alternatives and made a judgement that it should adopt the former. In the circumstances that was a regulatory judgement it was entitled to make: one that fell within the margin of appreciation to be afforded to it as the expert regulator and it was not wrong.
- 7.168 The CAA assessed whether the different circumstances in which it made its decision warranted a different approach to that taken in previous price controls. It was not wrong to conclude that, as with other elements of the price control, the methodology for estimating the various WACC components evolves over time or that different approaches may be taken in different cases. Its approach does not, in our judgement, represent a fundamental departure from the real returns regulatory framework that can be said (i) to have failed to have regard to the need for regulatory activities to be carried on in a way that is consistent nor (ii) in itself to be wrong in law or in the exercise of a discretion.
- 7.169 In deciding between the competing alternatives, the CAA's primary duty was to further relevant end-users' interests. Having considered the consequences and risks liable to result from the alternative approaches, the CAA made the judgement that using the short-term inflation forecasts would ensure that efficient financing costs are reflected in the price control, better matching the objectives of the real

returns framework in the H7 period and meaning that charges for end-users are no higher than necessary (whereas using long-term forecasts was liable to result in higher charges).

7.170 In making its assessment, the CAA had regard to the need for regulatory activities to be carried on in a way that is proportionate and to the need to ensure that a relevant licence holder (the notional company) is able to finance its provision of airport operation services in the relevant area.⁷⁹⁵ It concluded that such a licence holder would be so able.

7.171 The CAA also had regard to the effect of its decision on investors and on past investment decisions. In that regard, our findings are that:

- (a) while some investors may have different preferences regarding inflation exposure, and the change in CAA's approach may have different impacts on different types of investors, that does not mean the CAA was wrong in law or in the exercise of a discretion in adopting the approach it did;
- (b) the CAA took proper account of the circumstances in which it was setting the H7 price control and gave sufficient consideration to the effect of a change in its approach to inflation forecasts in light of its statutory duties; and
- (c) the CAA was not wrong to take the view that a change in approach would further the interests of relevant end users (consumers), since it would result in lower prices for them in H7, and, in light of its primary statutory duty, to place greater weight on that point than on a view that a change of approach would undermine past investment and financing decisions or have a negative impact on the perception of regulatory risk.

7.172 Accordingly, we determine that the CAA was not wrong in law or in the exercise of a discretion. It made judgements balancing the different considerations that it was entitled to make. It reached a conclusion that it considered would further end users' interests in line with its primary statutory duty. It did not make an error in the exercise of a discretion by making a choice, albeit a rational one, where a clearly superior alternative, in particular the use of longer-term inflation expectations as advanced by HAL, was available to it.

Section B: Nominal cost of embedded debt

HAL's submissions on the nominal cost of embedded debt

7.173 In support of its appeal, HAL relied on the following submissions.

⁷⁹⁵ [Final Decision, Section 3](#), paragraph 9.1, and chapter 12.

HAL-specific premium: reliance on the cost of HAL's Class A debt

- 7.174 HAL submitted that the Final Decision was wrong on the basis that the CAA only considered Class A debt and did not reflect the cost of HAL's Class B debt in calculating the HAL-specific yield premium. HAL argued that this was inconsistent with the notional company used in the CAA's assessment that was BBB+ rated, noting that a BBB+ rated notional company would not be able to finance itself exclusively by means of A- rated debt, so that basing an assessment of a BBB+ rated notional company's cost of debt solely on Heathrow's Class A debt was irrational.
- 7.175 HAL stated that an appropriate premium would be around 49 to [REDACTED] bps.⁷⁹⁶ This is based on the following evidence:⁷⁹⁷
- (a) An analysis of actual spreads at issue across all of HAL's bonds relative to the iBoxx indices: HAL separately estimates a premium on Class A debt relative to the iBoxx A index, and a premium of on its Class B debt relative to the iBoxx BBB index, with an average spread across both classes of debt of [REDACTED].⁷⁹⁸
 - (b) An analysis of secondary traded yields for a selection of HAL's Class A debt relative to the iBoxx A index, which showed a spread of 34bps or 49bps with a 15bps new issue premium added.

HAL-specific premium: estimate of the costs associated with foreign currency debt

- 7.176 HAL contended that it had to rely on foreign currency debt as the Sterling market alone did not have sufficient depth to accommodate all of HAL's financing requirements. The CAA had acknowledged this and recognised that there were associated costs. However, HAL submitted that evidence of actual pricing and projected spreads for the Australian Dollar, Canadian Dollar, Euro and Swiss Franc showed that the CAA made a factual error by 'significantly' underestimating the cost of cross-currency swaps by up to 40bps.⁷⁹⁹

Use of a 13.5-year trailing average

- 7.177 HAL also contended that the Final Decision was wrong because:
- (a) For the assessment of embedded debt, the CAA used a 13.5-year trailing average of the iBoxx indices. However, that was a factual error. The average

⁷⁹⁶ [HAL NoA](#), paragraphs 249-253.

⁷⁹⁷ [HAL NoA](#), paragraph 255. Ding 1, paragraphs 6.13-6.16.

⁷⁹⁸ The average premia on Class A and Class B debt are based on confidential information.

⁷⁹⁹ [HAL NoA](#), paragraph 254.

maturity for all HAL's Class A debt on issue was 17.6 years, and that of its Sterling-denominated component which most closely matched the iBoxx indices was 21.1 years. The 13.5-year period the CAA used also did not appear to be consistent with its own assumptions as to Class A debt which indicated an average maturity of 15.7 years and that 17% of HAL's Class A bonds pre-date 2007.⁸⁰⁰

- (b) The CAA's 13.5-year averaging period was not consistent in respect of a number of parameters with the assumed notional company construct that the CAA used in its assessment: regulatory asset life (assumed to be c.21.7 years), the average tenor of debt making up iBoxx indices (c.20 years), the averaging period of the long-term inflation forecast used to deflate the cost of index-linked debt (20 years), and proportion of new debt that was assumed to be issued in each year (5% rather than the 7.5% required if all embedded debt needed replacing after 13.5-year).⁸⁰¹

CAA response on the nominal cost of embedded debt

7.178 The CAA addressed each of these allegations in its Response.

Reliance on HAL's Class A debt

7.179 The CAA considered that HAL's argument was based on two mistaken assumptions:

- (a) As regards the use of HAL's Class A debt as the basis of the CAA's assessment, the CAA noted that it had, in fact, assumed that the notional company had historically achieved a similar credit rating to HAL's Class A debt. Although this implied a BBB+ credit rating for H7, it also implied that the notional company could have maintained an A- rating for much of the historical period, in line with HAL's Class A debt.⁸⁰²
- (b) Second, the CAA had not sought to opine on whether HAL's Class B debt is or is not efficient. Rather, the CAA submitted that it had consistently taken a view for over 15 years that it should set price controls that were appropriate for a company that maintained a notional capital structure comprised of 60% debt and 40% equity. This means that any debt that HAL chooses to issue beyond 60% gearing is at its own risk and will not be reflected in the CAA's calculations.⁸⁰³

⁸⁰⁰ [HAL NoA](#), paragraphs 259-261.

⁸⁰¹ [HAL NoA](#), paragraph 262.

⁸⁰² [CAA Response](#), paragraph 172.1.

⁸⁰³ [CAA Response](#), paragraph 172.2.

- (c) Further, HAL's Class B debt takes HAL's gearing to 77.7% which is significantly in excess of the CAA's 60% notional gearing assumption, and if the CAA were to include this Class B debt, it would signal that consumers would underwrite the costs associated with higher gearing which the CAA concludes is not in consumers' long-term interests.⁸⁰⁴

Underestimation of currency swap costs

- 7.180 As to whether the CAA was wrong not to use HAL's actual swap costs in calculating the HAL-specific premium, the CAA submitted that it had asked HAL on numerous occasions for its own data together with supporting evidence so that the CAA could scrutinise the information provided. When HAL did not provide this data or when it did, and such data was provided in a format which did not permit reasonable interrogation, the CAA used its own reasonable estimates.⁸⁰⁵

Averaging period

- 7.181 The CAA submitted that it was not wrong to have used a 13.5-year measurement window, starting in 2008, for the purposes of estimating the cost of embedded debt for a number of reasons:

- (a) A 2008 start date reflects a reasonable assumption that the notional company can be assumed to have issued increasing volumes of debt over time to finance a growing RAB;⁸⁰⁶ and
- (b) A 13.5-year averaging period results in a cost of embedded debt that is close to HAL's actual cost of Class A debt (whereas a 20-year trailing average would have significantly exceeded HAL's actual cost of debt) which provides a degree of confidence (given the similarities between HAL's Class A debt and the notional structure) that the CAA's chosen trailing average is not arbitrary and does not unduly over- or under-remunerate HAL.⁸⁰⁷

- 7.182 The CAA argued that HAL's arguments to the contrary were misconceived in that:

- (a) While it was right that the CAA had assumed that a notional company issues debt that has a maturity at issuance of 20 years, this was separate from (and fully consistent with) the assumption that the notional company had issued debt evenly over the last 13.5 years.⁸⁰⁸

⁸⁰⁴ [CAA Response](#), paragraph 172.3.

⁸⁰⁵ [CAA Response](#), paragraph 174.

⁸⁰⁶ [CAA Response](#), paragraph 178.1.

⁸⁰⁷ [CAA Response](#), paragraph 178.2.

⁸⁰⁸ [CAA Response](#), paragraph 179.1.

- (b) It was not wrong for the CAA to adopt a 2008 start date for the notional company merely because HAL had a significant amount of debt on its balance that pre-dates 2008.⁸⁰⁹
- (c) The CAA was not wrong to use a 13.5-year measurement window in the light of its own assumptions as to the distribution of Class A debt issuance over time and that HAL's arguments did not justify its preferred 20-year trailing average.⁸¹⁰

Interveners' submissions on the nominal cost of embedded debt

- 7.183 Both BA and Delta intervened in support of the CAA in relation to the nominal cost of embedded debt.
- 7.184 HAL had argued that the CAA was wrong to calculate the HAL specific premium with reference to HAL's Class A debt only. The Airline Interveners submitted that this argument failed when one considered the gearing levels of HAL's debt. They noted, in the AP Intervention Report, that the gearing implied by HAL's Class A debt was already above the CAA's 60% notional gearing level. The Airline Interveners set out that, as also explained in the AP Intervention Report, the CAA was therefore 'correct to ignore HAL's Class B debt' because consideration of HAL's Class B debt 'would expose consumers to an unnecessary increase in aeronautical charges to cover a higher cost of debt'.⁸¹¹
- 7.185 The Airline Interveners set out that HAL had proposed alternative methodologies to calculate the premium and had proposed the mid-point of two alternative values ([§]bps). They submitted that HAL's proposed remedy contained multiple errors.
- (a) This value was derived from HAL's actual debt issuance and actual traded debt (instead of notional debt with lower notional gearing).
 - (b) HAL, erroneously, included Class B debt in its consideration of new debt. Inclusion of HAL's Class B debt brings the gearing levels above the 60% level for the notional company.
 - (c) For HAL's Class A debt, reference to the A-rated iBoxx index was a departure from HAL's Class A ratings of BBB+ and A- (from Standard and Poor's (S&P) and Fitch respectively). As noted in the AP Intervention Report, 'this will overstate the premium'.⁸¹²
- 7.186 HAL had argued that the CAA underestimated the cost of foreign currency swaps related to HAL's non-sterling debt. BA and Delta submitted that, as explained in

⁸⁰⁹ [CAA Response](#), paragraph 179.2.

⁸¹⁰ [CAA Response](#), paragraph 179.3.

⁸¹¹ [BA Nol](#), paragraph 3.6.3(a) and [Delta Nol](#), paragraph 3.32(a).

⁸¹² [BA Nol](#), paragraph 3.6.3(a)-(c) and [Delta Nol](#), paragraph 3.33 (a)-(c).

the AP Intervention Report, a notional company might not need access to non-sterling debt markets to the same extent as HAL does – '[t]he 60% notionally geared company would only use non-sterling debt if it was the cheapest debt solution after taking account of the additional costs of accessing non-sterling debt markets, including the foreign exchange swap costs'.⁸¹³

Our assessment on the nominal cost of embedded debt

Preliminary remarks

- 7.187 The CAA, like most other UK regulators, estimates the WACC by reference to the costs that would be incurred by HAL under a notional financing structure.⁸¹⁴ This raises several methodological issues, in particular what benchmarks are appropriate for the notional company and what weight, if any, should be given to the actual debt costs of the regulated company. These issues are not straightforward, especially when (as is the case for the CAA in H7) there is only one licensee and the actual capital structure of the licensee differs materially from the notional structure.
- 7.188 When it comes to the cost of embedded debt, while the principle of allowing for the costs of embedded debt is relatively well-established, regulators use a variety of estimation approaches which have generally changed from one price review to the next. In other words, while the cost of debt is more directly observable than the cost of equity in the WACC, estimating an efficient cost of debt allowance is not a mechanistic exercise.
- 7.189 The CAA summarised its approach to estimating the cost of debt as being one which estimates the cost of debt for a notional company representing a hypothetical alternative airport operator that is identical in most respects to HAL, but whose structure of liabilities may be different to HAL's actual liability structure.⁸¹⁵

The CAA's approach in the Initial Proposals

- 7.190 The starting point for the CAA's initial assessment was an index of corporate bonds of similar credit quality and tenor to the CAA's assumptions for the notional company: the iBoxx £ Non-financial A and BBB 10+ indices.⁸¹⁶
- 7.191 The CAA considered that using a notional cost of debt provided stronger incentives on the regulated company to maintain efficient costs than using an actual cost of debt. The CAA also noted that it would only support using actual

⁸¹³ [BA Nol](#), paragraph 3.6.3(b) and [Delta Nol](#), paragraph 3.32(b).

⁸¹⁴ [Initial Proposals](#), Section 2, paragraph 9.133.

⁸¹⁵ Hoon 2, paragraph 9.2.

⁸¹⁶ Hoon 2, paragraph 9.13.

cost of debt where this could be clearly demonstrated to be efficient and provided a better outcome for consumers than using a notional benchmark.⁸¹⁷

- 7.192 The CAA carried out analysis of the costs of HAL's Class A debt relative to the iBoxx indices, based on publicly available data from Bloomberg. The CAA focused on HAL's Class A debt, since it considered that this provided the most suitable approximation for the notional entity.⁸¹⁸ HAL's Class A debt has a similar gearing and credit rating to the notional company, with gearing of 66.4% and a credit rating of A- up to March 2020, which was downgraded by S&P to BBB+ in 2020.⁸¹⁹
- 7.193 The CAA noted that there was significant variation in spreads over time, but overall provisionally concluded that HAL had historically been able to at least match iBoxx spreads on average.⁸²⁰ The CAA based its estimate of the nominal cost of embedded debt on a 20-year collapsing average of yields on the iBoxx A and BBB 10+ year non-financial indices, which produced an estimate of 4.60%.⁸²¹

The CAA's approach in the Final Proposals

- 7.194 Having considered the responses to the Initial Proposals, in the Final Proposals, consistently with the initially proposed approach, the CAA started with the yields on the notional benchmark indices. It then carried out a 'balance sheet check' which focused on HAL's Class A debt.⁸²²
- 7.195 In the Final Proposals (which the CAA confirmed in the Final Decision), this 'balance sheet check' led the CAA to propose to align its cost of debt allowance more closely with the actual cost of HAL's Class A debt in two respects:⁸²³
- (a) by including a HAL-specific premium above the benchmark indices. This reflected its updated view that HAL's Class A debt had been issued at a slightly higher cost than the benchmark indices, although the difference was relatively small; and
 - (b) by shortening the look-back period used to estimate the notional benchmark from a 20-year collapsing average to a 13.5-year fixed average. The CAA considered that this more closely reflected HAL's actual profile of Class A debt issuance, which was more skewed towards recent years than a 20-year collapsing average would imply.

⁸¹⁷ [Initial Proposals, Section 2](#) paragraph 9.155.

⁸¹⁸ [Initial Proposals, Section 2](#) paragraph 9.158.

⁸¹⁹ Hope 1, paragraph 5.19.

⁸²⁰ [Initial Proposals, Section 2](#), paragraph 9.162.

⁸²¹ [Initial Proposals, Section 2](#), paragraph 9.187.

⁸²² [Final Proposals, Section 3](#), paragraph 9.261.

⁸²³ [Final Proposals, Section 3](#), paragraph 9.262.

HAL-specific premium

7.196 In the Final Proposals, the CAA refined its analysis of the HAL-specific premium, responding to the comments it had received on its Initial Proposals. We understand that the HAL-specific premium of 8bps was derived as follows:⁸²⁴

- (a) The CAA obtained information available from Bloomberg on HAL's Class A bonds. These bonds were rated A- until March 2020 and rated BBB+ thereafter;
- (b) The CAA then calculated the issuance spread for each of the bonds as follows:
 - (i) It identified the difference between the spread on the HAL bonds and the spread on the relevant iBoxx index of comparable tenor on the issuance date. The relevant iBoxx index was calculated by taking an average of the iBoxx non-financial A and iBoxx non-financial BBB rated bonds for different tenors (5-7 years, 7-10 years, 10-15 years and 10+ years).
 - (ii) For non-sterling bonds, the spread was converted to a sterling spread, and swap cost was added. This cost was provided to the CAA by its financial advisers (Centrus).
- (c) The premium of 8bps was calculated by taking the average difference between the spread on HAL's bonds and the spread on the benchmark index. The average was calculated as a weighted average based on the outstanding sterling notional amount for each bond.

7.197 The CAA disagreed with HAL that Class B bonds should be included in its analysis. The CAA stated that HAL's gearing, inclusive of Class B debt, would be substantially higher than its notional assumption and would include structural features that the CAA did not assume for its notional company. The CAA also noted that its assumed notional credit rating of BBB+/A- is broadly consistent with HAL's Class A debt but not with Class B debt.⁸²⁵

Averaging period

7.198 The CAA noted that its assumption of a 20-year collapsing average used in the Initial Proposals reflected an implicit assumption that the notional company would evenly raise debt over the course of its useful asset life of 20 years.⁸²⁶

⁸²⁴ CAA Response to CMA's RFI B003, question 2.

⁸²⁵ [Final Proposals](#), paragraphs 9.275-9.276.

⁸²⁶ [Final Proposals](#), paragraph 9.286.

7.199 In the Final Proposals, the CAA reconsidered this assumption based on the actual profile of HAL's Class A debt. The CAA inferred the following issuance profile as set out in Table 7.4.

Table 7.4 Notional vs actual (Class A) debt issuance profile

Period	HAL Class A bonds	IP notional assumption
Pre-2007	17%	25%
2007-2011	14%	25%
2012-2016	28%	25%
2017-2021	41%	25%

Source: [Final Proposals](#), Table 9.6.

7.200 The CAA noted that the skew in issuance towards the later years is important because yields on the notional benchmark, as well as interest rates more generally, have declined significantly since 2002. A skew towards debt issuance in recent years will, therefore, imply a lower cost of embedded debt, all else being equal. The CAA also stated that such an issuance profile both for the actual and the notional company would be consistent with an increasing RAB over the period. Therefore, the CAA proposed to adopt a trailing average period since mid-2008.⁸²⁷

7.201 The CAA therefore provisionally estimated a nominal cost of fixed-rate embedded debt of 4.22% (based on a trailing average of benchmark yields of 4.14% plus a HAL-specific debt premium of 8bps).⁸²⁸

The Final Decision

7.202 In response to the Final Proposals, stakeholders raised various issues with the CAA's calculations.

HAL-specific premium

7.203 HAL stated that the CAA had significantly underestimated swap costs; had not compared HAL's bond with indices of the correct tenor; and that the CAA's estimate of 8bps was not consistent with long-run evidence from the secondary market spreads of Heathrow's Class A bonds over the iBoxx.⁸²⁹ The Airlines also noted several methodological issues, such as a relatively small sample size and the significant variation in spreads across individual bonds, and that alternative calculations suggested a negative premium to the benchmark index.⁸³⁰

7.204 The CAA assessed these arguments and concluded that the approach it considered in the Final Proposals was appropriate. Specifically, the CAA noted the following.⁸³¹

⁸²⁷ [Final Proposals](#), paragraphs 9.289-9.292.

⁸²⁸ [Final Proposals](#), Table 9.7.

⁸²⁹ [Final Decision](#), paragraph 9.105.

⁸³⁰ [Final Decision](#), paragraph 9.117.

⁸³¹ [Final Decision](#), paragraphs 9.121-9.126.

- (a) While there was variation in the spreads relative to the iBoxx, the issuance yields on HAL's bonds tended to be lower than the iBoxx during 'benign' periods, and higher during periods of market stress such as the 2008 financial crisis and the COVID-19 pandemic. The CAA considered that it was important to take account of debt raised in both benign and stressed periods, since the notional company would have historically needed to issue bonds during both periods.
- (b) It was satisfied that it had compared the bonds with the benchmark of the right tenor.
- (c) It specifically requested data on Heathrow's actual swap costs on multiple occasions prior to the Final Proposals, but these had not been provided. Moreover, the swap costs that had been provided by HAL in response to the Final Proposals had been submitted in a format that did not permit any interrogation of their accuracy, efficiency or completeness. Bearing these factors in mind, the evidence provided by HAL was not sufficiently persuasive to warrant a change in the CAA's approach.
- (d) It referred back to its reasoning in the Final Proposals as to why secondary market yields did not represent an appropriate basis of estimation for the HAL-specific premium.

Averaging period

- 7.205 HAL continued to argue for a 20-year averaging period. HAL noted that the CAA's proposed lookback period ignored HAL's actual average tenor at issuance; that a cut-off date of 2008 ignored debt issued prior to this period; that the CAA provided no calculation in support of its proposed lookback period; that the CAA's own analysis did not support a 13.5-year average; that the lookback period should be adjusted to account for liquidity facilities; and that the CAA did not consider impacts of its proposed lookback period on the incentives and financial risk of HAL.⁸³² The Airlines welcomed the reduction from the 20-year average to a 13.5-year average, but noted that a collapsing average would be more representative of the notional company's embedded debt costs.⁸³³
- 7.206 The CAA assessed these arguments and concluded that the approach it set out in the Final Proposals was appropriate. Specifically, the CAA noted the following.⁸³⁴
- (a) Using a 13.5-year averaging period produced a cost of debt allowance that is roughly in line with HAL's actual average yield at issuance across its Class A

⁸³² [Final Decision](#) Section 3, paragraphs 9.103-0.104.

⁸³³ [Final Decision](#) Section 3, paragraph 9.113.

⁸³⁴ [Final Decision](#) Section 3, paragraphs 9.127-136.

bonds. This is important, because it implies that the CAA was not unduly over- or under-remunerating HAL's efficient cost of debt.

- (b) A notional company that issued debt evenly from 2008 onwards at a slight premium to the relevant iBoxx indices represented a reasonable benchmark for HAL.
- (c) The figures set out in the Final Proposals (Table 7.4) were intended as an illustrative example of why a 20-year trailing average would assign excessive weight to earlier years and should not be regarded as a precise calibration of the trailing average period used.

7.207 The CAA therefore adopted the approach to estimating the nominal cost of debt that it had proposed. The CAA concluded that having some regard to HAL's actual investment grade debt costs, subject to appropriate checks, was consistent with both protecting consumers and having regard to the need to secure that the notional company is able to finance its activities.⁸³⁵

Reliance on HAL's Class A debt

Consistency with the credit rating of the notional company

- 7.208 HAL argued that the CAA's estimate of the premium was effectively for an A-rated airport (see paragraph 7.174), whereas the CAA stated in the Final Proposals that the target credit rating for the notional company was A-/BBB+ (see paragraph 7.179(a)). HAL also noted that the CAA's financeability assessment was largely based on a BBB+ credit rating. Therefore, in HAL's view, the efficient cost of debt should be based on the cost of issuance for a BBB+ rated airport.⁸³⁶
- 7.209 HAL submitted that BBB+ is an appropriate target credit rating for a 60% geared notional company. HAL's actual credit rating has benefitted from a 1-notch uplift as a result of structural features included in its whole business securitisation (**WBS**) structure.
- 7.210 We understand HAL's argument as saying that a 'balance sheet check' against HAL's Class A debt implies that the notional company would have historically achieved the same credit rating as HAL's Class A debt, but that this is inappropriate.
- 7.211 In the Final Proposals, the CAA considered the implications of a WBS structure for a notional company and noted that the notional company could also benefit from some rating uplift without an implementation of a WBS structure. However, this

⁸³⁵ [Final Decision](#) Section 3, paragraph 9.140.

⁸³⁶ King 1, paragraph 142.

was in the context of its forward-looking financeability assessment and not in the context of estimating the cost of embedded debt.⁸³⁷

- 7.212 In its response to HAL's NoA, the CAA stated that it was reasonable to assume that the notional company would have achieved the same credit rating as HAL historically, and that the CAA relied on independent advice to check if this was reasonable. The actual rating on HAL's Class A debt was A- until March 2020 and BBB+ afterwards. The CAA also noted that there was nothing inconsistent with it then testing financeability assuming a credit rating of BBB+ going forward in H7 (see paragraph 7.134).
- 7.213 In response to our Provisional Determination, HAL also submitted that the CAA's approach was inconsistent with its previous approach (and with the CC's approach in 2007) that envisaged a rating of BBB+ in Q5 and BBB+/BBB in Q6.⁸³⁸ HAL said that it was inappropriate to assume that the notional company could achieve a rating of A- in retrospect.
- 7.214 Our view is that assessing the appropriate credit rating for the 'hypothetical airport operator similar to HAL' requires some judgement on the CAA's part as an expert regulator. The CAA's chosen benchmark index, which reflects a broad rating of A-/BBB+ (and which is the main determinant of the cost of embedded debt), is consistent with both an assumption that the notional company had managed historically to achieve the same rating as HAL's Class A debt as well as an assumption that the rating could have been slightly weaker and closer to BBB+.
- 7.215 In our view, there is no inconsistency, real or apparent, with the CAA's approach to financeability. Targeting a BBB+ credit rating in the financeability assessment reflects the CAA's view that the notional company's credit metrics need to be broadly consistent with those for a BBB+ rated company, on a forward-looking basis, over the course of H7. This assumption does not necessarily imply that the notional company was assumed to have been rated BBB+ historically.
- 7.216 We also note that both in Q5 and Q6 debt benchmarks were similarly based on both A- and BBB+ indices.⁸³⁹ This means the cost of debt allowance has given some weight to both A- and BBB+ debt costs over time, and this approach was considered to be consistent with a target credit rating of BBB+ at those times. The CAA is continuing to use both A- and BBB+ indices in H7 and therefore, in our view, its approach cannot be described as only funding the debt costs of an A-rated notional airport operator. We also note that HAL has not challenged the use of both A- and BBB+ bond indices as the relevant benchmarks.

⁸³⁷ [Final Proposals](#), Section 3, paragraph 13.39.

⁸³⁸ HAL Response to PD, paragraph 144.

⁸³⁹ [CAP1115.pdf \(caa.co.uk\)](#), section 6. ([nationalarchives.gov.uk](#)), paragraphs 35-38. [Also cited in the HAL Reply to CAA Response]

- 7.217 The purpose of the ‘balance sheet check’ is then to assess whether using the chosen benchmark A-/BBB+ bond indices could be reasonably expected to systematically under- or over-remunerate the efficiently incurred costs for the notional company.
- 7.218 In our view, the CAA has set out a reasonable and internally consistent definition for the notional company (ie a hypothetical airport operator similar to HAL in most respects other than its actual liability structure). HAL’s actual capital structure differs materially from the notional structure (including the level of gearing, the significant use of derivatives and other complex structural features), and this presents some challenges in deciding which of HAL’s debt instruments to use in this ‘balance sheet check’. We therefore now turn to HAL’s second argument that the CAA was wrong to only rely on HAL’s Class A debt for this purpose and that the CAA should have also considered the costs of HAL’s Class B bonds.

Exclusion of HAL’s Class B debt from the analysis

- 7.219 In its Final Decision, the CAA noted that its approach to remunerating HAL for efficiently incurred debt cost was to protect consumers from higher leverage associated with HAL’s Class B and subordinated borrowings.⁸⁴⁰
- 7.220 HAL argued that its Class A and B debt taken together would broadly correspond to a combined credit rating of BBB+, which was the target rating for the notional company.⁸⁴¹ HAL said that basing an assessment of a BBB+ rated notional company’s cost of debt solely on Heathrow’s Class A debt was irrational as a BBB+ company would not finance itself with A- rated debt.⁸⁴²
- 7.221 As we discuss in the section above, in our view, using both A- and BBB+ benchmark bond yields as the main basis for the cost of embedded debt does not imply that the notional company would solely finance itself with A- rated debt.
- 7.222 As to whether the CAA was wrong to exclude Class B debt from its ‘balance sheet’ check, our view is that it was not. Class A debt represents the majority of HAL’s financing and already takes HAL’s gearing above the notional level of 60%. Class B debt on the other hand takes HAL’s gearing significantly above the notional level of 60%, and it has also been downgraded from BBB+ to BBB in March 2020. We agree on that basis with the CAA’s assessment that including Class B debt could lead to customers paying more than the efficient notional cost of debt. For the avoidance of doubt, we agree with the CAA that the exclusion of Class B debt does not imply that HAL’s use of Class B debt is inefficient – the key point here is

⁸⁴⁰ [Final Decision Section 3](#), paragraph 9.139.

⁸⁴¹ [HAL NoA](#), paragraphs 253.

⁸⁴² [HAL NoA](#), paragraphs 253.

that it is not necessarily consistent with the assumed debt structure of the notional company.

HAL's alternative calculations

- 7.223 HAL submitted alternative estimates of the HAL-specific debt premium, that it had prepared itself and that Oxera had prepared on its behalf, and which, in its view, clearly showed that the CAA had understated the premium.
- 7.224 We set out in the section above our view that it was not wrong for the CAA to exclude Class B debt from its 'balance sheet check'. Therefore, we focus on HAL's estimates which use Class A debt only.
- 7.225 Both HAL's internal analysis and Oxera's analysis compare the cost of Class A debt relative to the iBoxx A- index (noting that Class A debt was downgraded from A- to BBB+ during the pandemic), and not to the average of the A- and BBB+ iBoxx indices (which was the CAA's approach for estimating the 8bps premium). Such an approach may be a useful indicator whether HAL has historically issued debt at a premium to the iBoxx (controlling for credit quality). However, adding a premium estimated in this way to the CAA's benchmark cost of debt, which is based on an average of A- and BBB+ indices (and the choice of which HAL has not appealed) would overestimate the efficient cost of debt.
- 7.226 This can be illustrated by a simple example. Suppose HAL issued a bond at a cost of 5.5% when yields on the iBoxx A- and BBB+ indices were 4.0% and 5.0% respectively. HAL's methodology would imply a HAL-specific premium of 150bps while the CAA's methodology would imply a premium of 100bps. While the CAA's estimate of the premium is lower than HAL's, it would be added to a benchmark bond yield of 4.5%, resulting in a total cost of 5.5% (ie equal to the actual cost of the bond).
- 7.227 Further, HAL benchmarks the cost of Class A debt to the A- index up to the end of 2021 despite HAL's Class A debt being downgraded to BBB+ in March 2020, which will further overstate the premium.
- 7.228 Taking account of those points, and our assessment in the preceding paragraphs, we conclude that the alternative approach advanced by HAL was not clearly superior to that the CAA used to estimate of the HAL-specific debt premium. Nor was the CAA's approach irrational.

Underestimation of currency swap costs

- 7.229 According to the CAA, HAL did not provide the CAA with any clear evidence of its actual swap costs at the relevant points during the H7 consultation process. We note that this is something which HAL disputes.

- 7.230 The disputed point in the previous paragraph notwithstanding, as discussed in paragraph 7.196(b)(ii), the CAA factored in the cost of currency swaps in its calculation of the HAL-specific debt premium based on estimates provided by its financial advisers. The CAA's overall approach was to estimate the cost of embedded debt for a notional company, with some cross-checks to HAL's Class A debt. While other sources of evidence do exist, including data on HAL's swap costs, our view is that this does not imply that the CAA was wrong not to have used HAL's actual swap costs.
- 7.231 In particular, the approach the CAA took was consistent with its approach generally to the notional company, which involved making judgements about that company's position. In that context, not using HAL's actual swap costs does not amount to a material error of fact on which the Final Decision was based.
- 7.232 We also see some merit in the point made by BA and Delta that a notional company might not need access to non-sterling debt markets to the same extent as HAL does (paragraph 7.186). While the CAA chose to calibrate the cost of the HAL-specific premium using data on both sterling and non-sterling bonds, this choice involved some judgement and the CAA could have reasonably placed less weight on data from non-sterling bonds. That, in our view, reinforces that the CAA was not wrong, in fact, in its approach.

HAL-specific debt premium: our conclusions

- 7.233 We draw the above points together into the following conclusions.
- 7.234 Through the consultation process involved in the Initial and Final Proposals, the CAA consulted on alternative approaches. It had a reasoned basis, reached after considering responses to the consultations, for the approach it decided to adopt on each of the credit rating of the notional company, the balance sheet check, the exclusion of HAL's Class B debt, and its estimate of currency swap costs. It cannot, in our view, be said to be wrong on the basis it made a decision based on a material error of fact, nor one without reasonable foundation in the facts and evidence such that it was outside the range of decisions open to it to make and thus irrational. Nor, in our further view, was there a clearly superior approach it should have taken or decision it should have made. HAL has not demonstrated otherwise.

Averaging period

Consistency with HAL's Class A debt

- 7.235 HAL argued that the CAA's assertion that a 13.5-year averaging period is better aligned with HAL's actual issuance profile is not supported by the facts, for the following reasons:

- (a) the average maturity of all of HAL's Class A debt was 17.6 years, while the sterling-denominated component of this, which most closely matches the iBoxx indices used as a benchmark, had an average maturity of 21.1 years at inception;
- (b) while the beginning of the 13.5-year averaging period adopted by the CAA to calculate the cost of HAL's embedded debt appeared to align with HAL's restructuring of its debt in 2008, HAL has retained a 'significant' proportion of debt which pre-dates 2008.
- (c) the 13.5-year period does not appear to be consistent with the CAA's own assumptions as to the distribution of Class A debt, which indicates an average maturity of 15.7 years and assumes that 17% of HAL's Class A bonds predate 2007.⁸⁴³

7.236 The CAA responded that HAL was confusing two different concepts: the maturity at issuance and the period over which the notional company is assumed to have issued debt. While the CAA had assumed that the notional company had issued debt with a maturity of 20 years, which is similar to the maturity at issuance of the bonds HAL refers to, the CAA assumed that the profile of debt issued by the notional company was best captured by a 13.5-year averaging period.⁸⁴⁴

7.237 The CAA also stated that it was not wrong to use a 13.5-year trailing average simply because HAL had issued debt prior to the start of the averaging period. The CAA also submitted that if it had used a 20-year trailing average, it would 'significantly' have exceeded HAL's actual cost of debt while a 13.5-year trailing average was more closely aligned with HAL's actual cost of Class A debt (see paragraph 7.181).

7.238 The choice of the averaging period, similar to other aspects of the estimation of the cost of embedded debt, involves some judgement by the CAA, and regulatory practice is not uniform in this area. Neither the approach advanced by HAL (the 20-year collapsing average) nor the CAA's approach for H7 (the 13.5-year simple trailing average) were used in previous reviews (Q5 and Q6).⁸⁴⁵

7.239 Both approaches assume that the notional company would issue debt in a relatively mechanistic way (in similar amounts and with similar maturity year after year), which is unlikely to be case for most real-world companies. Market conditions and other treasury policies would likely affect the timing of debt issuance and the choice of specific instruments.

⁸⁴³ [HAL NoA](#), paragraphs 259-261.

⁸⁴⁴ Hoon 2, paragraph 26.6.

⁸⁴⁵ King 1, paragraph 157.

- 7.240 While we are of the view that the cost of debt should reflect the costs faced by a notionally efficient company, for the same reasons we have provided earlier (see paragraph 7.222) as to why the CAA was not wrong to base its 'balance sheet check' on HAL's Class A debt, we consider the CAA was not wrong to assess whether its initial proposal of a 20-year collapsing average was supported by the evidence on HAL's actual debt profile. Doing so provides a useful cross-check for the notional company's likely costs.
- 7.241 On the specific factual contentions put forward by HAL, we agree with the CAA's reasoning that all the measures HAL referred to describe the maturity of the bonds at issuance. While providing some information on the debt profile of the actual company, these are not by themselves determinative of what should be the correct averaging period, since they only give a view on the average tenor of the debt and not necessarily on when it was issued. It is also clear that the purpose of the 'balance sheet check' is not to match precisely the actual profile and cost of HAL's Class A debt, but to 'sense check' the notional assumptions.
- 7.242 Regarding the observation that HAL had debt predating 2008, this, in our view, similarly does not imply that the CAA made an error in choosing a 13.5-year period. The profile of debt issuance was informative in that it provided some evidence that on average relatively less debt was issued prior to 2008 and relatively more in the recent years compared with what the CAA had assumed in the Initial Proposals. However, the CAA was clearly not trying to match precisely the actual profile and cost of HAL's Class A debt.
- 7.243 If interest rates are broadly stable over time, the choice of the averaging period might not be particularly significant, but interest rates declined materially in the 15 to 20 years leading up to H7. The table to which HAL refers (Table 7.4), while implying that some debt was issued prior to 2008, also implies that nearly 40% of all HAL's Class A debt was issued in the 2017-2021 period, coinciding with a period of very low interest rates, whereas a simple 13.5-year trailing average would imply that around 30% of debt was issued in that period.
- 7.244 This illustration shows that the choice of a trailing average is necessarily a crude approximation of how debt is likely to be issued in practice. It supports the view that the calibration of the average involves a choice, taking account of relevant factors, between alternatives none of which is a precise guide to an answer that is clearly superior to any other. Our view is that, given that point and that the CAA's overall approach was to estimate a cost of debt for a notional company, it cannot be said to have made a material error of fact on which the Final Decision was based by not using HAL's actual issuance profile to calibrate the average.
- 7.245 We also note that, according to HAL, a 20-year collapsing average would produce a nominal cost of debt of 5.06%, which is higher than its estimate of its actual cost of embedded debt of 4.6% (across all debt instruments, including the more

expensive Class B debt).⁸⁴⁶ The CAA, on the other hand, noted that a 13.5-year averaging period would be close to HAL's actual cost of Class A debt (paragraph 7.206(a)).

7.246 The observation that the 13.5-year trailing average is more closely aligned with the actual cost of HAL's Class A debt, while the 20-year average significantly exceeds this, is in our view a relevant factor. It is evidence, to which we have regard, that the notional company could have efficiently secured a lower cost of debt than that implied by the 20-year average, and that using a 20-year average could have led to charges which were higher than necessary. In our view, the CAA was accordingly not wrong in this aspect of its decision.

Consistency with the notional company

7.247 HAL told us that the CAA's approach to using a 13.5-year average of the iBoxx index was not consistent with the assumed notional company construct for a number of parameters in which a 20-year assumption is used, such as regulatory asset life, the average tenor of debt making up iBoxx indices, inflation forecast to deflate index-linked debt, and proportion of new debt that was assumed to be issued in each year.

7.248 The CAA responded that these did not reflect a like-for-like comparison with the 13.5-year trailing average. These parameters would be more indicative of the appropriate tenor of debt, rather than when the debt was issued.⁸⁴⁷

7.249 Our view is that the CAA's reasoning was not wrong in this regard. The trailing average period indicates when the debt was issued historically, which need not coincide with the assumed tenor of debt.

7.250 The CAA also stated that a 2008 start date for the average was a reasonable assumption since the notional company would have needed to issue increasing volumes of debt over time to finance a growing RAB.⁸⁴⁸ HAL submitted evidence to show that in real terms its RAB increased from £8.4 billion in 2004 to £17.3 billion in 2014 and has remained broadly stable since 2014. HAL stated that, therefore, the notional company would be expected to have significant debt relating to the period before 2008.⁸⁴⁹

7.251 In principle, an increasing RAB would typically be consistent with increasing amounts of debt being issued over the period, although nominal RAB growth would be more informative in this context. The implication of a growing real RAB

⁸⁴⁶ King 1, paragraphs 161 and 164.

⁸⁴⁷ [CAA Response](#), paragraph 179.1.

⁸⁴⁸ [CAA Response](#), paragraph 178.1.

⁸⁴⁹ HAL closing statement, paragraph 40.

between 2004 and 2014, and a stable real RAB since 2014, is that HAL's nominal RAB has consistently grown over the period.

- 7.252 However, the rate of HAL's RAB growth has not been constant, suggesting that the amounts of debt issued in each year are also unlikely to have been constant (or to have grown at a constant rate over time). While RAB growth may be used to construct a RAB-weighted average index of historical debt costs, this is not an approach that was explicitly considered by the CAA or other stakeholders earlier in the H7 process.⁸⁵⁰ We also note that such an approach could still lead to the notional allowance unduly over- or under-remunerating debt costs. This is because, in practice, the timing of debt issuances will be affected by many factors (of which growth in the asset base is just one). We therefore place little weight on this point either way.
- 7.253 In light of our earlier assessment in paragraphs 7.235 to 7.246, we find the CAA was not wrong in using the 13.5-year trailing average. As we note in paragraph 7.246, such a trailing average aligns more closely with HAL's Class A debt cost than the approach set out by HAL, implying that the notional company could secure debt finance at similar cost, and it is not inconsistent with most parameters set for the notional company.

Averaging period: our conclusion

- 7.254 The CAA's overall approach of estimating the cost of debt may be characterised as estimating the costs for a notional company while cross-checking against HAL's actual Class A debt in relevant respects (see paragraph 7.195). This approach avoids the cost of debt becoming a pass-through cost (preserving incentives for HAL to manage its debt costs efficiently) while still ensuring that the notional company can reasonably expect to recover efficiently incurred debt costs. It was not, in our view, wrong. It took account of, and was based on, relevant facts and evidence and was not adopted at the expense of a clearly superior approach.

Conclusion on the nominal cost of embedded debt

- 7.255 Having carried out a detailed review and assessment of the Parties' submissions and supporting evidence, we have concluded that the CAA did not err in law, in fact or in the exercise of a discretion in its calculation of the cost of embedded debt in its Final Decision.
- 7.256 We determine that the CAA did not err in using short-term inflation forecasts to deflate the nominal cost of fixed-rate embedded debt. Nor, likewise, did it err in law, fact or in the exercise of a discretion in calculating a HAL-specific yield premium of 8bps over the iBoxx corporate debt indices it used as a benchmark or

⁸⁵⁰ HAL Response to PD, paragraph 154.

in basing its assessment of the cost of embedded debt on observations of the iBoxx indices it used for comparison that are averaged over 13.5-years.

Section C: Index-linked premium

Airlines' submissions on index-linked premium

7.257 In support of their appeals, the Airlines relied on the following submissions.

Premium principle error – error of fact

7.258 The Airlines contended that the Final Decision was wrong in fact because:

- (a) In justifying the inclusion of an index-linked premium by comparing the spreads of five of HAL's index-linked bonds with contemporaneous iBoxx spreads, the CAA's interpretation of the data was wrong. For three of the five bonds, the issuance spread was lower for HAL's index-linked bonds. The simple average difference was that HAL's index-linked bonds had a negative premium of over 10bps.⁸⁵¹
- (b) As explained in the AlixPartners WACC Report, the CAA had made a statistically invalid comparison between the spread of five of HAL's index-linked bonds as against recognised benchmarks. This had resulted in an error of fact which (in and of itself) undermined the CAA's analysis.⁸⁵²
- (c) Investors generally required a lower return on index-linked debt because it does not carry an inflation risk, meaning that the CAA's estimation of an uplift was wrong conceptually.⁸⁵³

Premium principle error – error of law

7.259 The Airlines submitted that the Final Decision was wrong in law because of the following.

- (a) The CAA's reported average was based on a weighted average which gave a 60.5% weight to a single observation when the CAA should have considered a simple average.⁸⁵⁴
- (b) The CAA placed the incorrect interpretation on the bonds data (described in paragraph 7.258(a)).

⁸⁵¹ [Delta NoA](#), paragraph 5.66 and [VAA NoA](#), paragraph 5.64.

⁸⁵² [BA NoA](#), paragraph 5.8.2.

⁸⁵³ [BA NoA](#), paragraph 5.8.3, [Delta NoA](#), paragraph 5.67 and [VAA NoA](#), paragraph 5.65.

⁸⁵⁴ [Delta NoA](#), paragraph 5.66, and [VAA NoA](#), paragraph 5.64.

- (c) The CAA's inclusion of an index-linked premium was novel and unjustified. There was no premium included in recent decisions by other regulators and the CAA had failed to adequately justify its inclusion of such a premium.⁸⁵⁵
- (d) The CAA's approach evidenced a material misunderstanding of the nature of index-linked debt. The cost of index-linked debt could be derived by subtracting inflation expectations from a nominal yield but, to derive a sufficiently accurate measure, other factors specific to such debt needed to be considered, ie the lower return required by investors as they no longer bear inflation risk.⁸⁵⁶ This was the primary reason why the CAA's treatment of this adjustment could not reasonably be supported. Adding a positive index-linked premium of 15bps to the return from nominal gilts, and assuming that 30% of debt was index-linked, was entirely irrational.⁸⁵⁷

Premium calibration error – error of fact

7.260 The Airlines said that the CAA was wrong in fact because it was inappropriate to add a premium of 15bps in circumstances where HAL would also receive a benefit of lower costs from issuing its own index-linked bonds. The AlixPartners WACC Report observes that in the context of RIIO-2 it was estimated that energy network companies issued nominal index-linked debt at 11bps below equivalent nominal debt, and it would be appropriate to reduce the cost of index-linked debt by up to 10bps, not to apply a 15bps premium.⁸⁵⁸

Premium calibration error – error of law

7.261 The Airlines also submitted that the Final Decision was wrong in law on the basis that:

- (a) In calculating the magnitude of the adjustment required, the CAA considered a sample of only five HAL index-linked bonds. The correct methodology for estimating the appropriate adjustment involves comparing the yields of index-linked and nominal bonds issued, not just by HAL, but in the market more widely.⁸⁵⁹
- (b) BA contended that the index-linked premium should have been calculated, as set out in paragraph 85 of the AlixPartners WACC Report, by:
 - (i) taking the 20-year nominal gilt yield from the Bank of England's yield curve calculations;

⁸⁵⁵ [BA NoA](#), paragraph 5.8.2, [Delta NoA](#), paragraph 5.66 and [VAA NoA](#), paragraph 5.64.

⁸⁵⁶ [BA NoA](#), paragraph 5.8.3.

⁸⁵⁷ [BA NoA](#), paragraphs 5.8.3-5.8.4.

⁸⁵⁸ [Delta NoA](#), paragraph 5.71 and [VAA NoA](#), paragraph 5.69.

⁸⁵⁹ [Delta NoA](#), paragraph 5.69 and [VAA NoA](#), paragraph 5.67.

- (ii) deducting the long-term expected RPI inflation of 2.9%; and
 - (iii) then further deducting the 20-year index-linked gilt yield from the Bank of England's yield curve calculations.
- (c) The CAA had failed to explain why it had departed from the orthodox approach for calculating the magnitude of the premium and it was not possible to understand the approach the CAA had taken. The consequence was that the CAA's methodology was 'opaque, contrary to orthodox practice and not one which could reasonably be supported', and nor, owing to the methodological errors, could the premium the CAA decided upon be supported.⁸⁶⁰

CAA response on index-linked premium

- 7.262 The CAA addressed each of the Airlines' allegations in its Response and contended that the Airlines' arguments had no merit.
- 7.263 First, the CAA noted that the materiality of this issue was very limited - the index-linked premium was 15bps applied to 30% of the debt of the notional balance sheet and removing the index-linked premium would reduce the WACC by less than 3bps.⁸⁶¹
- 7.264 In relation to the Airlines' argument that the CAA's approach differed from that adopted by other regulators, whilst the CAA acknowledged this, it submitted that this did not, by itself, mean that it was wrong to apply such a premium. Furthermore, the absence of an index-linked premium for energy and water company debt did not rule out the existence of a premium for debt raised by airport companies or HAL specifically.⁸⁶²
- 7.265 The CAA also considered that the Airlines did not adequately show why the CAA was wrong to base its conclusions on a weighted average of yield differences and submitted that there was no obvious reason why smaller bond issues should be assigned the same weight as larger ones, and a weighted average provided a more accurate reflection of total cost across the full set of index-linked bonds.⁸⁶³
- 7.266 Additionally, whilst the CAA acknowledged that it was true that the absence of an inflation risk premium implied that index-linked bonds should exhibit a lower cost, all else being equal, the CAA also contended that this assessment omitted consideration of the generally lower liquidity of corporate index-linked bonds compares with their fixed-rate counterparts. The information available to the CAA

⁸⁶⁰ [BA NoA](#), paragraph 5.8.6.

⁸⁶¹ [CAA Response](#), paragraph 183.1.

⁸⁶² [CAA Response](#), paragraph 183.2.

⁸⁶³ [CAA Response](#), paragraph 183.3.

indicated that this liquidity premium had generally resulted in corporate index-linked bonds being more expensive.⁸⁶⁴

7.267 Finally, the CAA considered that it was not wrong to examine HAL's index-linked debt only in calculating the premium. The Airlines' argument was based on a comparison of government index-linked and fixed-rate gilts, which the CAA had previously indicated did not exhibit a material liquidity premium, whereas corporate index-linked bonds did. Any cost differential between fixed-rate and index-linked gilts was likely to provide a misleading view of the cost differential between fixed-rate and index-linked corporate bonds.

Intervener's submissions on index-linked premium

7.268 HAL intervened in the Airlines' appeals in relation to the premium principle error and the premium calibration error, noting that it considered that the Airlines' arguments were misconceived and could easily be shown to be wrong.⁸⁶⁵

7.269 HAL considered that the AlixPartners WACC Report submitted by the Airlines looked at the wrong target – using index-linked gilts rather than corporate debt. The gilt market is a risk-free and liquid market. In contrast, corporate index-linked debt consistently exhibits a premium over nominal debt which reflects both lower liquidity and higher risk.

7.270 HAL considered that the calculations made by the Airlines' advisers suffered from several errors both in terms of input data and methodology. Importantly, the argument that a simple rather than a weighted average should have been used was misplaced, as it would grossly overweight small, and often unrepresentative, private trades.

7.271 Finally, HAL contended that the most reliable method of assessing the appropriate allowance for HAL's index-linked debt was to compare the actual pricing of its index-linked debt to the cost of its fixed-rate debt, and that in practice HAL's index-linked debt was priced by reference to fixed-rate debt but adding a liquidity premium of 15-20bps.

Responses to our Provisional Determination

7.272 Our provisional conclusion on this part of this ground, set out in our Provisional Determination, was that the CAA had erred in matters of fact and in law in including the 15bps premium. It had made methodological errors, failed to take into account relevant considerations and reached a conclusion without a proper

⁸⁶⁴ [CAA Response](#), paragraph 183.4.

⁸⁶⁵ [HAL NoI](#), paragraph 144.

factual basis and foundation in the evidence such that its decision in this regard was irrational.

7.273 In response to the Provisional Determination, the CAA acknowledged its errors. It said:⁸⁶⁶

[...] we accept the CMA's view that the evidence base was limited. On this basis the CAA accepts the CMA's findings in the Provisional Determinations that this matter should be remitted back to the CAA for further consideration.

7.274 HAL, for its part, responded to the Provisional Determination that our assessment of the matter was incomplete. It said the available evidence made '... clear the correct premium was at least 15bps.' It also said we had ample evidence to deal with this matter now, even if we consider that CAA did not give the matter due consideration, and should have regard to that evidence and dismiss the appeal on this ground.⁸⁶⁷

Our assessment on index-linked premium

7.275 As discussed in paragraphs 7.10 and 7.13, the CAA estimated the 'nominal' cost of index-linked debt as the cost of nominal fixed rate debt plus a premium of 15bps.

7.276 The Airlines submitted that it was wrong for the CAA to include a positive premium in the cost of index-linked debt relative to the cost of fixed-rate debt.

7.277 We first provide further background on the issue and then assess the Airlines' various arguments. We group the arguments analytically (some of them relate to the Airlines' alleged errors of principle, some to the alleged calibration errors and some are relevant for both). We then reach our conclusion on this matter taking account of the evidence and the CAA's admission in this connection.

The CAA's approach in the Initial Proposals

7.278 In the Initial Proposals, the CAA considered whether it should apply a premium to the cost of new index-linked debt relative to nominal fixed-rate debt. It noted that, in its earlier documents, it had been minded not to include such a premium.⁸⁶⁸ However, HAL had expressed a view that an index-linked premium should be included. It specifically noted that a zero-premium assumed that HAL could obtain

⁸⁶⁶ CAA Response to PD, paragraph 22.

⁸⁶⁷ HAL Response to PD, paragraphs 11 and 12.

⁸⁶⁸ [Initial Proposals](#), paragraph 9.189.

index-linked/fixed swaps at zero cost, and the CAA had provided no basis for this assumption.⁸⁶⁹

7.279 In HAL's July 2021 H7 Revised Business Plan - Update 1, HAL assumed an index-linked premium of 5bps for the cost of new debt based on 15bps applied to 30% of new debt assumed to be index-linked.⁸⁷⁰ The 15bps was set out in HAL's December 2019 Initial Business Plan (see Table 7.5). HAL did not provide much detail behind the analysis but noted that the bonds used in this analysis had been selected to have similar expiry dates, and that an adjustment had been made to reflect the different iBoxx spreads on the issue dates for each bond.⁸⁷¹

: HAL's Initial Business Plan – comparison of Nominal and IL Spreads

Type	Expiry	Amount (£m)	Margin over Gilt bp	Issue Date	iBoxx z spread on issue date	Adjusted nominal cost bp
Comparison A						
Nominal	Sep-49	400	142	09/08/2016	113.04	150.65
Index-Linked	Jan-49	75	166	28/01/2014	121.69	
Additional Spread			24			15.35
Comparison B						
Nominal	May-41	750	140	13/5/2011	126.07	143.53
Index-Linked	Mar-40	100	158	24/07/2014	129.6	
Additional Spread			18			14.47

Source: Heathrow's Initial Business Plan, Detailed Plan, December 2019. Table 53: Comparison of Nominal and IL Spreads, page 311.

7.280 In the Initial Proposals, to establish whether or not to include an index-linked premium relative to the notional benchmark index (the iBoxx indices), the CAA examined evidence on HAL Class A index-linked bonds, based on publicly available information from Bloomberg. The CAA provisionally found that HAL's index-linked debt generally exhibited higher issuance spreads than the relevant contemporaneous iBoxx indices, although the CAA noted that the number of bonds from which to draw the inference was small.⁸⁷²

: H7 Initial Proposals showing HAL's Class A IL issuance spread compared to iBoxx spread

Issue Date	Amt Outstanding	Issuance spread	iBoxx spread	Difference
09/12/2009	460m	285.0	224.3	60.7
28/01/2014	50m	131.0	147.4	-16.4
24/07/2014	100m	217.3	150.7	66.6
28/01/2014	75m	131.0	147.4	-16.4
28/01/2014	75m	0.0	147.4	-147.4
Average	152m	222.6	194.3	28.3

Source: H7 [Initial Proposals](#), Table 9.10: Issuance spread of HAL Class A index-linked bonds compared with contemporaneous iBoxx spreads, page 80.

7.281 Based on its own analysis shown in Table 7.6, in the Initial Proposals the CAA posited that it would be inappropriate to penalise HAL unduly by preventing it from recovering costs associated with issuing index-linked debt.⁸⁷³ The CAA, therefore,

⁸⁶⁹ [Initial Proposals](#), paragraphs 9.199-9.200.

⁸⁷⁰ [Initial Proposals](#), paragraph 9.201.

⁸⁷¹ [HAL December 2019 Business Plan](#), page 311.

⁸⁷² [Initial Proposals](#), paragraph 9.217.

⁸⁷³ [Initial Proposals](#), paragraph 9.218.

proposed to include a positive premium in respect of index-linked debt, and it based its estimate directly on the HAL's Updated RBP (ie based on the evidence shown in Table 7.5).⁸⁷⁴ This was applied to the cost of new debt only, and comprised a premium of 15bps applied to the proportion of debt assumed to be index-linked (30%).⁸⁷⁵

The CAA's approach in the Final Proposals

- 7.282 The CAA did not receive any specific feedback in respect of the 15bps index-linked premium included in the cost of new debt in the Initial Proposals. In the Final Proposals, the CAA retained the inclusion of the index-linked premium and applied a premium of 15bps both to the costs of embedded and new index-linked debt, continuing to rely on evidence directly from HAL's Business Plan.^{876,877}
- 7.283 At this stage, the CAA was more explicit regarding its assumption for the cost of embedded nominal fixed-rate and embedded index-linked debt respectively. As we discussed in section A, inflation forecasts changed significantly between Initial and Final Proposals. The CAA estimated an explicit allowance for index-linked embedded debt to reflect its view that the notional company would have historically issued such debt, and that the real cost of such debt would not have fallen to the same extent as fixed-rate debt.⁸⁷⁸
- 7.284 The overall impact of the inclusion of the 15bps premium was to increase the overall cost of debt by 5bps given the assumed proportion of index-linked debt of 30%. At 60% gearing, this is equivalent to around 3bps on the overall WACC.

The Final Decision

- 7.285 In response to the Final Proposals, CEPA, on behalf of the airline stakeholders, stated that the CAA failed to identify a balanced, holistic view of the index-linked premium, since it had not used a market-based inflation measure to deflate nominal yields.⁸⁷⁹
- 7.286 In the Final Decision, the CAA adopted the Final Proposals for the reasons put forward therein. Specifically, the CAA reiterated its view that it did not agree with the use of breakeven inflation to deflate nominal bond yields, and that for the same reason, the CAA considered that its assumption of a 15bps index-linked premium was reasonable.⁸⁸⁰

⁸⁷⁴ [Initial Proposals](#), paragraph 9.219.

⁸⁷⁵ [Final Proposals](#), Section 3 paragraph 9.338.

⁸⁷⁶ [Final Proposals](#), Section 3 paragraph 9.309.

⁸⁷⁷ [HAL H7 Revised Business Plan \(Detailed\)](#), December 2020, page 409.

⁸⁷⁸ [Final Proposals, Section 3](#) paragraph 9.263.

⁸⁷⁹ [Final Decision](#), Section 3, paragraph 9.116.

⁸⁸⁰ [Final Decision](#), Section 3, paragraphs 9.141-9.142.

Assessment of Airlines' arguments

Economic principles

- 7.287 A key argument made by the Airlines was that investors generally required a lower return on index-linked debt compared to nominal debt. This is because index-linked debt offered inflation protection compared to nominal debt. Therefore, it would be appropriate to subtract rather than add a premium on index-linked debt. To support their argument, the Airlines presented empirical evidence from government bond markets.⁸⁸¹
- 7.288 The CAA stated that the Airlines' assessment omitted the lower liquidity of corporate index-linked bonds compared to nominal fixed-rate bonds. The CAA told us that it asked its financial advisers for advice on the premium for index-linked debt, who said that the premium depended on various factors and could go either way.⁸⁸² As an intervener, HAL submitted that the index-linked premium is not found in the gilt market but is found in the corporate bond market, and it is to compensate for a lack of market liquidity and extended duration due to the timing of cash flows.⁸⁸³
- 7.289 As a matter of economic principle, we agree with the Airlines that we would typically expect investors to require a lower return on index-linked bonds relative to nominal debt, and this is clearly supported by empirical evidence from the government bonds markets and from the energy market analysis.⁸⁸⁴
- 7.290 However, we also note that there is some merit to the CAA's hypothesis that a negative index-linked premium could be offset by other factors, such as the liquidity premium, both when it comes to corporate debt markets in general and in the particular circumstances of HAL.
- 7.291 Our view, therefore, is that the CAA may have had grounds for considering the introduction of an index-linked debt premium. However, given that economic theory suggests that a discount rather than a premium would be more appropriate, and in light of the potential impact of introducing such a premium, our view is that the CAA should have ensured that it had a sufficient evidential basis that such a premium does in fact exist (which we discuss next). Where it did not do so, its decision in this regard is liable to have been wrong.

⁸⁸¹ 'Cost of capital issues raised by the Heathrow Airport H7 price control': (**AlixPartners WACC Report**) an Expert Report prepared for British Airways, Virgin Atlantic Airways and Delta Air Lines, 17 April 2023, paragraphs 83 and 84.

⁸⁸² Transcript of Ground B Hearing, 17 July 2023, page 129, lines 9-12.

⁸⁸³ HAL, Second Witness statement of Sally Ding (**Ding 2**). 22 May 2023, paragraphs 3.3.1-3.3.2.

⁸⁸⁴ AlixPartners WACC Report, paragraph 89.

Evidence used by the CAA

- 7.292 One of the Airlines' main arguments was that the CAA drew the wrong conclusions from the analysis of the evidence on HAL's bonds which the CAA produced in the Initial Proposals. The analysis was based on a sample of five bonds, with three bonds showing a negative premium to the contemporaneous spreads on the nominal iBoxx indices, and two showing a positive premium (see Table 7.6). The Airlines further argued that the CAA was also wrong to use a weighted average of the spreads rather than a simple average. The CAA's analysis gave a 60.5% weight to a single observation. Instead, the Airlines argued that the CAA should have used a simple average which would have shown a negative premium of 10.6bps.⁸⁸⁵
- 7.293 Our view is that the evidence relied on by the CAA was limited and far from compelling. While we recognise that this was the only HAL-specific evidence that the CAA had, in our view the CAA was wrong to draw any meaningful conclusions from this data to support imposing either a positive or negative premium.
- 7.294 We note that HAL submitted that the CAA's analysis in the Initial Proposals (see Table 7.6) contained errors, and that correcting for these errors would provide stronger support for the index-linked premium. We make two observations in that regard:
- (a) HAL is only pointing out these errors now and had not done so in response to the Initial Proposals.
 - (b) Even if we accept HAL's corrections, the evidence remains too limited for the CAA to have relied on it to reach the conclusions it did. HAL submitted that the average spreads (both weighted and simple) were understated by the CAA, and that the appropriate figures were 55.6bps and 8.66bps for the weighted and simple averages respectively. However, the sample still only includes five bonds, and four out of five index-linked bonds have a negative spread to the iBoxx.⁸⁸⁶
- 7.295 With regard to the averaging method, the appropriate method depends on the question being answered. If the purpose of the analysis is simply to establish whether typically index-linked bonds are issued at a premium to nominal bonds, using a simple average which does not take into account the relative size of different issuances may be more appropriate. On the other hand, if the purpose is to estimate the average premium actually faced by HAL on its index-linked bonds, then a weighted average may be more appropriate.

⁸⁸⁵ AlixPartners WACC Report, paragraph 81.

⁸⁸⁶ Ding 2, paragraphs 3.6-3.7 and Table 1.

- 7.296 The CAA's response indicates that it was more concerned with how the premium would translate into the allowed cost of debt, which it considered represents a weighted average cost of all debt issuances.⁸⁸⁷ We note that this would be more consistent with a taking a weighted average. However, in pursuing this objective the CAA was wrong to rely on such limited data to seek to draw any meaningful conclusions on the existence of a claimed positive index-linked premium due to hypothesised liquidity issues, given standard presumptions from economic and financial theory and evidence from other bond markets that the premium might as easily be negative.
- 7.297 The specific evidence the CAA used to derive the 15bps allowance came directly from HAL's Business Plan, as discussed in paragraph 7.281, where HAL compared the spread over the index-linked debt which HAL pays on its index-linked debt versus the spread over fixed-rate gilts which HAL pays on its fixed-rate debt. The 15bps difference was based on just two data points, and these bonds were not readily comparable on a 'like for like' basis (eg they were issued several years apart). While HAL attempted to control for the difference in issuance dates, there is no evidence of the CAA subjecting this evidence to any rigorous scrutiny, or doing its own analysis of HAL bonds to ascertain the magnitude of the premium.
- 7.298 In its NoI, HAL submitted further analysis which in its view supports the inclusion of the index-linked premium. HAL showed a comparison of spreads between index-linked and fixed-rate debt for three transactions done at a similar time and for two transactions with a similar tenor. HAL also submitted example emails from certain banks and debt investors on how the price of an index-linked bond is constructed, and stated that the illiquidity premium is clearly articulated as an additional charge to be paid over and above the spread for a fixed-rate debt issue, with the various evidence supporting a premium of at least 15-25bps.⁸⁸⁸ We also take into account what HAL said in its response to the Provisional Determination: that the ample evidence before us made clear that the correct premium was 'at least' 15bps.
- 7.299 It may be that, under proper scrutiny, this additional evidence is useful in forming a view on the appropriate index-linked premium, and that this premium is 15bps. We also take into account, however, each of: (i) the shortcomings in the CAA's evidence and analysis (as described above); (ii) the CAA's admission in that regard; and (iii) HAL's own statements that the premium should be 'at least' 15bps or 15-25bps. Given this, there is significant uncertainty about the existence, direction and scale of any premium and the CAA should have properly assessed the relevant evidence and decided what, if any premium, should apply. It did not do that.

⁸⁸⁷ Hoon 2, paragraph 28.8.

⁸⁸⁸ Ding 2, paragraphs 3.9-3.14.

Alternative sources of empirical evidence

- 7.300 The Airlines stated that the CAA should have relied on the evidence from government bond markets to reach a conclusion that a zero or a negative premium would be appropriate. AlixPartners, acting for the Airlines, estimated a negative premium on government debt of 57-78bps. While AlixPartners noted that this size of an adjustment may not be appropriate for HAL, it stated that HAL would receive a benefit in the form of lower costs from issuing its own index-linked debt. AlixPartners submitted that, in the context of RIIO-2, Ofgem's advisers, CEPA, estimated that energy network utilities typically issued index-linked debt at 11bps below equivalent nominal debt. Therefore, a negative adjustment of 10bps at the lower end would be appropriate, and a conservative view would be to apply no adjustment at the upper end.⁸⁸⁹
- 7.301 The CAA again stated that evidence from government bond markets was not relevant, and that it preferred to rely on HAL-specific evidence (recognising that it was limited). The CAA further noted that it was not clear what inferences could be made from evidence from other corporate sectors, and in any case the Airlines had not presented any such evidence.⁸⁹⁰ The CAA did not explicitly comment on the CEPA analysis presented by the Airlines.
- 7.302 It is not, in our view, clear that using evidence from government bond markets instead of HAL-specific data would have avoided any error. Government bond markets are different to corporate bond markets in important respects (in particular, their relative depth and liquidity). The evidence from the energy networks, meanwhile, while consistent with the theoretical presumption that index-linked debt is cheaper than nominal debt, does not necessarily provide a basis upon which the CAA should have relied (see further below). Where we find, however, that the evidence on which the CAA did rely does not support the decision it made, and the decision was accordingly wrong, we do not need to make a finding that the evidence supports the imposition of a negative premium instead (and we are not in a position to do so). The proper consideration of all the evidence, both its relevance and the findings it supports, is a task for the CAA that it has not so far undertaken.

Consistency with other regulators

- 7.303 The Airlines also stated that no such premium was included in recent regulatory decisions including Ofgem's determination of RIIO-1 or RIIO-2 or the CMA PR19 redetermination. The CAA in its Response told us that this did not mean it was wrong to apply an index-linked premium.

⁸⁸⁹ AlixPartners WACC Report, paragraph 89.

⁸⁹⁰ [CAA Response](#), paragraph 183.

7.304 We agree with the CAA's reasoning that the absence of a positive index-linked premium in other regulated sectors is not necessarily sufficient evidence that a positive index-linked premium for H7 was wrong. However, that such premia have not typically been applied is, in our view, a relevant consideration that the CAA was wrong not to have taken into account in making its assessment.

Conclusion on index-linked premium

7.305 In light of the above, we conclude that the CAA erred in matters of fact and in law in including a premium of 15bps in the cost of index-linked debt when calculating the WACC. It made methodological errors, failed to take into account relevant considerations and reached a conclusion without a proper factual basis and foundation in the evidence such that its decision in this regard was irrational.

7.306 Our view is that this error is material.⁸⁹¹ We have come to this view based on the following three factors:

- (a) First, the error has the potential to have a significant impact on the overall level of the price control set by the CAA. We are not in a position to say whether the 15bps figure was definitively wrong or not wrong, nor to what extent. It is plausible that on closer inspection 15bps figure may transpire to be too high or, possibly, too low, perhaps significantly so. Similarly plausibly, it may be that 15bps was appropriate. We cannot be assured, for example, that on a proper assessment of the evidence a negative premium of the size (10bps) contended by the Airlines, or larger, may be appropriate. Put another way, the magnitude of the error may be up to 25bps or may be larger. Its potential size (currently unknown but plausibly large) is an important factor in our assessment of the materiality of the error.
- (b) Second, the error also has the potential to have a significant effect on future price controls. That is, while we would not expect a regulator to repeat the practice of making decisions based on untested evidence, if we were to consider the error not to be material, it would provide validation of that approach and could lead to the inappropriately calibrated application of an index-linked premium in future price controls.
- (c) Third, we do not consider that the cost of addressing the error would be disproportionate to the value of the error because this would not require the CAA to recalculate any of the other WACC parameters.

⁸⁹¹ Regarding factors relevant to materiality, see the Legal Framework at paragraph 3.47.

Determinations on cost of debt

7.307 For the reasons set out in detail above, our determinations are that the CAA:

- (a) did not err in law and/or in the exercise of a discretion in using short-term inflation forecasts to deflate the nominal cost of HAL's fixed-rate embedded debt;
- (b) did not err in fact, law, or in the exercise of a discretion in calculating a HAL-specific yield premium of 8bps over the iBoxx corporate debt indices it used as a benchmark; and
- (c) did not err in fact, law, or in the exercise of a discretion in basing its assessment of the cost of embedded debt on observations of the iBoxx indices it used for comparison that are averaged over 13.5-years.

7.308 We do not therefore allow HAL's appeal, and instead confirm the Final Decision, in these regards.

7.309 Our further determination, for the reasons set out in detail above, is that the CAA erred in matters of fact and in law in including a premium of 15bps for HAL's index-linked debt when calculating the WACC. Accordingly, we allow the Airlines' appeals in respect of this part of the Final Decision.

8. Ground B3: Point estimate

Introduction

8.1 This chapter sets out our determination in relation to the ground of appeal regarding the CAA's choice of a WACC point estimate from the specified range.

Background

8.2 The point estimate represents the regulator's final decision on what it deems is the appropriate cost of capital within the WACC range. It is then applied to the RAB to determine the revenues that the regulated entity can charge customers throughout the control period.

8.3 Estimating some of the individual components of the WACC (in particular, the components of the cost of equity within the CAPM) is subject to parameter uncertainty. As the true cost of capital is not directly observable, this parameter uncertainty creates a risk that the chosen cost of capital may be set at too high or low a level which could either result in consumers paying too much or the regulated entity struggling to access funding and deliver necessary investments, to the detriment of consumers.

8.4 Uncertainty surrounding the exact quantification of parameters such as the equity beta and equity risk premium means the ultimate choice of a WACC point estimate is not a purely mechanistic exercise. Typically, a range is set around each parameter to generate a range of possible values for the WACC from which a point estimate is then chosen.⁸⁹² In practice, the CAA adopted point estimates for the cost of debt, the risk-free rate and the equity risk premium, meaning that the overall WACC range was driven by the CAA's estimated range for the asset beta.⁸⁹³

Final Decision on point estimate

8.5 This section summarises the CAA's reasoning in determining the WACC point estimate for the H7 price control. We provide further detail as necessary on the CAA's reasoning in the assessment of parties' arguments below.

8.6 In its approach to choosing the final H7 point estimate, the CAA considered that the choice of point estimate should balance the risk of setting the WACC too high, leading to consumers paying too much; and setting the WACC too low, and

⁸⁹² UK Regulators' Network, 'UKRN guidance for regulators on the methodology for setting the cost of capital', (see [UKRN Guidance for regulators](#)), pages 26 and 29.

⁸⁹³ Economic regulation of Heathrow Airport: H7 Final Decision', CAP2524, March 2023 (CAA's Final Decision) (see: [Final and Initial Proposals for H7 price control | Civil Aviation Authority](#)), (Final Decision), Section 3, Table 9.6.

potentially undermining long-term financeability and/or incentives for investment.⁸⁹⁴

- 8.7 The CAA's Initial Proposals did not specify a point estimate. In the Final Proposals, the CAA's starting point was to assume that it is appropriate to use the midpoint of the range as the point estimate unless there is strong and compelling evidence to deviate from this assumption.⁸⁹⁵ The CAA considered five key factors in its choice of point estimate in the Final Proposals:⁸⁹⁶
- (a) **Welfare effects:** the CAA recognised the WACC's importance in incentivising HAL to invest, indicating that this may warrant aiming up above the midpoint of the WACC range. However, it noted that the existence of other mechanisms to support capex meant that it did not need to rely on the WACC exclusively.
 - (b) **Parameter asymmetry:** some inputs into the WACC are not directly observable, creating the risk that the mid-point of the overall range may not necessarily represent the most likely estimate of the true WACC. Specifically, the CAA highlighted that its decision to adopt a stable real Total Market Return (**TMR**) approach assumes that there is no correlation between both the TMR and the risk-free rate, and between the real TMR and inflation. With both assumptions unlikely to hold in reality, the parameter estimates could be skewed upwards, warranting some aiming down.
 - (c) **Asymmetry in the broader control period:** the CAA sought to address various areas of asymmetry in the price control within the relevant 'building blocks' (**building blocks**) and did not consider there was any material uncompensated asymmetry remaining within the H7 price control. Consequently, it did not believe that asymmetry issues justified aiming up or down when choosing the point estimate.
 - (d) **Market cross-checks:** the CAA considered that it lacked robust market benchmarks when cross-checking its CAPM-based WACC estimates for H7. It did not find comparisons with other, international listed comparators useful due to differences in regulatory frameworks and other operational characteristics and, consequently, viewed these as neutral for its choice of point estimate, ie the evidence did not provide a strong justification to deviate from the mid-point of the range.

⁸⁹⁴ [Final Decision, Section 3](#), paragraph 9.192.

⁸⁹⁵ 'Economic regulation of Heathrow Airport Limited: H7 Final Proposals', CAP2365, June 2022, (See: [Final and Initial proposals for H7 price control | Civil Aviation Authority](#)), (**Final Proposals**), paragraph 9.394.

⁸⁹⁶ [Final Proposals](#), Section 3 CAP2365, paragraphs 9.400 to 9.419.

(e) **Financeability:** the CAA submitted that any such issues should be addressed via NPV-neutral remedies, with WACC adjustment a last resort, and so considered financeability issues were neutral for the point estimate.

8.8 In its Final Decision, the CAA concluded that choosing the mid-point estimate remained appropriate.⁸⁹⁷ Regarding two specific considerations which the CAA relied on in the Final Proposals – welfare effects and parameter asymmetry – the CAA noted the following.

(a) **Welfare effects:** the CAA stated that the evidence in respect of investment incentives is largely unchanged.⁸⁹⁸

(b) **Parameter asymmetry:** the CAA concluded that the impact of recent market developments on the appropriate choice of point estimate was mixed. It noted that the risk-free rate had increased significantly, reducing the equity risk premium, and by extension, the upward skew associated with the RPI-real TMR relative to the Final Proposals. On the other hand, RPI inflation forecasts had also increased significantly, which might imply a greater skew than was previously the case.⁸⁹⁹

8.9 The CAA concluded that it had identified factors that support both a higher and a lower point estimate, and that the evidence was broadly balanced. It therefore chose a point estimate for the WACC at the midpoint of the range, which was a WACC of 3.18% from its RPI-real cost of capital range of 2.64% to 3.73%.⁹⁰⁰

Grounds of appeal

8.10 In this section, we set out the legal grounds of appeal advanced by BA, Delta and VAA (the **Airlines**).

8.11 BA submitted that '[...] the CAA has erred in misjudging or ignoring factors that are relevant to its decision to set a WACC at the mid-point of the range.'⁹⁰¹ We understand BA to be contending that the Final Decision was wrong because it was wrong in law, or because the CAA made an error in the exercise of a discretion, in the selection of the point estimate.

8.12 Delta and VAA submitted in relation to various factors that the Final Decision was wrong because it was based on an error of fact, was wrong in law or an error was

⁸⁹⁷ [Final Decision, Section 3](#), paragraph 9.207.

⁸⁹⁸ [Final Decision, Section 3](#), paragraph 9.205.

⁸⁹⁹ [Final Decision, Section 3](#), paragraph 9.205.

⁹⁰⁰ [Final Decision, Section 3](#), table 9.6.

⁹⁰¹ [BA NoA](#), paragraph 5.9.4.

made in the exercise of a discretion.⁹⁰² The factors to which Delta and VAA referred overlap with, but also add to, those to which BA referred.

Issues for determination

Overall statutory question for determination

8.13 Under this ground, we are required to determine whether the choice of the midpoint, as the point estimate of the cost of capital in the Final Decision, was wrong because it was based on an error of fact, was wrong in law, or because the CAA made an error in the exercise of a discretion.

Subsidiary questions for determination

8.14 Taking account of BA's submissions discussed below, the subsidiary question for our assessment, in order to determine the overall statutory question in respect of BA's appeal, is whether, in selecting the point estimate, the Final Decision was wrong in law or the CAA made an error in the exercise of a discretion by misjudging or ignoring:

- (a) the asymmetry of costs and benefits;
- (b) the asymmetry of pandemic events;
- (c) information asymmetries between HAL and the CAA; or
- (d) the effect of distortions created by the outer band of the TRS.

8.15 Taking account of Delta and VAA's submissions discussed below,⁹⁰³ the subsidiary questions for our assessment, in order to determine the overall statutory question in respect of Delta's and VAA's appeals, are as follows.

- (a) The CAA failed adequately to consider the asymmetry of costs and benefits.
 - (i) Was the Final Decision based on errors of fact because the CAA failed adequately to consider the asymmetry of costs and benefits, and so had the wrong facts or interpreted them incorrectly, and/or because, by failing adequately to consider that asymmetry, the CAA reached conclusions without a reasonable basis?
 - (ii) Was the Final Decision wrong in law because the CAA failed adequately to consider the asymmetry of costs and benefits and so breached its duty to carry out its functions in a manner which it

⁹⁰² [Delta NoA](#), paragraph 5.110 and Annex 2, [VAA NoA](#), paragraph 5.104 and Annex 5.

⁹⁰³ In particular with reference to [Delta NoA](#), Annex 2 and [VAA NoA](#), Annex 5.

considers will further the interest of users of air transport services regarding the range, availability, continuity, cost and quality of airport operation services, failed to take proper account of relevant considerations and/or made methodological errors?

- (iii) Did the CAA make errors in the exercise of a discretion because it failed adequately to consider the asymmetry of costs and benefits, and so did not appropriately balance competing considerations?
- (b) The CAA failed adequately to consider the asymmetry of pandemic events.
- (i) Was the Final Decision wrong in law because the CAA failed adequately to consider the asymmetry of pandemic events, and so failed to take proper account of relevant considerations and/or made methodological errors?
- (c) The CAA failed to consider information asymmetries between HAL and the CAA.
- (i) Was the Final Decision based on errors of fact because the CAA failed to consider information asymmetries between HAL and the CAA, and so reached conclusions without a reasonable basis and/or made false comparisons?
 - (ii) Was the Final Decision wrong in law because the CAA failed to consider information asymmetries between HAL and the CAA, and so failed to take proper account of relevant considerations and/or made methodological errors?
- (d) The CAA failed to consider the effect of distortions created by the outer band of the TRS.
- (i) Was the Final Decision wrong in law because the CAA failed to consider the effect of distortions created by the outer band of the TRS, and so failed to take proper account of relevant considerations, made methodological errors and/or reached conclusions without adequate supporting evidence?
- (e) The CAA failed to have proper regard to or take account of other relevant factors.
- (i) Was the Final Decision wrong in law because the CAA failed to have proper regard to or take account of other relevant factors which support the case for aiming down in selecting the point estimate, and so failed properly to enquire, failed to take proper account of relevant considerations and/or made methodological errors?

- (ii) Did the CAA make errors in the exercise of a discretion because it failed to have proper regard to or take account of other relevant factors which support the case for aiming down in selecting the point estimate?
- (f) Not aiming down will give rise to material harm to consumers and means the passenger charge is set higher than necessary.
 - (i) Was the Final Decision based on errors of fact because the CAA selected a point estimate that will give rise to material harm to consumers and means the passenger charge is set higher than necessary, and in doing so reached conclusions without a reasonable basis?
 - (ii) Was the Final Decision wrong in law because the CAA selected a point estimate that will give rise to material harm to consumers and means the passenger charge is set higher than necessary, and in doing so it: breached its duty to carry out its functions in a manner which it considers will further the interests of users of air transport services regarding the range, availability, continuity, cost and quality of airport operation services; breached its duty to have regard to the need to promote economy and efficiency on the part of HAL in its provision of airport operation services at Heathrow; failed to take proper account of relevant considerations; and/or made methodological errors?
 - (iii) Did the CAA make errors in the exercise of a discretion because it selected a point estimate that will give rise to material harm to consumers and means the passenger charge is set higher than necessary, and in doing so failed to take relevant factors into account, to meet any of its own key consumer interest objectives, and/or to achieve its stated intention that passenger charges were 'no higher than necessary'?

Parties' submissions

Overview

- 8.16 In this section we provide an overview of the submissions put forward by the Airlines in support of the legal grounds of appeal above, the response from the CAA, and submissions from HAL, the intervener on this sub-ground.
- 8.17 In support of its appeal, BA submitted that the CAA erred in misjudging or ignoring factors that were relevant to its decision to set a WACC at the mid-point of the range, given the timing of H7 and factors specific to HAL. Delta and VAA similarly submitted that the CAA's decision not to aim down was unjustified because it had ignored or misjudged relevant factors and that the decision resulted from a failure

to have proper regard to and to take account of all relevant considerations given the timing of H7, and further argued that the CAA's decision not to aim-down when selecting the point estimate for the WACC was harmful. In making these arguments, all three Airlines referred to the severe cost of living crisis and the fact of no major capacity expansion at Heathrow.⁹⁰⁴

- 8.18 BA, Delta and VAA's submissions on this sub-ground all covered the following themes: asymmetry of costs and benefits; asymmetry of pandemic events; information asymmetries between HAL and the CAA; and the effect of distortions created by the outer band of the TRS. Delta and VAA also made submissions on other relevant factors which support the case for aiming down, as well as arguing that not aiming down will give rise to material harm to consumers and means the passenger charge is set higher than necessary.
- 8.19 At a high level, the CAA submitted that it took all relevant considerations into account and that the Airlines' complaints really amounted to no more than disagreements with regulatory judgement.⁹⁰⁵
- 8.20 At a similarly high level, HAL submitted that the arguments advanced by the Airlines were misconceived. As well as the specific points of intervention covered below, HAL submitted that in the context of selecting the appropriate asset beta estimate, there were strong reasons to aim up in this case and that the same issues applied in the context of the point estimate.⁹⁰⁶ HAL submitted that the CAA should have chosen an asset beta estimate towards the top of the (appropriately) estimated range. According to HAL, that was an error the CMA should correct but no further adjustment in light of the Airlines' arguments was warranted.⁹⁰⁷
- 8.21 We now consider the Parties' submissions in more detail, by reference to the themes in the Airlines' NoAs.

Asymmetry of costs and benefits

Appellants' submissions

- 8.22 BA submitted that for the reasons in section 6.2.1 of the AlixPartners WACC Report, the only reasonably supportable conclusion was that the weight of the balance between investment and lower prices was reversed compared to previous Heathrow determinations. In the balance of welfare consequences, BA submitted

⁹⁰⁴ [BA NoA](#), paragraph 5.9.4, [Delta NoA](#), paragraph 5.76, [VAA NoA](#), paragraph 5.73.

⁹⁰⁵ [CAA Response to the NoAs, \(CAA Response\)](#) paragraph 188.

⁹⁰⁶ [HAL NoI](#), paragraph 148 and 149.

⁹⁰⁷ [HAL NoI](#), paragraph 151.

that the only reasonable approach was to prioritise lower prices and aim down within the WACC range.⁹⁰⁸

- 8.23 Delta and VAA submitted that there was a clear imperative to secure affordable prices for consumers in the context of H7.⁹⁰⁹ They further submitted that there was little pressing need for large scale capex investment given the continuing restrictions on capacity and the H7 specific provisions to mitigate the risk of under-investment. By contrast, they submitted that for energy networks new investment was critical to meet government net zero targets.⁹¹⁰ In this context, they submitted that welfare effects outweighed investment considerations for H7 and that the CAA should have prioritised lower prices and aimed down.⁹¹¹

CAA Response

- 8.24 The CAA submitted that its primary duty is to further the interests of consumers and that is no more so now than it has been before. According to the CAA, it does not necessarily follow that the CAA must prioritise lower prices over, for example, providing for capital investment in the interests of consumers in the future. The CAA further submitted that Ofgem and Ofwat did not aim down on the WACC in any of their recent determinations on this basis and that the imperative for securing affordable prices was arguably more pressing in the context faced by those regulators. The CAA submitted that these arguments could not be characterised as ‘right’ or ‘wrong’ and that it was a matter of regulatory judgement how to balance these competing considerations.⁹¹²
- 8.25 The CAA also submitted that the alleged fact of little pressing need for large scale capex investment did not mean that the CAA was wrong in disagreeing with the Airlines’ position. According to the CAA, in its judgement, a number of HAL’s investment programmes were particularly important to consumers. The CAA cited the example of the next generation security programme as critical to improving security at the airport and providing a better experience for passengers. According to the CAA, the fact that the scale of expenditure as a proportion of the opening RAB was less than at certain other price control reviews did not mean the allowed expenditure was any less important or should assume a lower prominence when considering the choice of the point estimate.⁹¹³

⁹⁰⁸ [BA NoA](#), paragraph 5.9.4(a).

⁹⁰⁹ [Delta NoA](#), paragraph 5.79, [VAA NoA](#), paragraph 5.76.

⁹¹⁰ [Delta NoA](#), paragraph 5.80, [VAA NoA](#), paragraph 5.77.

⁹¹¹ [Delta NoA](#), paragraph 5.81, [VAA NoA](#), paragraph 5.78.

⁹¹² [CAA Response](#), paragraph 188.1.

⁹¹³ [CAA Response](#), paragraph 188.2.

Intervener's submissions

- 8.26 HAL submitted that the Airlines' asymmetry of costs and benefits arguments contained errors and fundamentally misunderstood why consumer welfare was maximised above the mid-point of an estimated range, which was concerned with balancing the interests of present and future consumers. HAL submitted that arguments about little pressing need for investment post-Covid and keeping prices low to aid recovery were in tension with the Airlines' own approach to pricing. According to HAL, this did not support the implicit assumption that any reduction in charges would be passed on to consumers. HAL submitted via witness evidence that on a like-for-like basis, prices per passenger had increased by about £55–85, well above inflation and any change in Heathrow's charges.⁹¹⁴

Asymmetry of pandemic events

Appellants' submissions

- 8.27 BA submitted that the CAA had failed, in the asset beta, to take account of the asymmetry in probabilities of a pandemic event.⁹¹⁵ BA submitted that this approach could not reasonably be supported. BA submitted that the CAA's ranges for the likelihood and duration of a future pandemic produced four separate cases with probability spread in an asymmetric distribution and that, in light of this asymmetry, each of these four cases should be assigned an appropriate weighting that should be reflected in the subsequent analysis. BA submitted that the CAA had failed to do this and only took account of the highest and lowest scenario through taking the mid-point. BA further submitted that any reasonably supportable approach to asymmetric distributions uses more robust measures such as the mean or median as the correct measure of central tendency and not the mid-point. BA submitted that this error had a material impact on where to aim down in the overall WACC range.⁹¹⁶
- 8.28 Delta and VAA similarly submitted that the CAA had made assumptions about the likelihood and duration of a future pandemic. Delta and VAA submitted that the probability of these events occurring was asymmetric but that the CAA had assumed they had equal weight. By taking the mid-point, Delta and VAA submitted that the CAA had assigned 50% weight to the extreme cases and zero to the middle ones and that the CAA had failed to recognise that the mean or median was the correct measure of central tendency for an asymmetric distribution, not the mid-point.⁹¹⁷ Delta and VAA submitted that this was a clear methodological error and that applying the correct method – even conservatively – would equate

⁹¹⁴ [HAL NoI](#), paragraph 150.1

⁹¹⁵ [BA NoA](#), paragraph 5.9.4(b).

⁹¹⁶ [BA NoA](#), paragraph 5.9.4(b).

⁹¹⁷ [Delta NoA](#), paragraphs 5.84-5.85, [VAA NoA](#), paragraphs 5.81 and 5.82.

to aiming down by 4% in the WACC range, citing as explained in paragraph 105 of the AlixPartners WACC Report.⁹¹⁸

CAA Response

- 8.29 The CAA submitted that it is true that the asymmetry of the probability of pandemic events provides a prima facie reason for aiming down within the point estimate that was not considered in the Final Decision. However, according to the CAA, the materiality of this observation is very limited as the Airlines' own WACC Report considers that an appropriate approach would be to adopt the 46th percentile of the WACC range as the point estimate. The CAA explained that this amounts to a 4bps reduction in the WACC.⁹¹⁹
- 8.30 The CAA further submitted that this asymmetry was not raised by stakeholders at any point during the H7 consultation process despite multiple opportunities to do so. According to the CAA, this matter cannot therefore be considered by the CMA under Schedule 2, paragraph 23(3) CAA12.⁹²⁰

Intervener's submissions

- 8.31 HAL submitted that the asymmetry of pandemic events arguments only arose when accepting the CAA's approach to determining the asset beta, which for all the reasons set out in HAL's NoA was flawed and should be rejected. However, according to HAL, it is not clear that there would be a pronounced asymmetry. HAL submitted, supported by witness evidence, that instead, assuming that the actual values for recurrence and duration of pandemic events lie towards the middle rather than at the extremes of the CAA's estimated ranges, the alleged effect largely disappears.⁹²¹

Information asymmetries between HAL and the CAA

Appellants' submissions

- 8.32 BA submitted that the CAA had failed to give appropriate weight to the challenges arising from the substantial asymmetry in information between it and HAL. BA submitted that this failure cannot be supported as matter of regulatory judgement and had been reached on the basis of the CAA misdirecting itself about 'regulatory precedent'. BA submitted that: the starting point is that significant information asymmetries, acknowledged by the CAA, exist; HAL has no close comparators against which to assess HAL's relative efficiency; and that aiming down is

⁹¹⁸ [Delta NoA](#), paragraph 5.86, [VAA NoA](#) paragraph 5.83.

⁹¹⁹ [CAA Response](#), paragraph 188.3.

⁹²⁰ [CAA Response](#), paragraph 188.3.

⁹²¹ [HAL NoI](#), paragraph 150.2.

necessary to compensate for information asymmetries in respect of passenger forecasts, opex, cost of debt (given the complexity of HAL's debt structure), commercial revenues and capital investment plans. BA submitted that these information asymmetries are set out in the AlixPartners report submitted to the CAA in response to the Final Proposals.

- 8.33 Delta and VAA submitted that the CAA wrongly dismissed evidence from the AP Initial Report.⁹²² Delta and VAA submitted that information asymmetries clearly existed in the context of the H7 price control and the CAA had made repeated reference to this throughout the H7 process. According to Delta and VAA, these have had a detrimental impact on CAA's ability to reach a robust decision that is well-supported by evidence.⁹²³
- 8.34 Delta and VAA submitted that the CAA's statement that there is no uncompensated asymmetry remaining within the H7 price control is unconvincing. According to Delta and VAA, it ignores important asymmetries which have not adequately been addressed – most notably regarding the passenger forecasting model, but also operational expenditure, commercial revenues and HAL's cost of debt. Delta and VAA submitted that aiming down within the range is necessary to compensate for these asymmetries.⁹²⁴
- 8.35 BA also submitted that the CAA's sole reason for not aiming down was that it wrongly considered itself constrained by the CMA's decision in RIIO-T2/GD2 and that this case had an entirely different factual position. According to BA, in RIIO-T2/GD2 Ofgem had increased access to information and made no criticism similar to the CAA's criticism of HAL for providing poor quality information. According to BA, energy and water networks also have risk sharing, unlike HAL (which is highly incentivised to present forecasts favouring its interests).⁹²⁵ Delta and VAA similarly submitted that the CAA's justification of its approach by reference to the CMA's determination in the RIIO-T2/GD2 appeals is unpersuasive. According to Delta and VAA, the H7 case is clearly distinguishable due to the CAA's constant criticisms of HAL for providing poor quality information, HAL's position as a single licensee with no possibility of benchmarking, and the lack of risk sharing in HAL's opex and commercial revenues regulatory regime.⁹²⁶

CAA Response

- 8.36 The CAA submitted that it is common ground between the CAA and the Airlines that information asymmetries exist in the context of the current price control, and that in some areas these can be acute. However, according to the CAA, the CMA's

⁹²² [Delta NoA](#), paragraph 5.87, [VAA NoA](#), paragraph 5.84.

⁹²³ [Delta NoA](#), paragraph 5.88, [VAA NoA](#), paragraph 5.85.

⁹²⁴ [Delta NoA](#), paragraph 5.89, [VAA NoA](#), paragraph 5.86.

⁹²⁵ [BA NoA](#), paragraph 5.9.4(c).

⁹²⁶ [Delta NoA](#), paragraph 5.90, [VAA NoA](#) paragraph 5.87.

determination of the RIIO-T2/GD2 price control appeal was clear that even where information asymmetries exist, this does not provide a valid reason for aiming down on the WACC or deducting any sort of outperformance wedge from the allowed return. According to the CAA, the CMA had considered that any perceived asymmetries should be addressed at source: namely, within the relevant cost and revenue building blocks themselves. The CAA submitted that the Airlines had not presented sufficient evidence to warrant departing from the building block estimates set out in the Final Decision.⁹²⁷

Intervener's submissions

- 8.37 HAL submitted that any alleged information asymmetries also do not provide a good basis for aiming down. HAL referred to the CMA's explanation in rejecting the 'outperformance wedge' mechanism in the RIIO-2 energy appeals, submitting that asymmetries are best addressed in the context of the specific variables where they are said to arise. HAL submitted that the CAA had made significant efforts to reduce any information asymmetries across the price control, largely by relying on outside information sources instead of or in addition to Heathrow. HAL also submitted, relying on witness evidence, that there were a number of factual errors in the Airlines' assertions.⁹²⁸

Effect of distortions created by the outer band of the TRS

Appellants' submissions

- 8.38 BA submitted that the CAA had failed to give appropriate weight to distortions created by the TRS, particularly the outer band, that put an additional adverse asymmetric price risk on Airlines using Heathrow and potentially destroy HAL's incentives to initiate traffic recovery during severe recessions. According to BA, these distortions constitute errors harming consumer interests through higher charges, but can be addressed by aiming down the WACC range:
- (a) The first error stems from asymmetries in shocks to Heathrow's traffic. A lower outer bound breach (leading to higher charges) is possible but an upper outer bound breach is highly unlikely due to HAL's capacity constraint. Consumers are therefore exposed to asymmetric upward risk on airport charges.
 - (b) The second error concerns HAL's incentives once the lower outer bound of the TRS is breached in a period of severe traffic downturn. The CAA ignored its consultants' advice and has failed to accord a reasonable margin for error,

⁹²⁷ [CAA Response](#), paragraph 188.4.

⁹²⁸ [HAL NoI](#), paragraph 150.3.

leaving HAL with either limited incentive to promote traffic growth or a negative incentive to constrain traffic.⁹²⁹

- 8.39 Delta and VAA also submitted that the calibration of the outer band of the TRS mechanism has two distortive effects. According to Delta and VAA, it first transfers additional (and asymmetric) price risk to consumers and second potentially undermines HAL's incentives to increase passenger traffic during severe recessions.⁹³⁰
- 8.40 Delta and VAA submitted that the CAA had acknowledged that downward shocks were more common than upward ones. According to Delta and VAA, a breach of the upper outer band is far less likely due to HAL's capacity constraint and consumers are exposed to asymmetric upward risk on airport charges, with no corresponding downward risk to HAL's charges. They submitted that the CAA had failed to take proper account of or have regard to this asymmetry.⁹³¹
- 8.41 They further submitted that the CAA also failed to consider incentives once the lower outer band is breached. According to the CAA's calculations, they submitted that choosing a 105% sharing factor for the outer band protects HAL from 91-94% of the Earnings Before Interest, Taxes, Depreciation and Amortisation (**EBITDA**) impact from traffic deviation. According to Delta and VAA, the CAA had failed to accord a reasonable margin of error given the difficulties in estimating opex and commercial revenue elasticities in this calculation. They submitted that HAL is left with limited incentive to promote traffic growth or an incentive to constrain traffic.⁹³²
- 8.42 Delta and VAA submitted that taking proper account of these distortive effects supports the case for aiming down the WACC point estimate.⁹³³

CAA Response

- 8.43 The CAA submitted that the Airlines' argument that the TRS mechanism gives rise to asymmetric risk exposure in HAL's favour, since it is less likely to return revenues to consumers than it is to result in consumers paying additional revenues, was wrong. The CAA submitted that the TRS mechanism does not result in any distortions and does not give rise to any asymmetry. According to the CAA, it remedies an existing asymmetry associated with traffic risk. The CAA submitted that it had taken the TRS into account in the calibration of the Shock Factor, asymmetric risk allowance and WACC. According to the CAA, it would

⁹²⁹ [BA NoA](#), paragraph 5.9.4(d).

⁹³⁰ [Delta NoA](#), paragraph 5.93, [VAA NoA](#), paragraph 5.90.

⁹³¹ [Delta NoA](#), paragraphs 5.94 and 5.95, [VAA NoA](#), paragraphs 5.91 and 5.92.

⁹³² [Delta NoA](#), paragraph 5.96, [VAA NoA](#), paragraph 5.93.

⁹³³ [Delta NoA](#), paragraph 5.97, [VAA NoA](#), paragraph 5.94.

therefore be wrong for the CAA to make a further adjustment to account for the TRS.⁹³⁴

Intervener's submissions

- 8.44 HAL submitted that while it is right that the lower band of the TRS is more likely to be engaged than the upper band, this does not imply a positively skewed distribution of returns. According to HAL, a risk profile with a downwards skew would in fact indicate higher risk and therefore the need for higher returns and aiming up.⁹³⁵

Other relevant factors which support the case for aiming down

Appellants' submissions

- 8.45 Delta and VAA submitted that a clear and compelling analysis of the combined impact of the H7 building blocks was absent from the Final Decision. They submitted that this would have revealed the numerous layers of protection the CAA has given HAL, immunising it against risk.⁹³⁶ They further submitted that the CAA ought to have had more regard to HAL's financial position when deciding the WACC. By not considering issues in aggregate, they submitted that the CAA had failed to take into account factors such as HAL's extremely high gearing and propensity to prioritise payments to shareholders over passenger needs.⁹³⁷

CAA Response

- 8.46 The CAA referred in particular to the Airlines' contention that it had failed to take into account the TRS and asymmetric risk measures, as well as an overinflated WACC in relation to the point estimate. In relation to this, the CAA submitted that:
- (a) it had fully taken into account the impact of the TRS in calibrating the WACC;
 - (b) the asymmetric risk allowance, Shock Factor and allowed return are deterministic allowances that do not affect HAL's risk exposure in any way because they are fixed throughout H7 – and it would therefore have been wrong for the CAA to treat them as justifying a shift in the point estimate;
 - (c) it does not agree that the WACC is 'over-inflated', and had it thought so, it would be incumbent on it to revise its estimate. Insofar as this is the basis for

⁹³⁴ [CAA Response](#), paragraph 188.5.

⁹³⁵ [HAL NoI](#), paragraph 150.4.

⁹³⁶ [Delta NoA](#), paragraph 5.99, [VAA NoA](#), paragraph 5.96.

⁹³⁷ [Delta NoA](#), paragraph 5.101, [VAA NoA](#), paragraph 5.97.

this point, it is ‘parasitic’ on the Airlines’ other arguments that the WACC is too high (which are themselves devoid of merit).⁹³⁸

8.47 In relation to HAL’s financial position, the CAA submitted that it does not consider this an appropriate consideration in the context of the CAA’s use of the notional financial structure to set the WACC. The CAA explained that it based its determination of the price control on notional assumptions that need not align with HAL’s actual financial structure.⁹³⁹ The CAA submitted that the corollary of this is that HAL is at liberty to deviate from the CAA’s assumptions, but that the consequences of its decisions rest with shareholders and management.⁹⁴⁰

Intervener’s submissions

8.48 HAL submitted that there is no basis for the allegation that consideration of the price control as a whole, in combination with an alleged ‘long history of shareholders reaping the benefits of HAL’s monopoly profits’ should have led the CAA to aim down. According to HAL, relying on witness evidence, when the CMA considered evidence on historical returns across regulated sectors in the RIIO-2 energy appeals, data before it showed that underperformance was identified for three of the four CAA price controls included, including the last two Heathrow price controls.⁹⁴¹

Material harm to consumers

Appellants’ submissions

8.49 Delta and VAA separately submitted that aiming down was also warranted, given the specific circumstances of H7, to avoid material harm to consumers through the imposition of unjustifiably high airport charges throughout the H7 price control.⁹⁴²

Summary of our approach and final determination

8.50 We have considered the Airlines’ contentions that the CAA’s decision was wrong because it was wrong in law, or because the CAA made an error in the exercise of a discretion in relation to the point estimate. That includes the Airlines’ contentions that the CAA misjudged, ignored or failed to adequately consider certain matters and, in terms of certain alleged errors of law, that the CAA misdirected itself to or otherwise failed to comply with, certain of its statutory duties. We have also considered arguments raised by Delta and VAA characterising certain points as

⁹³⁸ [CAA Response](#), paragraph 188.6.

⁹³⁹ [CAA Response](#), paragraph 188.7. The CAA in this part of its response refers to the CAA Response, paragraph 48.2, which explains that the reason for approaching the exercise through the lens of a notional company is to ensure that only efficient financing costs are passed to consumers.

⁹⁴⁰ [CAA Response](#), paragraph 188.7.

⁹⁴¹ [HAL NoI](#), paragraph 150.5.

⁹⁴² [Delta NoA](#), paragraph 5.105, [VAA NoA](#), paragraph 5.100.

errors of fact. This assessment has been carried out in line with the legal framework described in chapter 3.

- 8.51 Following an in-depth review and assessment of the Parties' submissions and supporting evidence, and on the basis of the considerations set out in further detail below, we determine based on the evidence before us that the Final Decision was not based on an error of fact, was not wrong in law and that the CAA did not make an error in the exercise of a discretion in relation to the point estimate.

Our assessment

- 8.52 We have assessed the key issues raised by the Airlines in relation to the alleged failure of the CAA to aim down in its the choice of the WACC point estimate.

Asymmetry of costs and benefits

- 8.53 In this section, we consider the Airlines' arguments (set out above in paragraphs 8.22 to 8.23) that the CAA should have aimed down due to welfare effects in the particular circumstances of H7.
- 8.54 We agree with the CAA that welfare effects are often regarded as a prima facie reason to aim up on the WACC.⁹⁴³ This is because the costs of under investment from setting the WACC below its true level have the potential to outweigh the shorter-term costs to consumers from paying too much if the WACC is set above its true level. As set out by the CAA, this is because the foregone investment would entail a loss of consumer surplus that significantly outweighs the savings from lower near-term charges under a range of reasonable assumptions.⁹⁴⁴
- 8.55 Welfare concerns could, therefore, be a valid reason to consider aiming up, although the existence of other mechanisms to incentivise investment, which may mitigate such concerns, should also be taken into account.
- 8.56 There are various published materials supporting this position, including the CMA's Final Report on [PR19 Decision](#), and the latest UKRN guidance on the cost of capital.⁹⁴⁵
- 8.57 AlixPartners (on behalf of the Airlines) acknowledged, referring to UKRN guidance, that the general regulatory practice of choosing the midpoint is reasonable. However, the Airlines denied that this general practice should be applied in the particular circumstances surrounding H7. Specifically, as explained above, they

⁹⁴³ [Final Proposals, Section 3](#), paragraph 9.407.

⁹⁴⁴ [Final Decision, Section 3](#), paragraph 9.198.

⁹⁴⁵ UK Regulators' Network, 'UKRN guidance for regulators on the methodology for setting the cost of capital', (see [UKRN Guidance for regulators](#)), page 28. The report focuses on the cost of equity, but the guidance has relevance to the overall WACC.

argued that a relatively smaller capital expenditure programme in H7 and cost-of-living issues require a lower passenger charge.

- 8.58 Regarding capital expenditure, we do not consider the total amount of capex in H7, either in absolute terms or relative to the RAB, or the existence of investment incentives in H7, as appropriate reasons to aim down. In the Final Proposals, the CAA discussed that the extent of aiming up for welfare reasons may depend in part on the extent of new investment being undertaken within a price control, referencing the 2018 UKRN paper. That paper suggested that aiming up is appropriate for new investment, whereas the midpoint is appropriate for existing or sunk investment.⁹⁴⁶ Therefore, while the overall scale of new investment relative to sunk investment can be a relevant factor in considering the need to aim up, it is not a reason in itself to aim down on the WACC.⁹⁴⁷ Additionally, we observe that the existence of other mechanisms to incentivise investment in H7 may reduce the need to aim up, but does not necessarily justify aiming down in the range.
- 8.59 Further, we agree with the CAA (see paragraph 8.25 above) that while smaller than in certain prior periods, capex in H7 is nonetheless important to customers, given in particular the significance of some of the specific investment programmes to be funded in H7.
- 8.60 Regarding cost of living factors, we also agree with the CAA (see paragraph 8.24 above) that its duty is to consider both present and future consumers. Likewise, we agree with the CAA that there is no obviously clearer imperative to secure affordable prices in H7 than there has been in the past.⁹⁴⁸ The Airlines advanced arguments that affordable prices are the primary concern in the aviation sector and that consumers face higher costs of living as a result of increasing inflation.⁹⁴⁹ We do not disagree that the cost of living issues may be more acute in H7 than in other price control periods but it does not, in our view, follow that consumer welfare will be maximised if the CAA prioritises lower prices over the potential costs of disincentivising investment.
- 8.61 Regarding the alleged error of discretion, we therefore see no basis to conclude that the CAA misjudged or ignored the asymmetry of costs and benefits or that any alternative approach proposed by the Airlines on this point is a clearly superior alternative to that adopted by the CAA. As such, in our view, the conclusions reached by the CAA are a proper exercise of its regulatory judgement and fall squarely within its margin of appreciation. Regarding the alleged error of law, we also see no basis to conclude that the CAA misjudged or ignored the asymmetry

⁹⁴⁶ [Final Proposals, Section 3](#), paragraph 9.401 and 9.402.

⁹⁴⁷ Wright, S., Burns, P., Mason, R. and Pickford, D. (2018), '[Estimating the cost of capital for implementation of price controls by UK Regulators: An update on Mason, Miles and Wright \(2003\)](#)', p71.

⁹⁴⁸ CAA, Second Witness Statement of Jayant Hoon, (**Hoon 2**), 31 May 2023, paragraph 22.22.

⁹⁴⁹ 'Cost of capital issues raised by the Heathrow Airport H7 price control': (**AlixPartners WACC Report**) an Expert Report prepared for British Airways, Virgin Atlantic Airways and Delta Air Lines, 17 April 2023, paragraph 98.

of costs and benefits. It is also evident that the CAA had regard to relevant considerations in this area and we see no basis for a finding that it fell into methodological error.

- 8.62 Further, regarding the alleged error of law, in our view the CAA is not legally required to aim lower for affordability reasons in the particular circumstances of H7 as a result of its statutory duties. Delta and VAA referred to the CAA's duty under section 1 CAA12. Under this section, the CAA must carry out its functions in a manner which it considers will further the interests of users of air transport services regarding the range, availability, continuity, cost and quality of airport operation services. As was observed by the CAA in the Final Decision, while lower charges in H7 would benefit consumers in the short-term, this could be at the expense of under-investment in the longer-term, which would harm future consumers.⁹⁵⁰ The CAA is clearly entitled to balance these competing considerations in the context of this statutory duty before taking action it considers will satisfy the duty in section 1 CAA12. We are not persuaded that any of the evidence presented to us demonstrates that the CAA acted in breach of this duty.
- 8.63 We therefore do not agree with the Airlines that the CAA's approach relating to the asymmetry of costs and benefits discloses errors of law or discretion.
- 8.64 We also find no basis, taking account of the above, to support Delta's and VAA's contentions that the Final Decision was wrong because it was based on errors of fact – specifically, that the CAA had the wrong facts or interpreted them incorrectly or that it reached conclusions without a reasonable basis. We observe that those contentions do not allege errors of primary or plain fact. The incidence of costs and benefits and the assessment of welfare effects is a matter of evaluation. These two airlines' contentions attack the CAA's setting of the point estimate on account of its approach to those costs, benefits and effects, which we consider to have been a matter of discretionary judgement (in respect of which, for the reasons above, we do not consider the CAA to have been wrong).
- 8.65 We therefore determine that the Final Decision was not based on an error of fact, was not wrong in law, and nor did the CAA make an error in the exercise of a discretion, in relation to the asymmetry of costs and benefits.

Asymmetry of pandemic events

- 8.66 In this section, we consider the Airlines' arguments set out above in paragraphs 8.27 and 8.28 that the CAA should have aimed down in the WACC estimate due to the asymmetry arising from the probabilities and frequencies adopted in its own analysis of future potential pandemic events and the upward impact on the asset beta. The Airlines allege that the CAA's chosen scenarios were asymmetric and

⁹⁵⁰ [Final Decision](#), paragraph 9.198.

that it erred in choosing the midpoint of the two extremes, in turn choosing a point estimate for the WACC (from within the range) that is too high.

8.67 The CAA challenged the admissibility⁹⁵¹ of the Airlines' arguments summarised above on the basis that the issue had not been raised by stakeholders at any point during the H7 consultation process despite multiple opportunities to do so. The CAA referred us to Schedule 2, paragraph 23 CAA12 in this regard.⁹⁵²

8.68 We do not agree with the CAA that this material is inadmissible. There are two reasons:

- (a) CEPA, on behalf of IATA, appears to have alerted the CAA to issues around the appropriate statistical measure for pandemic asymmetry in its response to the Initial Proposals.⁹⁵³ It was therefore a matter considered by the CAA in a relevant sense that means we are not precluded from having regard to the material.
- (b) Paragraph 23 CAA12 does not appear to us to be intended to prevent parties from raising methodological errors of the nature raised by the Airlines purely because they did not raise the error at an earlier stage. The relevant information that gave rise to any methodological error was before the CAA at the time it took the Final Decision. It was in that sense 'considered' by the CAA in making its decision, and it is primarily the responsibility of the CAA to correct methodological errors where it has the information available to it that would enable it to do so, and to consider how relevant facts before it might affect its decision.

8.69 As to the substantive point, as discussed in chapter 6, the CAA, supported by Flint,⁹⁵⁴ adopted specific assumptions regarding the possible frequency and duration of future pandemics, which it then used to inform its asset beta estimates. These assumed a frequency of a pandemic once every 20 or 50 years, and durations of 17 or 39 months. The assumptions implied that, at any one point in time, the probability of a pandemic is 2.8%, 6.5%, 7.1% and 16.3%. The CAA then used the lower and the upper bounds of this distribution to adjust the pre-pandemic beta upwards by a range of 2-11bps. By then taking the mid-point of the WACC range, the CAA implicitly took the mid-point of the asset beta range which has the effect of assigning 50% weight to the two extremes of the distribution of pandemic probabilities and zero weight to the middle cases. Figure 8.1 shows the distribution of probabilities assumed by the CAA. The midpoint (9.6%) of the two extremes of this range implies a higher average probability of a pandemic than

⁹⁵¹ See paragraph 8.30 above.

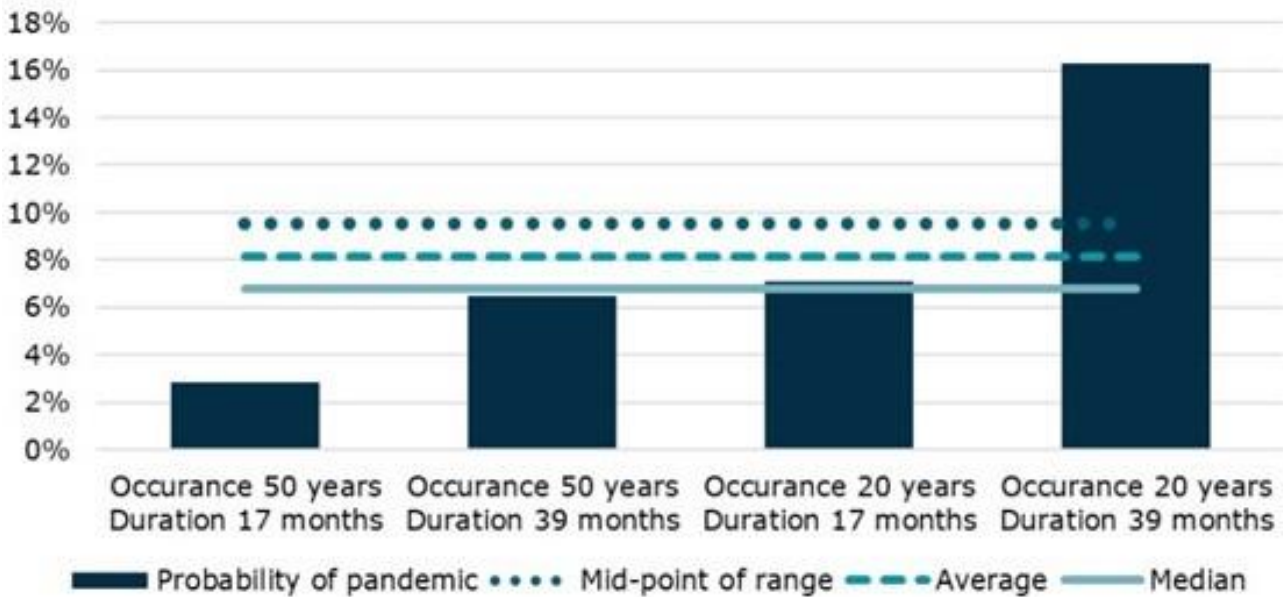
⁹⁵² [CAA Response](#), paragraph 188.3.

⁹⁵³ Airlines Closing Statement, paragraph 24.

⁹⁵⁴ CAA, Craig Lonie Expert Report from Flint, 31 May 2023, page 34.

other measures of central tendency of a distribution such as the mean (8.2%) or median (6.8%).⁹⁵⁵

Figure 8.1: The CAA’s four pandemic occurrence probabilities



Source: [AlixPartners WACC Report](#), 17 April 2023, Figure 7.

- 8.70 The Airlines contended that the CAA’s approach results in an asymmetric distribution for the WACC. AlixPartners estimated that this would reduce the central estimate of the WACC by 4bps (using the mean).⁹⁵⁶
- 8.71 As we state above (see paragraph 8.29), the CAA acknowledged in its response to the NoA that asymmetry of pandemic events is a prima facie reason for aiming down within the point estimate and accepted that this was not considered in the Final Decision.⁹⁵⁷ The CAA however questioned whether an adjustment to the WACC of 4bps is sufficiently material to mean it had erred. It also more generally stated that the degree of asymmetry would be potentially offset by other considerations, such as welfare effects.⁹⁵⁸
- 8.72 As a preliminary point, we note that the choice of the point estimate is a judgement that any regulator must make in line with its statutory duties and having demonstrated that it has considered relevant information and views.⁹⁵⁹ The CAA explained its approach in the Final Decision, noting that it was ‘balancing two considerations’ (welfare effects and parameter asymmetry) when setting the point estimate⁹⁶⁰ and that ‘[a]lthough we have identified factors that support both a higher and a lower point estimate, we consider that the evidence is broadly

⁹⁵⁵ We note that AlixPartners (AlixPartners WACC Report, paragraph 104) states that the midpoint is 9.5%. We calculate the midpoint as 9.6% with rounding, hence the small discrepancy.

⁹⁵⁶ AlixPartners WACC Report, paragraphs 104 to 105.

⁹⁵⁷ [CAA Response](#), paragraph 188.3.

⁹⁵⁸ Hoon 2, paragraph 22.28.

⁹⁵⁹ See further Hoon 2, paragraph 22.7.

⁹⁶⁰ [Final Decision, Section 3](#), paragraph 9.193.

balanced.⁹⁶¹ This demonstrates, in our view, that the overall decision on the point estimate (ie the CAA's choice of the mid-point of the range) involved the CAA making a judgement that weighed the impacts of different factors.

- 8.73 We also agree with the CAA that the CMA's RIIO-2 decision is relevant in this context and that the CAA's margin of appreciation will be at its greatest in situations such as selecting the point estimate, as it is required to make an overall judgement based upon a range of sometimes conflicting expert evidence in the context of a public policy decision.⁹⁶²
- 8.74 As the CAA noted, H7 stakeholders have at various points expressed different views regarding the choice of the point estimate for the WACC within the estimated range, with HAL advocating for close to the maximum possible value and the Airlines arguing that the CAA should have aimed down within the range.⁹⁶³ In our view, this demonstrates that different stakeholders are capable of taking very different positions on the impact of certain factors, motivated by their commercial interests, and that the CAA had to take its overall decision in this context taking into account a range of competing stakeholder opinions.
- 8.75 Each of these points, in our assessment, provides important context for our consideration of whether the CAA erred in law (because it failed to take account of a relevant consideration or made methodological errors), or in the exercise of a discretion, in setting the overall point estimate for the WACC.
- 8.76 As to the alleged errors, our assessment and findings are as follows.
- (a) We note the CAA's agreement that the asymmetry of pandemic events was a prima facie reason for aiming down in the WACC point estimate. We therefore treat it as such.
 - (b) We likewise note that the CAA did not take this asymmetry into account in selecting that estimate.
 - (c) The CAA accordingly did not take what was, at least, a potentially relevant consideration into account.
 - (d) However, having considered five potentially relevant factors in the Final Proposals, and in taking two in particular (welfare effects providing a prima facie reason for aiming up, and parameter asymmetry providing a prima facie reason for aiming down)⁹⁶⁴ into account in the Final Decision, the CAA took account of other more material but less readily quantifiable factors in

⁹⁶¹ [Final Decision, Section 3](#), paragraph 9.207.

⁹⁶² Hoon 2, paragraph 22.7; [ELMA Final Determination Volume 2A: Joined Grounds: Cost of equity](#), 28 October 2021, paragraph 5.934.

⁹⁶³ Hoon 2, paragraph 22.1-22.2.

⁹⁶⁴ Hoon 2, paragraph 22.13.

reaching its overall judgement on the point estimate. In that regard we note the following points:

- (i) The precise effects are a matter of judgement, but there is some material that suggests that, as far as welfare effects are concerned, the appropriate degree of aiming up may be relatively substantial. In the Final Proposals, for example, the CAA suggested that a mechanistic application of the 2018 UKRN approach could imply a 60th percentile point within a range.⁹⁶⁵
- (ii) As to parameter asymmetry, in the Final Decision the CAA took into account that the impact of recent market developments on the appropriate choice of point estimate was mixed: that the risk-free rate had increased significantly, reducing the equity risk premium – and by extension, the upward skew associated with the RPI-real TMR relative to the Final Proposals – but RPI inflation forecasts had also increased significantly, which might imply a greater skew than it previously considered.⁹⁶⁶

In other words, the CAA took into account material factors, liable to have significant effects in opposite directions on the WACC estimate but about which there was considerable uncertainty, and made an overall judgement. It did so in a context where its approach (not wrongly in our view) was that deviation from the mid-point of the WACC range would require strong and compelling evidence.⁹⁶⁷

- (e) In that context, the addition of one factor (relating to the asymmetry of pandemic events), which only suggests (at most according to the evidence submitted on behalf of the Airlines) a small degree of aiming down would be required, would not in our view have had a material impact on the CAA's overall judgement on the point estimate. That is, where the CAA took account of factors likely to be of a materially greater, but uncertain, size, a factor liable to indicate aiming down by 4bps or less would not likely have affected the estimate. Accordingly, insofar as the asymmetry of pandemic events was a relevant consideration (and even if we assume that it was) that the CAA did not take into account, it was immaterial. The omission did not result in the CAA point estimate being wrong either as an error of law as alleged or in the exercise of a discretion.

⁹⁶⁵ [Final Proposals, Section 3](#), paragraph 9.403.

⁹⁶⁶ [Final Decision, Section 3](#), paragraph 9.205.

⁹⁶⁷ [Final Proposals, Section 3](#), paragraph 9.394.

Asymmetries of information between the CAA and HAL

- 8.77 In this section, we consider the Airlines' arguments set out in paragraphs 8.32 to 8.35 above. They allege that HAL's status as a single licensee, the inability to conduct more detailed industry-wide benchmarking and an overreliance on HAL's own data mean that significant information asymmetries remain between HAL and the CAA, and the CAA should have aimed down in the WACC range to compensate.
- 8.78 We observe that the presence of information asymmetries is a normal feature of incentive-based regulation. Operational outperformance is, in our view, a desirable outcome which benefits consumers in the long-term. However, the existence of information asymmetries does not mean that a regulator cannot set a price control which is a 'fair bet' in expected terms for the regulated firm, or that the regulator should use the WACC as a tool to minimise scope for out-performance at the start of the control.
- 8.79 We agree with the CAA's representations⁹⁶⁸ that ex-ante extrapolation and the automatic assumption of outperformance is not an appropriate starting point. A regulator cannot practically eliminate all information asymmetries, nor do we consider that it is the regulator's role to eliminate any possibility of outperformance on an ex-ante basis.
- 8.80 Both the CAA (see paragraph 8.36) and HAL (see paragraph 8.37) cited recent regulatory determinations in this area, namely the CMA's determinations in RIIO-T2/GD2 and the removal of Ofgem's proposed outperformance wedge. HAL specifically highlighted the CMA's reasoning that such asymmetries are best addressed in the context of the specific variables where they arise.⁹⁶⁹ We agree with this general principle. If the Airlines are of the view that material information asymmetries led to poorly calibrated 'building blocks', they could have chosen to appeal the CAA's decision in relation to these particular building blocks (and in fact a key asymmetry the Airlines mention is in relation to passenger forecasts, which is the subject of chapter 9 of this document). Consequently, our view is that the CAA did not wrongly consider itself constrained by regulatory precedent. We are also of the view that the potential presence of information asymmetries is not an automatic reason to aim down. On that basis, the CAA's approach in this area does not disclose errors of law or discretion.
- 8.81 We have considered the Airlines' arguments surrounding the availability and quality of data in the consultations and the alleged role of these factors in exacerbating information asymmetry. We recognise the challenges related to the structure of the industry in the UK and the fact that HAL is the only licensee. While

⁹⁶⁸ Transcript of Ground B Hearing, 17 July 2023, page 156, lines 4 to 25.

⁹⁶⁹ [ELMA Final Determination, Volume 2B, Joined Grounds B, C and D](#), 28 October 2021, Page 61, paragraph 6.153 and page 71, paragraph 6.181(b).

this meant that the CAA could not conduct benchmarking to the level of detail it would have liked, this does not, in our view, imply that the price control was mis-calibrated in HAL's favour. We note HAL's submissions in this regard, referring to the CMA's review of historical returns in regulated sectors as part of the RIIO-2 appeals⁹⁷⁰ and its underperformance in three of the four CAA price controls included in the sample, as well as its underperformance in H7 to date.⁹⁷¹ The availability of better-quality data in other industries, such as energy and water, does not in our view mean the CAA erred in using the best available data in its own sector and exercising its expert regulatory judgement (both in relation to the point estimate and the building blocks of the price control). We also do not consider that differences in risk-sharing arrangements (eg on operating expenditure) is a suitable reason to aim down on the WACC.

8.82 We therefore find no basis, taking account of the above, to suggest that the Final Decision was wrong in law because the CAA misjudged or ignored information asymmetries between HAL and the CAA, or because it failed to take proper account of relevant considerations or made methodological errors. Nor do we find any basis to suggest that the CAA made an error in the exercise of a discretion by misjudging or ignoring information asymmetries between HAL and the CAA.

8.83 We also find no basis, taking account of the above, to support Delta's and VAA's contentions that the Final Decision was wrong because it was based on errors of fact – specifically, that the CAA reached conclusions without a reasonable basis or made false comparisons. What is alleged do not appear to us to be errors of fact at all and instead allege that the CAA's approach is unfair because it should compensate for information asymmetries. This is a matter of regulatory judgement (in respect of which, for the reasons above, we consider the CAA was not wrong).

8.84 Consequently, we determine that the Final Decision was not based on an error of fact, nor was it wrong in law, and nor did the CAA make an error in the exercise of a discretion, as far as information asymmetries were concerned.

Asymmetries caused by the TRS outer band

8.85 In this section, we consider the Airlines' arguments set out in paragraphs 8.38 to 8.42 above that the CAA should have aimed down due to asymmetries caused by the outer band of the TRS. The CAA introduced risk sharing for differences in traffic (between passenger forecasts and out-turns), protecting HAL from 50% of the airport charge revenue impact resulting from differences up to 10% and 105% revenue protection from differences above 10%. The Airlines submitted that:

⁹⁷⁰ HAL, Second Witness Statement of Peter Hope, (**Hope 2**), 22 May 2023 paragraph 2.39.

⁹⁷¹ HAL, Second Witness Statement of Michael King (**King 2**), 22 May 2023, paragraph 6.19.

- (a) the outer band transfers additional asymmetric risk onto consumers due to the capacity constraint HAL faces, as downside shocks are more likely than upside surprises and leave consumers more exposed to upward risk in passenger charges; and
- (b) breaching the lower band creates disincentives for HAL to grow traffic, or even an incentive to constrain it, when emerging from periods of demand shock.

The transfer of additional (asymmetric) risk onto consumers

8.86 We understand the TRS to be symmetric in its design but asymmetric in terms of expected financial outcome given the capacity constraints that confront HAL. However, we agree with the CAA that it dealt with such asymmetries in other elements of the price control design, specifically through the inclusion of the asymmetric risk allowance and the Shock Factor. The Airlines have separately challenged the CAA's decisions on the Shock Factor and the value of the asymmetric risk allowance in Ground C. We provide our assessment of the Shock Factor in paragraphs 9.285 to 9.310 and the asymmetric risk allowance in paragraphs 9.315 to 9.319 (and we provide our assessment of double counting in relation to the cost of capital in paragraphs 9.275 to 9.284). The Airlines have not appealed the design of the TRS itself and have not demonstrated why further action is required with regards to the WACC.

Impact on HAL's incentives to grow traffic

- 8.87 We note the Airlines' concerns that the TRS creates perverse incentives for HAL regarding growing passenger traffic in the wake of demand shocks. They allege that, due to uncertainties surrounding how to estimate the opex and commercial revenue elasticities assumed within the CAA's calculations, the TRS may provide HAL with even greater EBITDA protection than the CAA assumes and potentially in excess of 100%. Consequently, this may leave HAL with no incentive to encourage traffic growth or to even constrain it.⁹⁷²
- 8.88 In our view, the Airlines' submission is primarily about the design of the TRS mechanism. They have not appealed in respect of that, and we have received no compelling evidence to suggest that they were not able to contribute adequately to consultations about it. The issues raised by the Airlines do not appear to us to be addressed by the choice of the point estimate in any event. Rather, we agree with the CAA (see paragraph 8.43) that those issues have already been reflected in the WACC via the CAA's asset beta adjustment.

⁹⁷² AlixPartners WACC Report, paragraphs 115-117.

- 8.89 We therefore see no basis to suggest that the Final Decision was wrong in law because the CAA misjudged, ignored or failed to consider the effect of distortions created by the outer band of the TRS, and so failed to take proper account of relevant considerations, made methodological errors and/or reached conclusions without adequate supporting evidence. Nor do we see any basis to suggest that the CAA made an error in the exercise of a discretion by misjudging or ignoring the effect of such distortions.
- 8.90 We therefore determine that the Final Decision was not wrong in law, nor did the CAA make an error in the exercise of a discretion, by not aiming down to account for asymmetries created by the TRS mechanism.

Asymmetries caused by other factors

- 8.91 In this section, we consider Delta's and VAA's arguments set out above that the CAA failed to have proper regard to or take account of other relevant factors.
- 8.92 As described above (see paragraph 8.45), these factors include the CAA's alleged failure to consider the H7 price control package in the round and the overall benefits it provides to HAL, and the impact of HAL's gearing and past shareholder returns.

Consideration of the overall price control in the round

- 8.93 The CAA calibrated the various elements of the H7 price control through extensive consultation, with measures implemented via the specific building blocks, which allows for more targeted and evidenced treatment of each issue. The Airlines have not demonstrated why this overall package has been mis-calibrated or has left HAL facing very little risk over H7.
- 8.94 We agree with the CAA (see paragraph 8.46) that the WACC range has been subject to careful scrutiny. To the extent that the Airlines consider the WACC to be mis-estimated, we have assessed these concerns in the other WACC appeal sub-grounds.
- 8.95 Regarding the other 'protections' in the price control, such as the TRS, the Shock Factor and the asymmetric risk allowance, we note again that the Airlines have not appealed the design of the TRS, and that we assess certain points raised in relation to the Shock Factor and the asymmetric risk allowance in relation to Ground C (see chapter 9). Our view is that, as the CAA contends (see paragraph 8.46(b)), these mechanisms do not fully protect HAL against risk during H7; rather they ensure that the residual level of risk faced by HAL is commensurate with the H7 WACC allowance and that particular asymmetries in expected outcomes are addressed at source.

HAL's actual capital structure and past shareholder returns

- 8.96 Regarding HAL's actual capital structure, we do not consider the Airlines' arguments are relevant to the choice of point estimate. Gearing is considered in the notional company but the ultimate decision over capital structure rests with HAL's management and shareholders, as do the associated risks and rewards.
- 8.97 Similarly, the Airlines allege that HAL has prioritised shareholder returns over customer needs. They have provided no compelling evidence that this is the case. In our view, shareholder distributions are an important component of the return to the providers of equity capital and a matter for management, with the risks and consequences of over distribution residing with management and shareholders.
- 8.98 We therefore see no basis to conclude that any alternative approach proposed by the Airlines relating to these 'other factors' is a clearly superior alternative to that adopted by the CAA. As such, in our view, the conclusions reached by the CAA appear to be a proper exercise of its regulatory judgement and fell squarely within its margin of appreciation. We also see no basis to conclude that the CAA failed properly to enquire, failed to take proper account of relevant considerations or made methodological errors. On those footings, the CAA's approach to these 'other factors' does not disclose errors of law or discretion.
- 8.99 Accordingly, we determine that the Final Decision was not wrong in law, nor did the CAA make an error in the exercise of a discretion, regarding these 'other relevant factors'.

CAA's decision not to 'aim down' is harmful

- 8.100 In this section, we consider Delta's and VAA's arguments set out above that the CAA decision not to aim down in the WACC range is harmful.
- 8.101 The relevant airlines argued (see paragraph 8.49) that the cumulative alleged errors result in an excessively high passenger charge, which is harmful to consumers given current cost-of-living issues and the relatively low capex programme envisaged for H7.
- 8.102 In our view this particular argument is inexorably bound up with the alleged individual errors above. It is founded on the premise that those errors occurred. Given our view that the CAA has not erred on those bases, we also determine that the Final Decision was not based on errors of fact, was not wrong in law, and nor was an error made in the exercise of a discretion, on that basis that not aiming down will give rise to material harm to consumers and means the passenger charge is set higher than necessary. In particular:
- (a) The Final Decision was not based on errors of fact, in that by selecting such a point estimate the CAA reached conclusions without a reasonable basis.

We note that what is alleged does not appear to be an error of fact at all. Rather, in making that contention the Airlines in our view are alleging that the CAA erred in the exercise of a discretion because its approach will cause harm to consumers (and, for the reasons set out, we do not find that it did so);

- (b) Neither was it wrong in law because in selecting that estimate the CAA: breached its duty to carry out its functions in a manner which it considers will further the interests of users of air transport services regarding the range, availability, continuity, cost and quality of airport operation services; breached its duty to have regard to the need to promote economy and efficiency on the part of HAL in its provision of airport operation services at Heathrow; failed to take proper account of relevant considerations; or made methodological errors. Having looked closely at the Airlines' arguments, we found that the CAA had made no such errors;
- (c) Nor did the CAA make an error in the exercise of a discretion because it failed to take relevant factors into account, to meet any of its own key consumer interest objectives, and/or to achieve its stated intention that passenger charges were 'no higher than necessary'. Having looked closely at the Airlines' arguments we found that the CAA had made no such errors.

Determinations on point estimate

8.103 For the reasons set out above, we determine that the Final Decision was not wrong because it was not based on errors of fact, was wrong in law or because the CAA made an error in the exercise of a discretion, in the selection of the point estimate. The Airlines' appeals in relation to the point estimate are therefore dismissed and we confirm the Final Decision in that regard.

9. Ground C: Passenger forecast

Introduction

9.1 This chapter covers the errors that the Airlines submitted that the CAA had committed in relation to its passenger forecast for the H7 period. In broad terms, the Airlines submitted that the CAA underestimated the number of passengers that would use Heathrow airport during the H7 period. The Airlines also submitted that the CAA's consultation on its passenger forecast lacked transparency and was procedurally unfair.

Background

Relevance of the H7 passenger forecast

9.2 The number of passengers using Heathrow airport is of central importance to the overall economics of the airport. The passenger forecast is a key driver of the CAA's calculation of the maximum level of allowed airport charges.⁹⁷³ The passenger forecast also translates the revenue requirement into a 'maximum yield per passenger' which HAL is required to use when it sets airport charges.

Impact of COVID-19 on the CAA's passenger forecasting exercise

9.3 Developing a passenger forecast for a five-year period is not a straightforward task. In normal circumstances, including those prevailing during the previous control period (Q6), passenger volumes were relatively stable and constrained at the upper end by capacity at Heathrow. While there had been short-term shocks reducing passenger volumes by less than ten percentage points for some weeks or months at various points in the past three decades, the scale of the impact of the COVID-19 pandemic was unprecedented (see chapter 2, paragraphs 2.23 to 2.25 and Figure 2.4). In this context, the CAA's task in forecasting passenger numbers during the recovery period after that pandemic was much more difficult.

9.4 The context of substantial uncertainty over the pace and trajectory of recovery from the COVID-19 pandemic is important to our consideration of this ground. We note, in this uncertain context, that the passenger forecast figure which the Airlines submitted that the CAA should have arrived at (392.5 million passengers) is less than 5% higher than the CAA's forecast (375.5 million passengers) which they submit is wrong (see paragraph 9.69(h)).

⁹⁷³ [Economic Regulation of Heathrow Airport: H7 Final Decision Section 1: Regulatory Framework](#), March 2023 (**Final Decision, Section 1**), paragraphs 1.1 and 1.2. All the Decision Documents can be found on this page: [Final and Initial proposals for H7 price control | Civil Aviation Authority \(caa.co.uk\)](#)

Outline of how the CAA set the H7 passenger forecast

9.5 In this section, we give a brief overview of the CAA's approach to forecasting passenger numbers in H7. First, we describe the components of the model that HAL used to develop its passenger forecasts (the **HAL Model**) and then set out how the CAA used the HAL Model and other sources of information to determine the passenger numbers to be used in setting the price control. We also cover how the CAA engaged with stakeholders throughout the process.

The HAL Model

9.6 In December 2020, HAL produced its passenger forecasts for the H7 period in its Revised Business Plan (**RBP**), subsequently updated in later versions. The methodology was broadly similar to that followed in Q6, with an addition of a 'Travel Restrictions Model' (described in paragraph 9.7(a)) to account for the specific challenges faced during the COVID-19 pandemic.⁹⁷⁴

9.7 The HAL Model comprised the following elements:⁹⁷⁵

- (a) **Travel Restrictions Model:** This was a recent addition to the forecast model suite, to account for the specificities of the COVID-19 pandemic restrictions. It used historic data to assess the level of recovery reached (compared to 2019) in each country/market when a particular travel restriction was applied (eg hotel quarantine or pre-departure testing).
- (b) **Demand Model:** This was an econometric model which forecasts total market demand for both direct and indirect passengers, using variables on income (GDP and consumer expenditure) and fares (driven by oil prices, taxes, charges and efficiency gains). Our understanding is that since Q6 a COVID-19 Decay Function Overlay was added which used an exponential decay function to model the stages of traffic recovery from the initial shock impact of COVID-19 in 2020.⁹⁷⁶
- (c) **Capacity Supply Model:** This forecasted Heathrow specific passenger numbers from a supply point of view using air traffic movements, 'seats per movement' and load factors. The outputs from this model linked with those of the Demand Model to ensure that the demand outputs fitted within the supply envelopes.
- (d) **Weighted Combination of Scenarios:** Monte Carlo Simulations were used to generate a range of forecasts on the path to recovery from the COVID-19

⁹⁷⁴ HAL, Exhibit CEB1, to the first witness statement of Claire Berridge, Tab 9, page 59, Steer Report, Heathrow Airport – Review of Air Traffic Forecast Methodology, H7, February 2022, (**Steer Report**) page i. (64 of Exhibit CEB1).

⁹⁷⁵ [Initial Proposals](#), Section 1, paragraph 2.17.

⁹⁷⁶ Steer Report, paragraph 1.15. (71 of Exhibit CEB1).

pandemic.⁹⁷⁷ In an optimistic scenario, the travel restrictions end early and there is a faster recovery of the economy, and thereby, passenger numbers. In a pessimistic scenario, the travel restrictions end at a later date and the economy is slower to recover.

- 9.8 HAL commissioned Steer to provide an external review of its forecasting methodology.⁹⁷⁸ Steer reviewed the passenger forecasting methodology and conducted a formulae audit, including checking for the structural robustness of the models. Steer's report stated that it had found no material concerns in the Travel Restrictions Model and the Capacity Supply Model. Although Steer listed some minor issues for the Demand Model and the Monte Carlo Simulations, it stated that these issues were not likely to be material.⁹⁷⁹ We understand that the CAA has taken this review into consideration during the Initial Proposals and Final Proposals stage.⁹⁸⁰

The H7 consultation process

- 9.9 The consultation process leading to the setting of the passenger forecast for the H7 control period was unusually lengthy and complicated. The Airlines submitted that the consultation was defective and procedurally unfair. In assessing these submissions, it is relevant to understand both:
- (a) how the H7 consultation process differed to that used in the Q6 control period, and
 - (b) why the CAA took a different approach for the H7 control period.
- 9.10 In the Q6 control period, the CAA's forecast had been based on a model prepared by HAL. The CAA had taken the model, devised adjustments to that model, and then conducted a public consultation on its proposed adjustments. During its consultation HAL had disclosed an operable version of relevant non-commercially sensitive parts of the model to the Airlines⁹⁸¹ so that they could comment upon the modelling suite that underpinned the passenger forecast. Following its consultation, the CAA had then set its passenger forecast for the Q6 Period.
- 9.11 In the H7 control period, the CAA had initially intended to follow the same process that it had adopted during the Q6 control period. However, a dispute between HAL and the Airlines concerning access to the updated version of the model led the

⁹⁷⁷ Monte Carlo Simulation predicts a set of outcomes based on an estimated range of values versus a set of fixed input values.

⁹⁷⁸ HAL, [RBP](#), December 2020, page 153.

⁹⁷⁹ Steer Report, page 59 page iii and iv (66 to 67 of Exhibit CEB1). Steer identifies issues as part of its 'Red/Amber /Green' framework, described in page ii of the report.

⁹⁸⁰ [Initial Proposals Section 1](#), paragraph 2.23.

⁹⁸¹ The demand module was disclosed. The supply module was redacted/aggregated as it contained competitively sensitive information about the airlines' future fleet/route plans, CAA Response to PD, Appendix 1, page 7.

CAA to take a different approach to consultation on the passenger forecasts. We set this out in more detail below.

- (a) In its Initial Proposals (October 2021), the CAA prepared its passenger forecast based on HAL's then current forecasting model (the HAL Model). The CAA reviewed the HAL Model and applied adjustments to it (or its outputs) which the CAA described in the Initial Proposals. These adjustments are described in paragraphs 9.12 to 9.15 below.
- (b) The CAA sought HAL's permission to disclose the HAL Model so that the airlines could comment upon the modelling suite in the same way that had occurred during the Q6 control period.⁹⁸² However, HAL objected on the basis that the HAL Model contained competitively sensitive information as well as content protected by its intellectual property rights (see paragraph 9.62 below). HAL threatened injunction proceedings to prevent the CAA disclosing the HAL Model.
- (c) In the weeks that followed, HAL agreed to the publication of a non-operable version of the HAL Model⁹⁸³ and also undertook a series of teleconference calls with the Airlines to explain how the HAL Model operated (see paragraph 9.69(j) below).
- (d) However, the Airlines did not regard this disclosure as sufficient to enable them to comment meaningfully on the forecast. This is because, in their view, it was not possible to observe nor deduce the judgements or assumptions made, or 'how they had been translated into the mathematics of the model'.⁹⁸⁴
- (e) HAL was prepared to disclose an operable version of the HAL Model into an external-adviser only confidentiality ring. However, this proposal was unacceptable to the Airlines. The Airlines insisted that access should be provided to at least certain internal airline staff in addition to their external advisers.⁹⁸⁵ In their view internal airline staff needed access because their business and commercial understanding meant that they could provide the most meaningful contribution when reviewing and assessing the veracity and quality of the model.⁹⁸⁶

⁹⁸² French 1, paragraphs 4.09-4.18 describes the ensuing correspondence.

⁹⁸³ This version is described as 'hard coded' and 'redacted'. BA, Witness Statement of Alexander James Dawe (**Dawe 1**), 18 April 2023, (footnote 72), 'redacted' is where a number is removed from view, and 'hard coding' is where a formula is replaced with the output.

⁹⁸⁴ Dawe 1, paragraph 82. See also Delta, Witness Statement of Christopher Allen Walker, (**C Walker 1**), 18 April 2023, paragraph 103(c), and VAA, Witness Statement of Matthew Lawrence Webster, (**Webster 1**), 18 April 2023, paragraph 98.8(b).

⁹⁸⁵ Dawe 1, paragraph 77, describes the Airlines' concerns regarding the workability of an external adviser only confidentiality ring. See also VAA, Exhibit MW1 to Webster 1, Tab 9, page 33, paragraph 4(c) reference to a joint letter from Delta, VAA and BA to the CAA, 12 October 2022.

⁹⁸⁶ Airlines Response to PD, paragraph 4.9.

- (f) Faced with this impasse, the CAA stated in its Final Proposals that it had decided to consult upon a new approach to the passenger forecast. The CAA stated that this approach would use ‘a much wider range of information than we used for Initial Proposals. As a result, [the HAL Model] has been given less weight in the development of our forecast, as it has become one of a number of forecasts that we have considered.’⁹⁸⁷

Initial Proposals (October 2021)

- 9.12 In preparing the Initial Proposals, the CAA used the HAL Model as a basis of its passenger forecasts. However, it made a number of changes to the model inputs and assumptions. These included:
- (a) mitigating the effect of asymmetric distributions which the CAA believed introduced a downside risk;
 - (b) removing the effect of fare increases due to reduced business travel;
 - (c) amending the assumption of ‘supply capping’, ie, airlines will not be able to respond to demand recovery due to the financial pressures facing them; and
 - (d) making changes to HAL’s assumptions of fleet changes.⁹⁸⁸
- 9.13 Finally, the CAA applied a ‘Shock Factor’ (**Shock Factor**) to the amended forecast to account for temporary and difficult to predict ‘non-economic’ shocks to air travel (which the CAA defined as including adverse weather, volcanic eruptions, terrorism or war).⁹⁸⁹
- 9.14 The effect of these adjustments was to increase the passenger number forecast for H7. The CAA’s mid forecast in the Initial Proposals was 6.8% higher than the HAL Model’s mid-forecast in HAL’s June 2021 RBP update.⁹⁹⁰
- 9.15 The CAA also commissioned and published alongside its Initial Proposals an external review by Skylark of the key assumptions and inputs of the HAL Model, and the subsequent adjustments by the CAA. Skylark, having access to all materials to which the CAA had access,^{991, 992} found that the CAA’s approach was

⁹⁸⁷ [Final Proposals](#), Section 1, paragraph 1.18.

⁹⁸⁸ [Initial Proposals](#), Section 1, paragraphs 2.25–2.39.

⁹⁸⁹ [Initial Proposals](#), Section 1, paragraphs 2.20.

⁹⁹⁰ CMA’s calculation from the mid forecasts of HAL (317.7m), compared with mid forecasts of CAA (339.2m) in Table 2.1 in [Initial Proposals](#), Section 1.

⁹⁹¹ Transcript of Hearing – Ground C, 18 July 2023, ([Transcript of Ground C Hearing](#)), page 40, line 13.

⁹⁹² For completeness, we note that the CAA did not have direct access to an operable version of the HAL Model at the time of the Initial Proposals (and instead requested that HAL made adjustments on its behalf) but the CAA did obtain direct access, enabling it to make adjustments itself, ahead of consulting on its Final Proposals.

'reasonable and proportionate'. Skylark also stated that in some areas the HAL assumptions should be challenged further or required more clarification.⁹⁹³

Final Proposals (June 2022)

- 9.16 For its Final Proposals, the CAA had the benefit of actual passenger numbers for early 2022, airlines schedules and booking data, and therefore decided to use separate forecasting processes for 2022 and 2023-2026.
- 9.17 For its 2022 passenger forecast the CAA used actual data for January and February 2022 and forward booking data to calculate upper and lower bounds for passenger numbers, selecting the midpoint for its forecast.
- (a) For its 2023 to 2026 passenger forecast, the CAA had direct access to the HAL Model and made further changes to the inputs, and the result was called 'the CAA-Amended-HAL Model' (**CAA Amended HAL Model**). The CAA reduced the short term (2023-2024) forecast to take account of the less optimistic economic outlook which prevailed at the time of the Final Proposals and increased the long term (2025-2026) forecast to take account of traffic at Heathrow being more 'robust in the face economic headwinds compared to other airports' over time.⁹⁹⁴
- 9.18 In particular, the CAA:
- (a) Decreased the long-term reduction of business travel post-pandemic: this was informed by a further study the CAA had commissioned Skylark to carry out on the future trends in business travel. The study found that the long-term reduction of business travel after the pandemic was not as large as had been modelled by HAL.⁹⁹⁵
- (b) Decreased the impact of carbon costs on fares: the CAA reduced HAL's assumption that carbon costs would lead to a reduction in demand of between 1.5% to 4.0% due to higher fares.⁹⁹⁶
- (c) Amended the COVID-19 Demand overlays: HAL's forecasts in its RBP Update 2 appeared too pessimistic to the CAA, which prompted the CAA to revert to the demand overlays used in the HAL Model for Initial Proposals.⁹⁹⁷
- 9.19 The CAA applied the Shock Factor to the 2022 and 2023-2026 forecasts.

⁹⁹³ Skylark Consulting Group, [CAA H7 Forecast Review, Final Report](#), prepared for: The UK Civil Aviation Authority, October 2021, page 5.

⁹⁹⁴ [Final Proposals](#), Section 1, paragraph 1.74.

⁹⁹⁵ [Final Proposals](#), Section 1, paragraph 1.45.

⁹⁹⁶ [Final Proposals](#), Section 1, paragraph 1.47.

⁹⁹⁷ [Final Proposals](#), Section 1, paragraphs 1.50-1.52.

- 9.20 Finally, the CAA developed what it described as a ‘synthesised’ approach for preparing the passenger forecast. This involved comparing the results of the forecast produced by the CAA Amended HAL Model with: (i) a range of external forecasts (these being forecasts of aviation recovery prepared by parties independent of the H7 process, amended by the CAA to reflect the circumstances at Heathrow airport); and (ii) the forecasts of HAL and Airline Operators’ Committee (for Heathrow) / London (Heathrow) Airline Consultative Committee (**AOC/LACC**).⁹⁹⁸
- 9.21 After the amendments, the CAA’s mid forecasts over the H7 period (360.2 million) in the Final Proposal were 11.4% higher than HAL Model’s mid-forecasts in HAL’s RBP Update 2 (317.1 million).⁹⁹⁹ In comparison, the CAA’s forecasts were 9.3% lower than the AOC/LACC forecasts as of December 2021 (397.2 million).¹⁰⁰⁰
- 9.22 The CAA again commissioned Skylark to review the further adjustments and published the report alongside its Final Proposals. Skylark, having reviewed the documents and the relevant excel sheets,¹⁰⁰¹ concluded that the 2022 forecast may prove to be pessimistic, but that the remainder of the forecast ‘appears reasonable considering the macroeconomic situation’.¹⁰⁰²

Final Decision (March 2023)

- 9.23 The CAA consulted on its Final Proposals before preparing its Final Decision. In the consultation process, the Airlines criticised the CAA’s reliance on the HAL Model, noting that they had not been able to scrutinise it.
- 9.24 In the Final Decision, the CAA did not make any further changes to the CAA Amended HAL Model but made amendments to the output from the Final Proposals (the so called ‘Four Steps’ (see paragraph 9.27)). These amendments are discussed in greater detail in the sections below. In summary:
- (a) For 2022, the CAA replaced the forecast of 2022 passenger numbers with the actual number of passengers that had used Heathrow in 2022.
 - (b) For 2023, the CAA used forward bookings data for 2023 and actual passenger numbers in November and December 2022 (as a proportion of 2019 passenger numbers in the same months) to calculate upper and lower bounds selecting the midpoint for its forecast. The CAA also adjusted the

⁹⁹⁸ [CAA Response](#), paragraph 207.

⁹⁹⁹ CMA’s calculations from passenger forecast numbers from HAL, Witness Statement of Claire Berridge, (**Berridge 1**), 22 May 2023, Appendix 2.

¹⁰⁰⁰ CMA’s calculations from passenger forecast numbers from Berridge 1, Appendix 2.

¹⁰⁰¹ Skylark Consulting Group, [Expert Review of the CAA Approach to H7 Traffic Forecasting](#), Prepared for: The UK Civil Aviation Authority, June 2022, page 3.

¹⁰⁰² Skylark Consulting Group, [Expert Review of the CAA Approach to H7 Traffic Forecasting](#), Prepared for: The UK Civil Aviation Authority, June 2022, page 9.

resulting passenger forecast to reflect the change in economic outlook since the Final Proposals.

- 9.25 For the 2024-2026 forecasts, the CAA updated the Final Proposal forecasts to reflect a faster recovery of passenger numbers in 2022 and 2023 than had been expected at Final Proposals and then the change in economic outlook since the Final Proposals as follows:
- (a) For the Final Decision, the CAA observed that its revised 2023 forecast was at the 80% point between the Final Proposals' 2023 and 2024 forecasts and extrapolated this trend in updating forecasts for 2024 to 2026 (for example, for the Final Decision the 2024 forecast was set at the 80% point between the 2024 and 2025 forecasts generated by the CAA Amended HAL model for Final Proposals).
 - (b) For the Final Decision the CAA made further 'off-model' adjustments to 2023 to 2026 forecasts to reflect the change in economic outlook since Final Proposals.¹⁰⁰³
- 9.26 The CAA applied the Shock Factor to the 2023 and the 2024 to 2026 forecasts.
- 9.27 The CAA described the application of these updates in the Final Decision as a 4-step process:
- (a) **Step 1: Updating for actual passenger numbers and forward bookings.** In Step 1 the CAA took account of actual passenger data for 2022 and forward bookings for 2023 as of December 2022 to amend the 2022 and 2023 forecasts from the Final Proposals.
 - (b) **Step 2: Updating for economic forecasts.** In Step 2 the CAA considered what impact changes in economic forecasts for the economic outlook since the Final Proposals (ie changes in expected UK GDP growth) should have on the passenger forecasts.
 - (c) **Step 3: Validating with external forecasts.** In Step 3 the CAA continued to monitor external traffic forecasts it considered relevant to the H7 passenger forecast, many of which had been updated since the Final Proposals. The CAA then compared those forecasts with the CAA's own forecast.
 - (d) **Step 4: Updating for traffic shocks.** In Step 4 the CAA applied a Shock Factor (of 0.87%) to the years where the number of passengers was a forecast (2023 to 2026).¹⁰⁰⁴

¹⁰⁰³ [Final Proposals](#), paragraphs 1.15 and onwards. In particular, see paragraphs 1.17 and 1.18.

¹⁰⁰⁴ [Final Decision](#): the discussion of Step 1 is at paragraphs 1.53–1.57, Step 2 is at 1.58–1.60, Step 3 is at 1.61–1.65 and Step 4 is at paragraphs 1.66 and 1.67.

9.28 The CAA's final forecast for the H7 period was 375.5 million, 8.5% higher than the corresponding mid-forecast by the HAL Model in December 2022 and 18.5% higher than HAL's mid-forecast of 317.7 million in its RBP June 2021 update.¹⁰⁰⁵ In comparison, the CAA's forecast was 4.3% lower than the Airlines' forecasts of 392.5 million.¹⁰⁰⁶

9.29 We now turn to consider the appeals made in relation to the passenger forecast.

Overview of the issues for determination

9.30 Ground C concerns errors alleged by the Airlines in the CAA's setting of the passenger forecast for the H7 period. The alleged errors can be split into four groups:

- (a) The first set of alleged errors concern the procedure the CAA adopted when setting its passenger forecast, including the non-disclosure of the HAL Model, and are alleged errors of law and discretion (**the HAL Model Procedural Errors**).
- (b) The second set of alleged errors concern methodological matters connected with the CAA's reliance on the HAL Model, and are alleged errors of fact, law and discretion (**the HAL Model Substantive Errors**).
- (c) The third set of alleged errors concern the four steps approach taken by the CAA in the Final Decision, and are alleged errors of fact, law and discretion (**the four steps and the 4-Step Errors**).
- (d) The fourth set of alleged errors relate to the asymmetric risk allowance (**the Asymmetric Risk Allowance Error**) and are alleged errors of fact and law.

9.31 We address these four groups of alleged errors in turn.

The HAL Model Procedural Errors

Summary of our approach and overall conclusion on alleged HAL Model Procedural Errors

9.32 In this section, we answer the following question:

Was the Final Decision wrong because it was wrong in law or an error was made in the exercise of discretion, as a result of the procedure the CAA adopted when setting the passenger forecast,

¹⁰⁰⁵ [HAL RBP update](#), June 2021, page 109, Table 5.

¹⁰⁰⁶ [VAA NoA](#), paragraph 4.127, [BA NoA](#), paragraph 3.12.3, [Delta NoA](#), paragraph 4.105.

including by making use of the HAL Model without transparent disclosure having been made to the Airlines?

- 9.33 Taking account of the Airlines' submissions on the alleged procedural errors, the subsidiary questions which we have considered in our assessment, in order to determine the above question, are as follows:
- (a) Was the CAA's reliance on the HAL Model when formulating its passenger forecast wrong in law because the CAA's consultation was procedurally unfair in that the CAA:
 - (i) relied upon the HAL Model but did not adopt a procedure which would have permitted the Airlines to access an executable/operable version of that model;
 - (ii) did not allow them meaningfully to scrutinise or interrogate or comment on that model; or
 - (iii) did not have input from the Airlines that would have enabled it properly to assess whether to rely on the model?
 - (b) Was the CAA's reliance on the HAL Model when formulating its passenger forecast wrong in law because, in light of the points in the preceding sub-paragraph:
 - (i) the CAA breached its duty to have regard to the principles of best regulatory practice; or
 - (ii) the CAA failed to comply with the duty to undertake due enquiry?
 - (c) Was the CAA's reliance on the HAL Model when formulating its passenger forecast an error in the exercise of discretion on the basis that the CAA failed to provide proper reasons (by failing to explain clearly its four step methodology)?¹⁰⁰⁷

9.34 Following an in-depth review and assessment of the Parties' submissions and supporting evidence, and on the basis of the considerations set out in further detail below, we find that the CAA did not err in law, or in the exercise of a discretion, as a result of the procedure it adopted when setting the passenger forecast. Although an operable version of the HAL Model was not disclosed to the Airlines, this did not render the CAA's consultation procedurally unfair nor was the CAA's consultation otherwise procedurally unfair. The CAA followed a process that enabled the Airlines intelligently to comment on its passenger forecast proposals, having regard to the principles of best regulatory practice and undertaking due

¹⁰⁰⁷ [BA NoA](#), paragraph 3.3.1 and section 3.8, [Delta NoA](#), paragraphs 4.51-4.56 and Annex 1, [VAA NoA](#), paragraphs 4.59-4.71 and Annex 4.

enquiry. The CAA also provided reasons for its adoption of the four steps approach.

The Parties' submissions on the HAL Model Procedural Errors

The Airlines' submissions

9.35 The Airlines alleged that the Final Decision was wrong because, in placing reliance on the HAL Model, the CAA:

- (a) adopted an unfair consultation process, and so was wrong in law;
- (b) breached its duty to have regard to the principles of best regulatory practice and failed to undertake due enquiry, and so was wrong in law; and
- (c) failed to give proper reasons, and so made an error in the exercise of a discretion.

9.36 The Airlines' arguments in support of these allegations were broadly similar in substance but were articulated with different focuses. Delta submitted that the CAA's explanation of its forecasting process was inadequate owing to the non-disclosure of an operable version of the HAL Model. VAA and BA submitted directly that the non-disclosure of an operable version of the HAL Model was procedurally unfair, and that as a consequence of this unfair approach the forecasting exercise was not conducted sufficiently transparently.

9.37 We set out the detail of the Airlines' submissions below.

Delta

9.38 Delta submitted that the CAA was wrong because the CAA failed adequately to explain its methodology when setting the passenger forecast. In more detail:

- (a) It was not clear from the Final Decision how the passenger forecast was reached,¹⁰⁰⁸ nor is it possible to determine what the precise role of the HAL Model was in the CAA's forecast.¹⁰⁰⁹
- (b) Nevertheless, it was plain that the CAA relied on the HAL Model in formulating the passenger forecast to some extent.¹⁰¹⁰

¹⁰⁰⁸ [Delta NoA](#), paragraph 4.51.

¹⁰⁰⁹ [Delta NoA](#), paragraph 4.52.

¹⁰¹⁰ [Delta NoA](#), paragraph 4.52.

- (c) The HAL Model was not shared with the Airlines¹⁰¹¹ and therefore the CAA's adjustments to it were made without input from the Airlines.¹⁰¹²
- (d) The Airlines were best placed to scrutinise the HAL Model and its outputs.¹⁰¹³
- (e) The CAA's failure to adequately explain its methodology was a breach of the CAA's statutory duties, in particular its duties to carry out its regulatory activities in a way that is transparent and accountable.¹⁰¹⁴ It also meant that the CAA's forecasting exercise was not conducted fairly or transparently.¹⁰¹⁵

BA and VAA

9.39 BA and VAA submitted that the CAA placed reliance on the HAL model when it could not reach an informed decision as to whether it would be appropriate to place such reliance on the model. The consequence was that the CAA's decision was wrong in law because it was procedurally unfair. In more detail, BA and VAA submitted that:

- (a) Reliance was placed on the HAL Model by the CAA.¹⁰¹⁶
- (b) The CAA was not in a position to reach an informed decision as to whether it was appropriate to place reliance on the HAL Model because:
 - (i) The CAA's consultation took place without the benefit of any input from key stakeholders;¹⁰¹⁷
 - (ii) The CAA could not simply assume that the HAL Model was a credible input:
 - (1) The HAL Model was liable to underestimate passenger numbers given HAL's incentives were to do so.¹⁰¹⁸
 - (2) There were serious difficulties in benchmarking this sector and benchmarking Heathrow airport specifically.¹⁰¹⁹
 - (iii) Input from the Airlines was needed for the CAA to determine whether the HAL Model was a credible input.¹⁰²⁰ Without input from the Airlines, the CAA could not know if further adjustments would have been needed to ensure that the HAL Model was a credible input / whether the

¹⁰¹¹ [Delta NoA](#), paragraph 4.53.

¹⁰¹² [Delta NoA](#), paragraph 4.54.

¹⁰¹³ [Delta NoA](#), paragraph 4.54.

¹⁰¹⁴ [Delta NoA](#), paragraph 4.55.

¹⁰¹⁵ [Delta NoA](#), paragraph 4.54.

¹⁰¹⁶ [VAA NoA](#), paragraph 4.71, [BA NoA](#), paragraph 3.8.10.

¹⁰¹⁷ [VAA NoA](#), paragraphs 4.59 and 4.60, [BA NoA](#), paragraphs 3.8.1, 3.8.2 and 3.8.5.

¹⁰¹⁸ [VAA NoA](#), paragraph 4.62, [BA NoA](#), paragraph 3.8.4.

¹⁰¹⁹ [VAA NoA](#), paragraph 4.62, [BA NoA](#), paragraph 3.8.4.

¹⁰²⁰ [VAA NoA](#), paragraphs 4.59, 4.60 and 4.63, [BA NoA](#), paragraphs 3.8.1, 3.8.2 and 3.8.5.

adjustments already applied would have ensured that the HAL Model was a credible input;¹⁰²¹

- (iv) The Airlines were not able to provide input on the HAL Model because:
 - (1) An operable version of the HAL Model was not shared with them;¹⁰²²
 - (2) The Airlines needed access to an operable version of the HAL Model in order to comment meaningfully on its credibility. To comment, BA and VAA submitted that it would have been necessary to understand the modeller's assumptions as a whole, and to check for errors (eg double-counting errors),¹⁰²³ and
 - (3) In addition, BA and VAA contended that case law establishes that a fair process requires the disclosure of an executable/operable version of the HAL Model.¹⁰²⁴
- (v) The failure to consult the Airlines properly was not alleviated by use of the report produced by the Skylark Consulting Group.¹⁰²⁵
- (c) In light of the above, the forecasting exercise was not conducted transparently or fairly which was in breach of the CAA's statutory duties.¹⁰²⁶

The CAA's Response and HAL's submissions

9.40 The CAA denied that its procedure had been unfair. The CAA submitted that its process had been adequately transparent. In particular, it submitted that the extra steps that it took in terms of benchmarking its modelling to external forecasts and the four step adjustment process (see paragraph 9.27) meant that the process as a whole was conducted in an open and transparent way. The CAA described as 'regrettable' HAL's refusal to permit disclosure of an operable version of the HAL Model to the Airlines' staff, but noted that this was not its decision. Finally, the CAA submitted that the procedure had been 'as fair and transparent as it could have been in the circumstances' and that 'HAL's failure to share the model was not so serious a procedural deficiency that the CMA "cannot be assured that the Decision was not wrong"'.^{1027, 1028}

¹⁰²¹ [VAA NoA](#), paragraph 4.63 and 4.65 and [BA NoA](#), paragraph 3.8.5.

¹⁰²² [VAA NoA](#), paragraph 4.59 and [BA NoA](#), paragraph 3.8.1.

¹⁰²³ [VAA NoA](#), paragraphs 4.66 and 4.67 and [BA NoA](#), paragraphs 3.8.7 and 3.8.8.

¹⁰²⁴ [VAA NoA](#), paragraph 4.60, footnote 187 and [BA NoA](#), paragraph 3.8.2, footnote 55.

¹⁰²⁵ [VAA NoA](#), paragraph 4.68 and [BA NoA](#), paragraph 3.8.9.

¹⁰²⁶ [VAA NoA](#), paragraph 4.60 and [BA NoA](#), paragraph 3.8.2.

¹⁰²⁷ [CAA Response](#), paragraphs 221 to 224.

¹⁰²⁸ We note that in the CAA Response to PD, the CAA made a small number of comments concerning minor and typographical errors. Where relevant, we have taken account of these in our assessment below.

9.41 For its part, HAL in its intervention emphasised the high standard required to quash a decision on grounds of procedural unfairness in a merits appeal.¹⁰²⁹ HAL also emphasised that the HAL Model was only one input (amongst many) into the CAA's passenger forecast and that the HAL Model had been heavily modified by the CAA.¹⁰³⁰ HAL noted that it had itself been denied access to the CAA's amended version of the HAL Model (although it did not suggest that this non-disclosure was procedurally unfair).¹⁰³¹ Finally, HAL noted that the Airlines had been extensively consulted by the CAA in advance of the Final Decision being issued.¹⁰³²

Legal framework – HAL Model Procedural Errors

9.42 The leading authority on the issue of procedural fairness in consultation processes is the Court of Appeal judgment in *R v North and East Devon Health Authority, ex parte Coughlan (Coughlan)*.¹⁰³³ *Coughlan* was considered by the Court of Appeal in *R v National Institute for Health and Clinical Excellence (NICE), ex parte Eisai Limited (Eisai)*.¹⁰³⁴

9.43 The Court of Appeal in *Eisai* identified the following passages from *Coughlan* as being statements of principle of particular importance:

108. ... **To be proper, consultation** must be undertaken at a time when proposals are still at a formative stage; it **must include sufficient reasons for particular proposals to allow those consulted to give intelligent consideration and an intelligent response**; adequate time must be given for this purpose; and the product of consultation must be conscientiously taken into account when the ultimate decision is taken

112. ... It has to be remembered that consultation is not litigation: the consulting authority is not required to publicise every submission it receives or (absent some statutory obligation) to disclose all its advice. **Its obligation is to let those who have a potential interest in the subject matter know in clear terms what the proposal is and exactly why it is under positive consideration, telling them enough (which may be a good deal) to enable them to make an intelligent response.** The

¹⁰²⁹ [HAL NoI](#), paragraphs 62 to 64.

¹⁰³⁰ [HAL NoI](#), paragraphs 66 to 69.

¹⁰³¹ [HAL NoI](#), paragraph 78.2.

¹⁰³² [HAL NoI](#), paragraphs 72-76.

¹⁰³³ *R v North and East Devon Health Authority, ex parte Coughlan* [2001] QB 213, [\[1999\] EWCA Civ 1871](#).

¹⁰³⁴ *R v National Institute for Health and Clinical Excellence (NICE), ex parte Eisai Limited* [\[2008\] EWCA 438](#).

obligation, although it may be quite onerous, goes no further than this. (Emphasis added).¹⁰³⁵

9.44 Having conducted a survey of numerous other cases, the Court of Appeal went on to state that:

27. What fairness requires depends on the context and the particular circumstances ... **[It is important to] avoid a mechanistic approach to the requirements of consultation.** It seems to me that the various cases cited to us provide illustrations of that, without adding materially to the statements of principle in *ex parte Coughlan*.¹⁰³⁶ (Emphasis added)

9.45 The facts of *Eisai* have certain significant similarities to the fact pattern under appeal before us and therefore bear repeating.

9.46 In summary, NICE conducted a consultation in relation to certain drugs used to treat Alzheimer's disease. The purpose of the consultation was to assess the drugs' cost-effectiveness. An important element of this was the calculation of a cost per quality adjusted life year (or '**cost per QALY**') for the drugs. NICE used an economic model to inform its calculation of the cost per QALY. During its consultation process, and in line with its established policy, NICE disclosed a non-operable version of its economic model to the pharmaceutical companies that owned drugs which were being assessed. Eisai was one of the companies that owned a drug that was being appraised.

9.47 By the time the case had reached the Court of Appeal it was common ground that the economic model was central to the determination of the drug's cost-effectiveness and that the reliability of the model was a key question. It was also established that sensitivity analyses were important for checking for the reliability of the economic model and that consultees could only conduct sensitivity analyses if they had access to a fully executable version of the model.

9.48 At a late stage in the consultation, Eisai had requested an operable version of the economic model. NICE refused to disclose the operable version of the economic model on the grounds that its content was confidential and disclosure might entail adverse practical consequences for the appraisal process (in particular, additional delay). Eisai complained that NICE's consultation was procedurally unfair because of the non-disclosure of the fully operable version of the economic model.

9.49 Regarding NICE's grounds for refusing disclosure, the Court of Appeal concluded that NICE's confidentiality argument was unsound. It also concluded that the risk

¹⁰³⁵ *R v North and East Devon Health Authority, ex parte Coughlan* [2001] QB 213, [\[1999\] EWCA Civ 1871](#), paragraphs 108 and 112.

¹⁰³⁶ *R v North and East Devon Health Authority, ex parte Coughlan* [2001] QB 213, [\[1999\] EWCA Civ 1871](#), paragraphs 108 and 112, paragraph 27.

of adverse practical consequences for the appraisal process was a ‘serious’ consideration to which weight should be attached. However, the Court of Appeal stated that if fairness otherwise requires disclosure a court should ‘be very slow to allow administrative considerations of this kind to stand in the way of its release’.¹⁰³⁷

9.50 On the question whether NICE’s procedure was unfair, the Court of Appeal agreed with Eisai. The Court of Appeal held that Eisai was unable to make an intelligent response to the consultation on the issue of the reliability of the economic model. Richards LJ, giving the judgment of the Court of Appeal, said:

49. I accept that Eisai was given a great deal of information and was able to make representations of substance. It knew the assumptions that were being applied and could comment on them. It knew what sensitivity analyses had been run and could make comments on those. It could and did make an intelligent response, as far as it went. In my judgment, however, none of that meets the point that it was limited in what it could do to check and comment on the reliability of the model itself.¹⁰³⁸

9.51 Richards LJ, went on to conclude:

66. ... **The refusal to release the fully executable version of the model ... does place consultees** (or at least a sub-set of them, since it is mainly the pharmaceutical companies which are likely to be affected by this in practice) **at a significant disadvantage in challenging the reliability of the model.** In that respect **it limits their ability to make an intelligent response on something that is central to the appraisal process.** The reasons put forward for refusal to release the fully executable version are in part unsound and are in any event of insufficient weight to justify NICE's position. (Emphasis added.)¹⁰³⁹

9.52 The insight we draw from *Coughlan* and *Eisai* is that procedural fairness is context specific and there is no single mechanistic approach to the requirements of a fair consultation. Further, in the specific context of the *Eisai* case, the Court of Appeal’s finding that the consultee (Eisai) was unable to make an intelligent response to NICE’s consultation was in the context of the (undisputed) facts that: (i) the economic model was central to NICE’s cost-effectiveness evaluation, meaning that its reliability was a key question for consultees to opine upon; (ii)

¹⁰³⁷ *R v National Institute for Health and Clinical Excellence (NICE), ex parte Eisai Limited* [2008] EWCA 438, paragraph 65.

¹⁰³⁸ *R v National Institute for Health and Clinical Excellence (NICE), ex parte Eisai Limited* [2008] EWCA 438, paragraph 49.

¹⁰³⁹ *R v National Institute for Health and Clinical Excellence (NICE), ex parte Eisai Limited* [2008] EWCA 438, paragraph 66.

sensitivity analyses were important for checking for the reliability of the economic model and these analyses could only be done with access to an operable version of the economic model. Accordingly, the consultees could only respond intelligently to a key question under consultation if they had full access to NICE's economic model.

Our assessment – HAL Model Procedural Errors

Context – what alternatives were open to the CAA?

The Airlines' submissions on the alternatives open to the CAA

- 9.53 We have set out at paragraphs 9.35 to 9.39 above the Airlines' submissions that the CAA's process during the H7 consultation was untransparent and unfair.
- 9.54 Before assessing those submissions, we first consider the Airlines' contentions as to what lawful alternative courses of action had been open to the CAA. The alternatives open to the CAA provide important factual context for assessing the fairness of the process which the CAA in fact undertook and whether it was wrong in law.
- 9.55 The Airlines identified three alternative courses of action they contended were open to the CAA. The Airlines submitted that the CAA could have:
- (a) informed HAL that it would disregard the HAL Model unless HAL agreed to share the model with airlines into a suitable confidentiality ring arrangement which would have enabled consultees to provide informed comments on it (ie a confidentiality ring permitting participation of airline staff).¹⁰⁴⁰
 - (b) developed its own CAA-originated modelling which could then have been shared with all consultees (ie both airlines and HAL).¹⁰⁴¹
 - (c) disclosed the HAL Model to airlines itself. The Airlines contended that the CAA was permitted to do this under paragraph 4(1)(a) of Schedule 6 to the Act¹⁰⁴² which permits disclosure of information obtained 'for the purpose of facilitating the carrying out of functions' of the CAA under Part 1 of the Act. However, the Airlines acknowledged that HAL might have sought to block such disclosure via injunction proceedings.¹⁰⁴³
- 9.56 We consider each of these potential alternatives below.

¹⁰⁴⁰ [BA NoA](#) paragraph 3.7.1(i), Dawe 1, paragraph 77, [VAA NoA](#) paragraph 4.56.

¹⁰⁴¹ [BA NoA](#) paragraph 3.7.1(i), Dawe 1, paragraph 77, [VAA NoA](#) paragraph 4.56.

¹⁰⁴² [Paragraph 4, Schedule 6](#) of the Act.

¹⁰⁴³ Airlines Response to RFI H7 C001, Q12.

Should the CAA have disregarded the HAL Model because HAL refused to disclose an operable version of it to airlines' staff?

9.57 In our view, the CAA was not wrong to have regard to the HAL Model even though HAL did not consent to disclose an operable version of it to airlines' staff. The HAL Model is the only available model which yields Heathrow-specific forecasts.¹⁰⁴⁴ In addition, the HAL Model had access to granular airline data that was not more widely available.¹⁰⁴⁵ Whilst other external forecasts would have also provided (and did provide) useful information, they would not have rendered the HAL Model irrelevant. The CAA's objective was to make as accurate a forecast as reasonably practical and it would not have been able to do this if it had disregarded important evidence. It was not wrong therefore to take account of the HAL model as a relevant consideration.

9.58 In their response to our Provisional Determination, the Airlines submitted that we were wrong on this point.¹⁰⁴⁶ The Airlines contended that HAL had to make a choice: either agree to disclose an operable version of the HAL Model or accept that the CAA would pay no regard to it. We disagree. As set out in more detail in paragraph 9.94 below, if the CAA concluded that procedural fairness required disclosure of an operable version of the HAL Model, then – absent a statutory basis permitting it to disregard relevant evidence – it would have been required to give effect to disclosure using its powers under paragraph 4(1)(a) of Schedule 6 to the Act, which permits the CAA to disclose materials to facilitate the carrying out of its regulatory functions.¹⁰⁴⁷ The CAA would have acted unlawfully if it had not used this power and instead disregarded this obviously relevant evidence.

Should the CAA have developed its own model in place of the HAL Model?

9.59 Our view is that, in the circumstances faced by the CAA at the time, its decision to use the HAL Model as an input to its passenger forecast, rather than to seek to develop its own model, was not wrong. We accept the CAA's submission that the alternative of the CAA developing its own model (as suggested by the Airlines) would have taken a material period of time and 'involve a range of associated risks', requiring a 'series of formal and informal consultations on methodology and assumptions, with the potential to further delay our decision for H7 at that time.'¹⁰⁴⁸ Given the late stage at which the disclosure dispute arose, the CAA was not wrong to judge that the delay and risk associated with developing its own model to be unacceptably high.

¹⁰⁴⁴ [CAA Response](#), paragraph 231.

¹⁰⁴⁵ Transcript of Ground C Hearing, page 25, line 9 to page 26, line 8.

¹⁰⁴⁶ Airlines Response to PD, paragraph 4.3.2.

¹⁰⁴⁷ Provided the CAA adopted an alternative fair process (as we find it did), the CAA would be entitled to pay regard to the operable version of the HAL Model even absent disclosure of it.

¹⁰⁴⁸ Transcript of Ground C Hearing, page 35, lines 12–21.

9.60 In making that assessment, we are mindful of the Court of Appeal's conclusion in *Eisai* that the risk of adverse practical consequences for a consultation process is a 'serious' consideration to which weight should be attached but that, where fairness otherwise requires steps like disclosure of a model, we (and the CAA) should be 'very slow to allow administrative considerations of this kind to stand in the way.' We therefore take into account the following points.

- (a) First, there may have been similar difficulties relating to disclosure of any model developed by the CAA if it contained route-level data similar to that in the HAL Model.
- (b) Second, the incremental benefits of this approach are likely to be small given that the CAA had the opportunity to review and change the inputs and assumptions of the HAL Model. Where it did so, this may be capable of providing for a fair consultation process. It does not necessarily follow that the CAA was wrong in not developing its own model, and disclosing an operable version of that to consultees, in light of the practical difficulties that course would likely have encountered.
- (c) On those footings, we do not consider that the CAA erred in law on the basis it decided that this this was not an appropriate avenue to pursue.

Should the CAA have risked litigation with HAL and disclosed the HAL Model to internal airline staff itself?

9.61 As noted at paragraph 9.10 above, during the Q6 control period relevant parts of HAL's then current forecasting model had been disclosed for the purposes of consultation on its modelling suite. The Airlines argued that this disclosure was appropriate and that the same course of action should have applied during the H7 control period.

9.62 HAL objected to the disclosure of the HAL Model to airlines on two bases: it claimed disclosure would infringe certain of its intellectual property rights, it also claimed that the model contained competitively sensitive information and that disclosure to internal Airline staff would therefore be inappropriate.¹⁰⁴⁹

9.63 The CAA canvassed with HAL and airlines the possibility of establishing a confidentiality ring (ie the possibility of disclosing an operable version of the HAL Model to a limited group of individuals who had given signed confidentiality undertakings preventing onward disclosure to individuals outside of the 'ring'). Whilst the Airlines did not accept that the HAL Model contained confidential information, they were willing to agree to the establishment of a confidentiality ring provided that it included internal Airline staff (whose membership they considered

¹⁰⁴⁹ French 1, paragraph 4.12.

necessary to enable proper scrutiny of the HAL Model).¹⁰⁵⁰ For its part, HAL was only prepared to agree to the disclosure of an operable version of the model into an external adviser only confidentiality ring because it considered that the relevant material was competitively sensitive and therefore ought not be seen by individuals working for the Airlines. Furthermore, HAL wrote to the CAA threatening to bring injunction proceedings should the CAA insist on disclosure to internal Airline staff.¹⁰⁵¹

9.64 Regarding HAL's argument that the HAL Model contained competitively sensitive information, HAL explained that the HAL Model used in H7 was significantly more complex than its Q6 model and – unlike the Q6 model which had contained information aggregated at a multinational regional level – in H7, the HAL Model contained sensitive route-level information on seats and load factors from which sensitive individualised data might be reverse-engineered, as well as various airlines' future bookings data.¹⁰⁵² We are persuaded that HAL's confidentiality concerns were genuinely held, its case appeared arguable, and that its threat to bring injunctive proceedings was therefore credible. We do not reach any view on whether the CAA or HAL would have ultimately prevailed if litigation had ensued, but our view is that there was a real possibility that the Court would have ruled that disclosure should not be made to internal Airline staff, even within the confines of a confidentiality ring. That being the case, we consider it was not wrong for the CAA to have decided against insisting on the disclosure of an operable version of the HAL Model to internal Airline staff (via a confidentiality ring or otherwise), where it took alternative steps that provided for a fair consultation process on the passenger forecast. The CAA may not have been successful in such litigation and, whether it was successful or not, this course would have entailed an unacceptable risk of delay. For completeness, we note that we need not opine upon HAL's claims of intellectual property infringement which were not elaborated before us in any detail.

9.65 We note that the CAA did not explore further the option of disclosing the HAL Model into an external adviser only confidentiality ring. As was made clear to the CAA at the time (and to us during the appeal hearings), this approach was entirely unacceptable to the Airlines.¹⁰⁵³ If the alternative consultation process that the CAA in fact established was procedurally fair, then there would be no need to disclose the HAL Model into a confidentiality ring or at all, and so (subject to that caveat) the CAA cannot be criticised as wrong for not having providing a form of disclosure which was rejected by the Airlines at the time.

¹⁰⁵⁰ See further paragraph 9.11(e) above.

¹⁰⁵¹ CAA, Exhibit GF1 to the first witness statement of Graham French, 31 May 2023, pages 326 and 327, Letter from HAL's solicitors to CAA, dated 18 January 2022, stating that HAL 'is prepared to take whatever action it deems necessary to protect its rights, including the seeking of injunctive relief (including on an interim basis) to prevent the unauthorised disclosure of its Passenger Forecasting Tool.'

¹⁰⁵² Transcript of Ground C Hearing, page 25, line 11 to page 26, line 4.

¹⁰⁵³ Transcript of Ground C Hearing, page 27, lines 16–18 and page 34, line 22 to page 35, line 3.

Conclusion on the alternatives open to the CAA

9.66 In our view, the dispute regarding disclosure of the HAL Model placed the CAA in an unenviable position. We do not consider that the CAA was wrong in law because it failed to adopt one of the alternative courses advanced by the Airlines. The key issue is the fairness or otherwise of the process the CAA did follow.

The fairness of the procedure the CAA adopted

9.67 To ensure that a fair and lawful process was followed, the CAA had to conduct a consultation that, considered end to end, included sufficient information about and reasons for its passenger forecast proposals to allow those consulted to give the proposals intelligent consideration and make an intelligent response. In this context, we note that:

- (a) For both Initial Proposals and Final Proposals the CAA reviewed and amended inputs to the assumptions made in the HAL model, and commissioned external reviews by Skylark of these amendments and published their reports alongside these documents.
- (b) For Final Proposals the CAA did not rely on the use of the HAL Model to generate passenger numbers for 2022 and for its Final Decision for 2022 and 2023.
- (c) For Final Decision, the CAA observed that its revised 2023 forecast was at the 80% point between the Final Proposals 2023 and 2024 forecasts and extrapolated this trend in updating forecasts for 2024 to 2026.
- (d) For Final Decision the CAA made further 'off-model' adjustments to 2023 - 2026 forecasts to reflect the change in economic outlook since Final Proposals.¹⁰⁵⁴
- (e) These points, taken together, had the effect of reducing the weight the CAA placed on the HAL Model.

9.68 The question for us to answer is whether, in light of these developments, intelligent consideration and an intelligent response required that the Airlines conduct their own robustness checks on an operable version of the HAL Model or, alternatively, the CAA put to them a set of proposals for its passenger forecast that allowed them intelligent consideration and response without disclosure of such a model.¹⁰⁵⁵

¹⁰⁵⁴ [Final Proposals](#), paragraphs 1.15 and onwards. In particular, see paragraphs 1.17 and 1.18.

¹⁰⁵⁵ We note that if Airline-conducted robustness checks were not necessary for a fair procedure then the dispute between HAL and the Airlines as to how that disclosure should have been facilitated – ie whether or not an external adviser only confidentiality ring might have sufficed to enable intelligent consideration and an intelligent response (or, alternatively, whether a confidentiality ring including limited a number of internal airline staff would have been needed) – falls away.

9.69 Before we turn to the key question: was intelligent consideration and intelligent response possible in the process the CAA followed, or only possible with access to an operable version of the HAL Model so that the Airlines could conduct their own robustness checks, we first summarise what we consider to be further points of relevant context:

- (a) It is undoubtedly the case that disclosure of an operable version of the HAL Model would have increased transparency. The non-disclosure of the operable version of the HAL Model meant that the Airlines could not conduct their own detailed checks on the robustness of the HAL Model drawing on their own information and expertise. This meant that, for example, it cannot be entirely ruled out that the CAA (despite its best efforts) may have overlooked some elements of double-counting or other errors which the Airlines may have identified, if they had had disclosure.¹⁰⁵⁶ In his witness statement Mr Dawe provided an example of the difficulty that this posed for BA: 'behind each of the Covid-19 scenarios entertained by the HAL model, there would have been judgements and assumptions relating to vaccination rates, market performance, lockdown regulations and categories of travellers. I could neither see nor deduce the judgements and assumptions that had been made, nor how they had been translated into the mathematics of the model'.¹⁰⁵⁷
- (b) From the outset the Airlines had sought disclosure of the HAL Model. The Airlines had a genuine desire to review and critique the robustness of the HAL Model to input into the CAA's passenger forecasting exercise. The request was not made simply to enable the Airlines to launch a contrived procedural challenge.
- (c) In previous price controls parts of an operable version of the (then applicable) HAL Model had been disclosed to the Airlines to facilitate consultation. However, we bear in mind that these earlier models had not contained the same sensitive information hence this earlier practice is not entirely comparable: what appears to us the CAA was entitled to regard as a serious (ie arguable) confidentiality issue arose here such that a form of disclosure satisfactory to both the Airlines and HAL could not be achieved by consent.
- (d) The CAA's preference (and original starting point) was that an operable version of the HAL Model should be disclosed. At the Initial Proposals stage, the CAA considered that disclosure was legally necessary to facilitate a fair

¹⁰⁵⁶ For completeness, we note that HAL itself has been unable to comment upon the CAA Amended HAL Model.

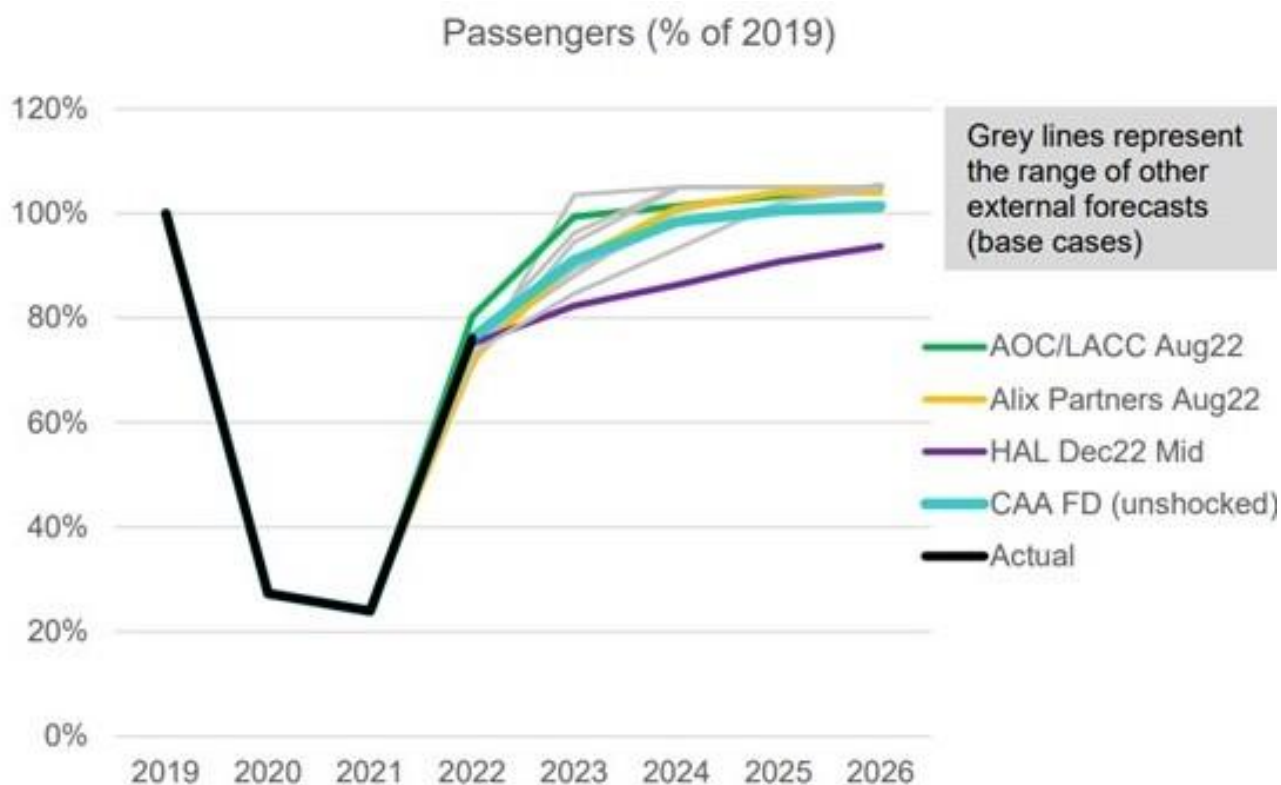
¹⁰⁵⁷ Dawe 1, paragraph 82. See also [VAA NoA](#), paragraphs 4.66 and 4.67 and [BA NoA](#), paragraphs 3.8.7 and 3.8.8, these provide a further example: 'an adjustment to the assumed level of business travel will inevitably have knock-on effects for other aspects of the model. If those effects are not identified and addressed, such an adjustment will have unintended consequences elsewhere, with the result that the model no longer functions as the modeller intended and is not useful.' Delta raised similar concerns at [Delta NoA](#), paragraph 4.54.

consultation given the reliance that the CAA envisaged placing on the HAL Model at that time. For example, on 14 January 2021, the CAA sent a letter to HAL after stating that ‘passenger forecasts are central to setting the price control. As s [sic] result, it is crucial for the robustness of the H7 process that we publish the modelling that we are using to set the price control.’¹⁰⁵⁸

- (e) As noted at paragraph 9.2 above, the passenger forecast is an important input into the H7 price control. Ultimately, it is a factor that might lead to higher (or lower) passenger charges.
- (f) The HAL Model undisputedly formed a ‘baseline’ for the CAA’s passenger forecast at Final Decision stage for the years 2024 to 2026. In that sense, notwithstanding the adjustments that have been made to it during the course of the consultation process, it remains an ‘input’ into the passenger forecast.
- (g) The HAL Model’s inputs, assumptions and outputs were heavily modified through the process of adjustments across the Initial Proposals, Final Proposals and Final Decision stages. To give a sense of the scale of these adjustments, the unadjusted HAL Model starting forecast across the H7 period was fewer than 318 million passengers. The Final Decision passenger forecast was 375.5 million passengers.
- (h) The range of reasonable estimates for a passenger forecast in the H7 period is not unbounded. This in part stems from the fact that Heathrow is expected to be operating at least close to its capacity during the final years of the H7 period. While there may be some debate over the precise limits of that capacity, these differences are far from orders of magnitude in scale. This is illustrated by Figure 1.4 of the Final Decision, which we reproduce below at Figure 9.1. The passenger forecast figure which the Airlines submitted the CAA should have arrived at (392.5 million passengers) is less than 5% higher than the CAA’s forecast (375.5 million passengers) which they submit is wrong. The level of that disparity must be set against the inherent uncertainty involved in forecasting across multiple years in the context of the impact of the COVID-19 pandemic, where absolute precision is not possible.

¹⁰⁵⁸ CAA, Exhibit GF1, to the first witness statement of Graham French, 31 May 2023, page 321, Letter from (CAA) to (HAL) in respect to publication of modelling, 14 January 2022.

Figure 9.1: CAA’s Final Decision ‘Figure 4.1 Comparison of the Final Decision (unshocked) forecast and external forecast’¹⁰⁵⁹



Source: [Final Decision](#), Figure 1.4.

- (i) Inspection of the range of external forecasts over the period 2023 to 2026 indicates that uncertainty around the speed of recovery from COVID-19 is a factor in forecasting 2023 and 2024 passenger numbers but not the later years. The CAA did not rely on the HAL model for 2023. For 2024, while the CAA used outputs from the CAA Amended HAL Model, it took the 80% point between the 2024 and 2025 forecasts, a decision that was informed by its updated ‘off-model’ forecast for 2023.
- (j) The consultation process in which the CAA engaged relating to the HAL Model – albeit that it did not involve the non-disclosure of an operable version of the HAL Model – was transparent. The CAA’s adjustments to the HAL Model’s assumptions were explained and consulted upon in the Initial and Final Proposals. Further assistance was provided through a series of 15 teleconference calls between airline staff and HAL staff in the lead up to the Initial Proposals and the publication alongside the Initial and Final Proposals of the Skylark reports commissioned by the CAA.¹⁰⁶⁰ Further, the Airlines were able to comment on the adjustments to the HAL Model starting point

¹⁰⁵⁹ [Final Decision](#), Figure 1.4, here provided to illustrate the narrowing of the forecast ranges toward the later years of the forecast period, during which Heathrow capacity constraints at Heathrow become more influential.

¹⁰⁶⁰ Berridge 1, paragraph 4.28: this notes 15 Teams calls between 4 August 2020 and 8 July 2021.

albeit, as noted at sub-paragraph 9.69(a) above, what they could not do was conduct their own checks on the robustness of the model.

- (k) The forward-looking nature of the exercise the CAA conducted (ie producing a forecast of future passenger numbers) does not permit a precisely accurate answer. We are mindful of the risk of seeking a ‘perfect’ forecast or a process that strives to produce one when the reality is that this is not achievable.

9.70 Having considered the evidence and submissions carefully, and the relevant context, it is our judgement in this Final Determination that the CAA’s consultation was not procedurally unfair and wrong in law on the basis of the non-disclosure of an operable version of the HAL Model or on account of the reliance the CAA placed on that model (to the extent it did so). We have come to this view for the following reasons.

9.71 First, in heavily modifying the HAL Model’s inputs, assumptions and outputs through the process of adjustments across the Initial Proposals, Final Proposals and Final Decision stages, and explaining those modifications, the CAA placed materially less reliance on the HAL Model in formulating its proposals for, and deciding upon, the overall passenger forecast for H7. It provided consultees with a substantial degree of transparency consistent with the requirement to allow intelligent consideration of, and response to, the approach and forecast numbers it proposed. In considering, formulating and explaining the modifications, the CAA engaged in its duty of due enquiry and had regard to principles that regulatory activities should, amongst other things, be carried out in a way which is transparent and accountable.

9.72 Second, we do not consider on the facts before us that the Airlines needed to be able to conduct robustness checks themselves in order to give intelligent consideration and provide an intelligent response during the CAA’s consultation (ie could not do so without doing those checks). Whilst the Airlines were undoubtedly important consultees, the material reduction in the CAA’s reliance on the HAL Model and the adjustments the CAA made to the model, meant – in our judgement – that the added value of such Airline-conducted robustness checks is likely to have been comparatively minor (and the process followed was not unfair on account of an inability to conduct them). This is because:

- (a) The Airlines were in a position to suggest robustness checks to be carried out by the CAA. The Airlines are sophisticated organisations with expert staff and had benefitted from a substantial degree of transparency through the CAA’s consultation process. In particular, the Airlines had access to a non-operable version of the HAL Model, and had been provided with guidance on the manner in which the HAL Model operated and information

on the amendments that the CAA had made to the HAL Model.¹⁰⁶¹ Further, the Airlines were in a position to develop their own forecasts (see paragraph 9.28 above) and could observe the relative differences between their forecasts and those of HAL and the CAA and use this to inform their own submissions. Whilst this did not provide a complete substitute for disclosure of an operable version of the HAL Model, these steps would have put them in a position to propose appropriate robustness checks that could be carried out by the CAA.

- (b) The scope of any potential error arising from the Airlines not being in a position to carry out robustness checks themselves is substantially reduced by the fact that for the years where uncertainty around speed of recovery has been greatest (ie 2022 and 2023) the CAA's passenger forecast numbers were 'off-model', and the CAA brought forward the growth forecast produced by the CAA Amended HAL Model in light of its 2023 forecasts.
- (c) The scope of any potential error arising from the Airlines not being in a position to carry out robustness checks themselves in relation to the later years (ie 2024 to 2026) is also comparatively small as by this time Heathrow is becoming increasingly capacity constrained.

9.73 Whilst not determinative, we are also mindful that:

- (a) the approach the CAA adopted avoided the risk of substantial delay which might have ensued had it insisted upon disclosure to Airline internal staff (with, for the reasons given above, only limited added value this would have entailed, such that the risk of delay was not justifiable); and
- (b) the Airlines declined to take up the opportunity of disclosure into an external adviser only confidentiality ring. Had they agreed to such disclosure, the Airlines would have benefitted from at least some additional transparency (ie they may have been able to conduct at least some of their own robustness checks). We note the Airlines' position that access by internal Airline staff with relevant expertise was needed to enable proper scrutiny of the HAL Model (see paragraph 9.11(e) above). However, in our view there would have been no inconsistency in the Airlines agreeing to the establishment of such a confidentiality ring whilst continuing to submit to the CAA that wider disclosure remained necessary and appropriate if they continued to believe that this was the case. Whilst we have found that disclosure of an operable version of the HAL Model was not necessary for the CAA's procedure to be fair, the fact that the procedure the CAA ultimately adopted was not more transparent was therefore partly a result of the Airlines' own conduct.

¹⁰⁶¹ See paragraph 9.691.1(j) above.

9.74 For the same reasons that we do not consider the CAA's procedure was unfair, we also consider that there was: (i) no breach by the CAA of its duty to have regard to the principles of best regulatory practice; and (ii) no failure to comply with the duty to undertake due enquiry. Finally, we note that in any event, for the same reasons as set out at paragraphs 9.70 to 9.72 above (ie the material reduction in the CAA's reliance on the HAL Model and the adjustments the CAA made to the model), we are also of the view that any deficiency in the procedure the CAA adopted, even if it were otherwise considered an error in law, would not translate into an error of substance. Any procedural imperfection resulting from the non-disclosure of an operable version of the HAL Model is not so serious that we 'cannot be assured that the Decision was not wrong'.¹⁰⁶²

Procedural fairness of the four-steps consultation

9.75 We turn now to consider the transparency of the four-steps consultation. In particular, whether the Final Decision in respect of the passenger forecast was wrong because the CAA acted procedurally unfairly in respect of the four-steps. The Airlines' submissions focused mainly on the transparency of Step 1 (updating for actual passenger numbers and forward bookings) and Step 2 (updating for economic forecasts), though we note that the Airlines also submitted that the CAA had breached its duty to have regard (inter alia) to the principle that regulatory activities should be carried out in a way which is transparent.

Step 1 – transparency (booking data as an upper bound in the Final Decision)

9.76 In Step 1 the CAA used actual passenger data and forward bookings data to amend its 2023 forecast from the Final Proposals. In its Final Decision the CAA used forward bookings data (which in December 2022 were 94% of 2019 levels) as an **upper** bound for its 2023 forecast. At the Final Proposals stage the CAA had adopted a similar approach to forecasting 2022 passenger numbers, but had used forward bookings data (which at the time of forecasting were 62% of 2019 levels) as a **lower** bound for its forecast.

9.77 The CAA explained in its Final Proposals in relation to its proposed choice of a lower bound and upper bound figures that:

IATA and some airlines provided us with bookings data for the early part of the year [2022] and similar data from 2019 as a comparison. Despite the likelihood that covid restrictions in force in the early part of the year would provide a disincentive for consumers to book travel in 2022, bookings for the year at the time of forecasting were 62% of the levels seen at a similar point in

¹⁰⁶² See Chapter 3, Legal Framework, paragraph 3.28(c).

\2019. We considered that this was evidence of a level of pent-up demand and concluded that 62% of 2019 levels was a likely lower bound for the forecast for the whole of 2022.¹⁰⁶³

[...] Taking into account the known and expected passenger levels for January to March 2022, this was equivalent to total passenger [sic] for the year of 74% of 2019 levels. We concluded that this (ie 74%) was therefore a likely upper bound for Heathrow passengers in 2022.¹⁰⁶⁴

- 9.78 In updating the 2022 and 2023 passenger forecasts for the Final Decision the CAA said that it would take account of the same information as that used on Final Proposal stage in updating the 2022 passenger forecast. Specifically, the CAA said that its ‘first step was to take account of actual passenger data for 2022 and forward bookings to amend the forecast from the Final Proposals’.¹⁰⁶⁵
- 9.79 The CAA noted that it now knew ‘that 61.6 million passengers used Heathrow airport in 2022 and that, in November and December 2022, passenger numbers were at 89 per cent of the level observed in the same months in 2019’ and that ‘[f]orward bookings for 2023 (as reported in December 2022) are at 94 per cent of the equivalent period in 2019’.¹⁰⁶⁶
- 9.80 The Airlines contended that this change in approach in the use of forward bookings data between Final Proposals and Final Decision was procedurally unfair: ‘If they had been consulted, the Airlines would have provided input on why using an upper bound based on historical data is erroneous...’¹⁰⁶⁷
- 9.81 We have considered the Airlines’ submissions. Our judgement is that the CAA’s consultation was sufficiently transparent to enable the Airlines to respond intelligently. The Airlines were aware during the consultation that the CAA planned to use actual passenger numbers and forward bookings data, where available, to adjust its forecast. The Airlines could comment on how those inputs should be used by the CAA. At the time the CAA was updating its forecasts for the Final Decision the level of forward bookings had increased since the Final Proposals (from 62% to 94% of 2019 passenger numbers) and, importantly, to a level that exceeded that which actual passenger numbers had reached. We do not, therefore, consider that the use of forward booking data as an upper bound, rather than a lower one, represented such a fundamental shift in approach that would lead us to conclude that there was a procedural error that means that the Final Decision the CAA’s consultation could be said to be unfair. In any event, any

¹⁰⁶³ [Final Proposals](#), paragraph 1.66.

¹⁰⁶⁴ [Final Proposals](#), paragraph 1.67.

¹⁰⁶⁵ [Final Decision](#), paragraph 1.53.

¹⁰⁶⁶ [Final Decision](#), paragraphs 1.54 and 1.55.

¹⁰⁶⁷ Airlines’ Closing Statement, paragraph 39. They also submitted in their response to the Provisional Determination that that the CAA, ‘... by the “four steps” adjusted its outputs in an opaque way that was not capable of interrogation.’ Airlines’ Response to PD, paragraph 4.11.

deficiency in the consultation was not ‘so serious that the CMA cannot be assured that the decision was not wrong.’¹⁰⁶⁸

Step 2 – transparency (adjustments for economic forecasts)

- 9.82 In Step 2 the CAA considered what impact changes in expected UK GDP growth since the Final Proposals should have on the Final Decision passenger forecast. At the Final Proposals stage the CAA relied upon an Oxford Economics forecast of UK GDP Growth dated March 2022. In the Final Decision the CAA relied upon an updated version of the Oxford Economics forecast dated December 2022. Given the worsened economic outlook, the CAA decided to apply a downward adjustment to the passenger forecasts for 2023-2026 of around 1%.¹⁰⁶⁹
- 9.83 The Airlines submitted that it was not at all clear why a 1% reduction had been forecast for Heathrow airport and that the CAA’s lack of transparency in relation to the Step 2 adjustment amounted to a further procedural error for the same reasons previously elaborated in relation to reliance placed on the HAL model.¹⁰⁷⁰
- 9.84 The CAA submitted that the adjustment was transparently explained and reasonable. Passenger demand had previously fallen during recessions, so it was appropriate to take this into account.¹⁰⁷¹
- 9.85 Our view is that it was sufficiently clear to consultees during the Final Proposals stage that up to date wider economic forecasts would be an input into the CAA’s passenger forecast in the Final Decision. Paragraph 1.58 of the Final Decision (which set out the CAA’s ‘synthesised approach’) explained that the CAA had ‘considered the most recent OBR and Oxford Economics forecasts and taken note of the change to economic drivers and outlook compared to six months ago.’ It was evident that, in the Final Proposals, the CAA’s position was based on the latest data then available. Paragraphs 1.73 and 1.74 of the Final Proposals also reference the wider economic situation and also Heathrow airport’s historic stronger resilience to economic headwinds than other UK airports. In the light of this, we consider it likely that the Airlines could have expected the CAA to take account of the latest data on the economic outlook in its Final Decision (or at least had the opportunity in response to the Final Proposals to comment on whether the economic forecasts then relied upon were the appropriate ones to inform the Final Decision). On that basis, our judgement is that the CAA was not wrong in law in this regard (ie as a matter of procedural fairness). We consider the Airlines’

¹⁰⁶⁸ See paragraph 3.43 (Legal Framework) which discusses when a procedural deficiency renders a decision wrong in law.

¹⁰⁶⁹ [Final Decision](#), paragraphs 1.58–1.60.

¹⁰⁷⁰ [VAA NoA](#), paragraph 4.115 (cross-referring to [VAA NoA](#), paragraphs 4.53–4.56), [Delta NoA](#), paragraph 4.93, [BA NoA](#), paragraph 3.11.28 (cross-referring to [BA NoA](#), paragraphs 3.8.1–3.8.11).

¹⁰⁷¹ [CAA Response](#), paragraph 230.1.

submissions that the CAA erred in substance separately at paragraphs 9.231 to 9.248 below.

- 9.86 We additionally note that in paragraphs 1.59 and 1.60 of the Final Decision the CAA explained its use of updated wider economic forecasts, as adjusted to take account of Heathrow airport's greater resilience. In the light of this we do not consider that the downward adjustment of around 1% was inadequately explained.

Step 3 and Step 4 – transparency

- 9.87 The transparency of the CAA's Step 3 and Step 4 adjustments was not a focus of the Airlines' submissions. We have reviewed the relevant portions of the Final Proposals and Final Decisions in relation to these steps and do not consider that the Airlines have established that the CAA erred. In particular, in relation to Step 3 (Validating with external forecasts), we note the Airlines' submission that it they could not comment on the CAA's statement that the HAL Model should be treated differently to external forecasts because it was (unlike the external forecasts) risk-weighted.¹⁰⁷² Our view here is that there was no absence in transparency on the part of the CAA. It was clear to the Airlines that the CAA's forecast was risk-weighted. The Airlines could access the external forecasts and comment on whether or not, in their view, they were risk-weighted.

Conclusions on the procedural fairness of the four-steps consultation

- 9.88 Our determination, based on the above, is that the CAA did not act procedurally unfairly and was not wrong in law in relation to its consultation on the four steps. Nor in our determination was its decision wrong because it made an error in the exercise of discretion by failing properly to explain its four-step methodology.

Overall conclusions on the HAL Model Procedural Errors

- 9.89 In the light of our detailed review and assessment of the Parties' submissions and supporting evidence, and as set out above, we find that the CAA did not err in law or in the exercise of a discretion, as a result of the procedure it adopted when setting the passenger forecast, including by making use of the HAL Model without transparent disclosure (that is, without disclosure of an operable version) having been made to the Airlines.
- 9.90 In our judgement, the CAA's reliance on the HAL Model when formulating its passenger forecast was not wrong in law because the CAA's consultation was procedurally unfair in that the CAA:

¹⁰⁷² [BA NoA](#), paragraph 3.11.31(c), [Delta NoA](#), paragraph 4.97(c), [VAA NoA](#), paragraph 4.118(b).

- (a) relied upon the HAL Model but did not adopt a procedure which would have permitted the Airlines to access an executable or operable version of that model;
- (b) did not allow them meaningfully to scrutinise or interrogate or comment on that model; or
- (c) did not have input from the Airlines that would have enabled it properly to assess whether to rely on the model.

9.91 Our further judgement is that the CAA's reliance on the HAL Model when formulating its passenger forecast was not wrong in law because, in light of the points in the preceding paragraph:

- (a) the CAA breached its duty to have regard to the principles of best regulatory practice; or
- (b) the CAA failed to comply with the duty to undertake due enquiry.

9.92 We also find that the CAA's reliance on the HAL Model when formulating its passenger forecast was not an error in the exercise of discretion on the basis that the CAA failed to provide proper reasons by failing to explain clearly its four step methodology.

9.93 Accordingly, we determine that the CAA's Final Decision was not wrong either because it was wrong in law or because the CAA made an error in the exercise of a discretion as contended by the Airlines in their appeals based on the HAL Model Procedural Errors. We do not, therefore, allow the appeals on that basis and, in the relevant respects, confirm the Final Decision.

Parties' requests for further guidance

9.94 In their responses to our Provisional Determination each of the Parties sought from us clarifications or guidance on the relevance of this Final Determination of Joined Ground C for the CAA's future price control decisions. The CAA submitted that we should make clear that this Final Determination does not create a requirement that the CAA must develop its own model in order to run a robust procedure in relation to future price control decisions.¹⁰⁷³ HAL invited us to 'provide further clarification on best practice for the sharing of confidential or competitively sensitive information in future' and submitted that we should make clear that 'the CAA's starting position in relation to disclosure of a passenger forecast model that contains prima facie competitively sensitive information should be to establish an [external] adviser only confidentiality ring'.¹⁰⁷⁴ The Airlines requested that we

¹⁰⁷³ CAA's Response to PD, Appendix 1, page 8, first row.

¹⁰⁷⁴ HAL's Response to PD, paragraphs 87 and 89.

clarify that our conclusion that the CAA was not required to disclose the HAL Model does not set a precedent for future price controls given that during the H7 control period there were ‘specific issues that may not arise in future price controls’.¹⁰⁷⁵

9.95 This Final Determination does not lay down any particular path for the CAA to adopt in its future price controls in terms of its approach to developing a passenger forecast. The law on the requirements of a fair consultation process is – and remains following this Final Determination – as stated by the Court of Appeal in *Coughlan* and *Eisai*. See in particular the passages of those judgments which we have cited at paragraphs 9.43 and 9.44 above. These judgments make clear that there is no ‘one size fits all’ mechanistic approach to be applied to procedural fairness. Whichever approach the CAA adopts in future consultations, the touchstone for lawfulness is whether the approach adopted enables consultees to make an intelligent response. Whether fairness requires the disclosure of an operable version of a particular economic model (or parts thereof) will depend on the circumstances of the case. Similarly, if it is decided that some form of disclosure is necessary for a fair consultation, the question whether disclosure into an external adviser only confidentiality ring is sufficient to enable an intelligent response to be made (or not) will be a matter which will depend on the circumstances. We have simply observed (at paragraph 9.73(b) above) that where an external adviser only confidentiality ring is proposed, a party whose external advisers enter into such a confidentiality ring may benefit from some additional transparency without thereby forfeiting the right to argue that the confidentiality ring should be expanded to include a company’s internal staff or, indeed, to argue that the confidentiality ring is not necessary at all.

9.96 Finally, we note the Airlines’ submission in response to our Provisional Determination that we had failed to address the Airlines’ submissions that, if confidentiality concerns were justified, they could be resolved ‘by limiting the individuals to whom an executable version of the HAL model is provided to those within a confidentiality ring’.¹⁰⁷⁶ In connection with this, the Airlines also submitted that ‘[a]s a matter of principle, the threat of litigation by another party could not justify the displacement of the principles of fairness.’¹⁰⁷⁷

(a) First, we observe that we have not found that the threat of litigation from HAL somehow justified the non-disclosure of an operable version of the HAL Model to the Airlines. Rather, for the reasons set out at paragraphs 9.70 to 9.72 above, we found that disclosure was not necessary to enable the Airlines to make an intelligent response. This meant, as we observed in

¹⁰⁷⁵ Airlines’ Response to PD, paragraph 4.12.

¹⁰⁷⁶ Airlines’ Response to PD, paragraphs 4.5 and 4.6.

¹⁰⁷⁷ Airlines’ Response to PD, paragraph 4.5.

footnote 1054, that the question of whether a confidentiality ring needed to be established to ensure fairness fell away.

- (b) Second, we note that had we concluded that intelligent response did require disclosure of an operable version of the HAL Model, then the CAA would have needed to have explored further whether a form of confidentiality ring should be established. Had the CAA concluded that intelligent response required disclosure to internal Airline staff within a confidentiality ring (ie that an external adviser only confidentiality ring was insufficient), and if HAL had still not consented to such disclosure, then the CAA would have needed to have exercised its powers to disclose an operable version of the HAL Model into a confidentiality ring including internal Airline staff. It was not open to the CAA simply to disregard the HAL Model, which was clearly relevant evidence. This being the case, if HAL had continued to resist disclosure, then litigation may have then become inevitable in order to resolve the matter such that a fair consultation could be conducted. However, this counterfactual scenario is not a matter we need to decide upon as we have concluded that disclosure was not necessary to ensure a fair consultation.

HAL Model Substantive Errors

Summary of our approach and overall conclusion on the alleged HAL Model Substantive Errors

9.97 In this section, we answer the following question:

Was the Final Decision wrong because it was based on errors of fact, was wrong in law, or an error was made in the exercise of a discretion, in relying on the HAL Model when setting the passenger forecast for the H7 control period?

9.98 Taking account of the Airlines' submissions on the alleged substantive errors, the subsidiary questions we have considered in our assessment, in order to determine the above question, are:

- (a) Did the CAA make an error of fact on which the Final Decision was based when formulating its passenger forecast by using the HAL Model as a starting point for its forecasts, thereby relying on flawed evidence and assumptions?
- (b) Was the CAA wrong in law (or, in respect of (iv), an error in the exercise of a discretion) in using the HAL Model as a starting point for its passenger forecast because in doing so the CAA:

- (i) breached its duty to carry out its functions in a manner which it considers will further the interests of users of air transport services regarding the range, availability, continuity, cost and quality of airport operation services;
 - (ii) breached its duty to have regard to the need to promote economy and efficiency by HAL in its provision of airport operation services at Heathrow Airport;
 - (iii) breached its duty to have regard to the principles that regulatory activities should be carried out in a way which is transparent, accountable, proportionate and consistent, and targeted only at cases in which action is needed; or
 - (iv) relied on flawed evidence and assumptions, made methodological errors or failed to take proper account of relevant considerations?
- (c) Did the CAA make an error of fact on which the Final Decision was based in using the HAL Model to the extent it did when formulating its passenger forecast, because in doing so the CAA relied on flawed evidence and assumptions (by unjustifiably relying on the HAL Model which was wrong and not fit for purpose)?
- (d) Was the CAA wrong in law in using the HAL Model to the extent it did in formulating its passenger forecast because in doing so the CAA:
- (i) breached its duty to carry out its functions in a manner which it considers will further the interests of users of air transport services regarding the range, availability, continuity, cost and quality of airport operation services (by wrongly relying on the HAL model, and as a result setting the H7 passenger forecast too low);
 - (ii) breached its duty to have regard to the need to promote economy and efficiency by HAL in its provision of airport operation services at Heathrow Airport (by setting the H7 passenger forecast too low and, as a result, failing to incentivise HAL to ensure efficiency);
 - (iii) breached its duty to have regard to the principles that regulatory activities should be carried out in a way which is transparent, accountable, proportionate and consistent, and targeted only at cases in which action is needed (by relying on a model which has not been subjected to scrutiny by stakeholders); or
 - (iv) relied on flawed evidence and assumptions (wrongly relied on the HAL model despite evidence that it is not fit for purpose), made methodological errors (relied on erroneous inputs from HAL's model to

arrive at its passenger forecast) or failed to take proper account of relevant considerations (the CAA failed to deal appropriately with the shortcomings in the HAL Model)?

- (e) Did the CAA make an error of fact on which the Final Decision was based when formulating its passenger forecast because the use of the HAL Model produced a flawed output?¹⁰⁷⁸

9.99 Following an in-depth review and assessment of the Parties' submissions and supporting evidence, and on the basis of the considerations set out in further detail below, we find that the CAA did not make errors of fact on which the Final Decision was based nor err in law in relying on the HAL Model when setting the passenger forecast for the H7 control period.

9.100 The HAL Model was plainly relevant to the setting of the passenger forecast and accordingly the CAA was not wrong to use it as an input into the overall passenger forecast for H7. However, the CAA made material modifications to that model (its inputs, assumptions and outputs). At each stage of the consultation process,¹⁰⁷⁹ the CAA commissioned an independent external review of its forecast approach by Skylark. It also 'sense-checked' the outputs against external forecasts, adjusting them accordingly. It took these steps so as to apply an appropriate methodology to set a passenger forecast that was as accurate as reasonably practical and in order that passenger charges would be set in a way that furthered relevant end-users' interests. It cannot in our view be said to have been wrong on account of a failure to act in a manner that it considered would further those interests in line with its primary statutory duty nor because it could be said to have acted in a way that failed to have regard to its secondary duties.

The Parties' submissions

The Airlines' submissions

9.101 Whilst the Airlines' precise formulation of the alleged errors differs, their submissions cover common ground. They contend that the CAA was wrong in law¹⁰⁸⁰ and/or in fact¹⁰⁸¹ because:

- (a) the CAA placed reliance on the HAL Model when using the HAL Model was not reasonable or appropriate and it was an evidentially erroneous input; and
- (b) the HAL Model's output could not be corrected via ad hoc adjustments.

¹⁰⁷⁸ [BA NoA](#), paragraph 3.3.1 and section 3.9, [Delta NoA](#), paragraphs 4.57-4.68 and Annex 1, [VAA NoA](#), paragraphs 4.72-4.86 and Annex 4.

¹⁰⁷⁹ These include Initial Proposals, Final Proposals and Final Decision.

¹⁰⁸⁰ VAA and Delta contend this.

¹⁰⁸¹ VAA, Delta and BA contend this.

9.102 In more detail, the Airlines submitted that:

- (a) The CAA's reliance on the HAL Model was not reasonable or appropriate¹⁰⁸² because the HAL Model was an evidentially erroneous input.¹⁰⁸³ This was because:
 - (i) HAL had an incentive to underestimate passenger forecasts.¹⁰⁸⁴
 - (ii) HAL itself did not use the model for forecasting,¹⁰⁸⁵ and it can be inferred that HAL's data no longer supported the forecast it was urging the CAA to adopt.¹⁰⁸⁶
 - (iii) HAL's lack of transparency undermines confidence in the HAL model to such an extent that no reliance can be placed upon it.¹⁰⁸⁷
 - (iv) HAL's model persistently underestimated passenger numbers.¹⁰⁸⁸
 - (v) The CAA had better alternative information which it could have used (namely airline booking data and external forecasts).¹⁰⁸⁹
- (b) The flaws in the HAL Model could not be corrected by making ad hoc adjustments to the model.¹⁰⁹⁰ In relation to this, the Airlines' supporting arguments were:
 - (i) there could be no confidence that these adjustments had (a) resolved the identified errors and/or (b) not undermined the internal logic of the model, such that its output is arbitrary and not as intended,¹⁰⁹¹ and
 - (ii) the ad hoc adjustments failed as actual passenger outturn shows that the CAA underestimated 2022 passenger numbers in both its Initial Proposals and Final Proposals.¹⁰⁹²

The CAA's Response

9.103 The CAA submitted that the HAL Model was the correct starting point for it to use, given the absence of suitable alternatives. Further, it was fully aware of HAL's commercial interests and made a range of adjustments to ensure its forecast was reasonable. It also considered a range of factors to arrive at a forecast that

¹⁰⁸² [VAA NoA](#), paragraph 4.83, [Delta NoA](#), paragraph 4.67.

¹⁰⁸³ [VAA NoA](#), paragraph 4.86, [BA NoA](#), paragraph 3.9.6.

¹⁰⁸⁴ [VAA NoA](#), paragraph 4.76 and 4.77, [Delta NoA](#), paragraphs 4.59 and 4.60.

¹⁰⁸⁵ [VAA NoA](#), paragraph 4.81, [BA NoA](#), paragraph 3.9.3.

¹⁰⁸⁶ [VAA NoA](#), paragraph 4.82, [BA NoA](#), paragraph 3.9.4.

¹⁰⁸⁷ [Delta NoA](#), paragraph 4.65.

¹⁰⁸⁸ [VAA NoA](#), paragraphs 4.78-4.80, [BA NoA](#), paragraph 3.9.2, [Delta NoA](#), paragraphs 4.61-4.64.

¹⁰⁸⁹ [VAA NoA](#), paragraph 4.83(c), [Delta NoA](#), paragraph 4.67(c).

¹⁰⁹⁰ [VAA NoA](#), paragraphs 4.84 and 4.85, [BA NoA](#), paragraph 3.9.5, [Delta NoA](#), paragraph 4.68.

¹⁰⁹¹ [VAA NoA](#), paragraph 4.84, [BA NoA](#), paragraph 3.9.5, [Delta NoA](#), paragraph 4.68.

¹⁰⁹² [VAA NoA](#), paragraph 4.85, [Delta NoA](#), paragraph 4.68.

balanced the perspectives of all consultees.¹⁰⁹³ The CAA denied that the alleged consistent under-forecasting of 2022 and pessimistic forecasting for 2023 demonstrated that the HAL Model was not fit for purpose. Its adjustments meant that its forecast was comparable with that of independent aviation forecasts and was adjusted and updated to ensure its accuracy.¹⁰⁹⁴ The CAA noted that the Airlines' preferred forecasts had materially overstated passenger numbers at the Final Proposals stage and were less accurate than the CAA's Final Proposals forecast.^{1095,1096}

HAL's intervention

9.104 HAL submitted that Airlines' argument was bound to fail because the CAA did not rely exclusively or uncritically on the HAL Model methodology, but instead had regard to a wide range of other information and applied its own judgement to come to its passenger forecast. HAL further emphasised that the CAA's approach differed materially from HAL's own forecasting methodology and created a stretching goal for HAL over the course of H7.¹⁰⁹⁷ HAL also rejected criticisms of the robustness of the HAL Model.¹⁰⁹⁸

Our assessment of the alleged HAL Model Substantive Errors

9.105 We assess the Airlines' arguments in turn. First, we assess the Airlines' arguments that the CAA was wrong to rely on the HAL Model to the extent that it did because that reliance was unreasonable or inappropriate or the HAL Model was an evidentially erroneous input. Second, we assess the Airlines' submissions that there cannot be confidence that the CAA's adjustments addressed the flaws in the model.

The alleged flaws in the HAL Model

HAL's incentive to underestimate passenger forecasts

9.106 The Airlines argued that HAL had an incentive to underestimate passenger forecasts because doing so would feed into the price cap calculation and lead to HAL obtaining greater overall revenues.¹⁰⁹⁹ HAL strongly refuted this allegation. HAL confirmed that the outputs submitted to the CAA for setting the price control were the same range of outputs used for internal business purposes. It also stated that it did not create a special version of the model specifically for price control

¹⁰⁹³ [CAA Response](#), paragraph 225.

¹⁰⁹⁴ [CAA Response](#), paragraph 226.

¹⁰⁹⁵ [CAA Response](#), paragraph 227.

¹⁰⁹⁶ We note that in the CAA Response to PD, the CAA made a small number of comments concerning minor and typographical errors. Where relevant, we have taken account of these in our assessment below.

¹⁰⁹⁷ [HAL NoI](#), paragraphs 15-26.

¹⁰⁹⁸ [HAL NoI](#), paragraphs 27-43.

¹⁰⁹⁹ [VAA NoA](#), paragraphs 4.76 and 4.77, [Delta NoA](#), paragraphs 4.59 and 4.60.

purposes, nor use different outputs for the purposes of its own planning.¹¹⁰⁰ This was accepted by the Airlines, although they noted that for operational purposes, HAL would plan for the ‘peakiest’ day for the year but would use mid-forecasts for H7.¹¹⁰¹ For its part, the CAA stated that it was ‘fully aware’ of HAL’s commercial interests.¹¹⁰²

- 9.107 We consider that HAL’s incentives were likely mixed. Other things being equal, we would expect HAL to prefer higher revenue allowances through the price cap. On the other hand, HAL needed accurate forecasts for its internal business planning which provided an incentive to ensure the forecasts were accurate. We do not consider it necessary, however, to form a view on whether there might be some residual bias towards underestimating the forecast. Even if HAL had – on balance – an incentive to systematically underestimate passenger volumes in its internal passenger forecasts, this would not lead us to conclude that the CAA’s passenger forecast was wrong.
- 9.108 In our view, the relevant forecasts are those made by the CAA, which were upward revisions of HAL’s forecasts. The CAA was not wrong, as we note above, to have some regard in preparing these to the HAL Model, it being the only available model which yields Heathrow-specific forecasts¹¹⁰³ and having access to granular airline data that was not more widely available.¹¹⁰⁴ In the context of the CAA’s objective of making as accurate a forecast as reasonably practical, the HAL model was plainly relevant and important (and the CAA may well have erred had it taken no account of a relevant consideration such as this).
- 9.109 However, recognising HAL’s mixed incentives,¹¹⁰⁵ and as described in paragraphs 9.12 and 9.18 above, the CAA reviewed the HAL Model, and used its judgement to change the assumptions and inputs,¹¹⁰⁶ and commissioned an external consultant’s (Skylark) review of the changes it made.¹¹⁰⁷ It consulted on such matters as described above. The CAA also, in the Final Decision, made off-model adjustments to the outputs of the HAL Model by updating 2022 and 2023 forecasts using actual passenger numbers and forward booking data (Step 1) and latest information on macroeconomic outlook (Step 2). It appears to us that the CAA took these steps in the interests of applying an appropriate methodology to set a passenger forecast that was as accurate as reasonably practical and in order that passenger charges would be set in a way that furthered end-users’ interests in line

¹¹⁰⁰ Transcript of Ground C Hearing, page 91, lines 3-10. See also HAL, HAL response to RFI H7 C001, 7 July 2023.

¹¹⁰¹ Transcript of Ground C Hearing, page 92, lines 9-11.

¹¹⁰² [CAA Response](#), paragraph 225.2.

¹¹⁰³ [CAA Response](#), paragraph 231.

¹¹⁰⁴ Transcript of Ground C Hearing, page 25, line 9 to page 26 line 8.

¹¹⁰⁵ [CAA Response](#), paragraph 225.2.

¹¹⁰⁶ [CAA Response](#), paragraph 225.2.

¹¹⁰⁷ [CAA Response](#), paragraph 226.

with the matters to which it was required to have regard under the Act. We note, for example, that the CAA said at Final Decision stage that:

An appropriate passenger forecast helps to ensure that the airport charges HAL sets are no higher than necessary to recover its efficient costs and to provide an appropriate return, and is a fundamental step in allowing us properly to further the interests of consumers, having regard to the matters required by CAA12.¹¹⁰⁸

9.110 We do not therefore find that any incentives HAL may have had to underestimate the passenger forecasts mean that the CAA was wrong to have used the HAL Model in the way it did for forecasting H7 passenger numbers.

HAL's own use of the model for forecasting

9.111 Regarding the Airlines' contention that HAL itself did not rely on the model for forecasting and their subsequent inference that HAL's data no longer supported the forecast it was urging the CAA to adopt, in our view this is not supported by the evidence.

- (a) First, we note HAL's submission, made in its Nol containing a statement of truth, that the model is used for internal business and operational purposes.¹¹⁰⁹
- (b) Second, it is correct that in December 2022 HAL produced an updated forecast model that it did not offer to the CAA, and the CAA itself did not seek to obtain the updated model spreadsheets from HAL.¹¹¹⁰ We note the CAA's evidence that this was to avoid the lengthy extensive analysis, review and amendments to the HAL Model at a stage which was already relatively late in the H7 consultation process. We also note that, at this stage in the process, the CAA had made modifications to the HAL Model that materially lessened its reliance on that model. Our views, taking account of these points are:
 - (i) The position is consistent with HAL continuing to use its model for internal purposes, as demonstrated by its updating.
 - (ii) The position does not demonstrate that the CAA was placing reliance on a model that HAL itself had repudiated.

HAL's lack of transparency undermining confidence in the HAL Model

9.112 We have considered separately the Airlines' arguments on transparency. We have found that HAL's confidentiality concerns were genuinely held (see paragraph 9.64

¹¹⁰⁸ [Final Decision](#), paragraph 1.3.

¹¹⁰⁹ [HAL Nol](#), paragraph 30.

¹¹¹⁰ French 1, paragraph 5.75.

above) and we note that HAL was willing to agree to the disclosure of an operable version of the HAL Model into an external adviser only confidentiality ring.¹¹¹¹ Further, we note that the CAA had full access to the model, took account of an external review by Steer of the HAL Model, and reviewed and amended assumptions and inputs.¹¹¹² We do not see in those circumstances the CAA's reliance on the model (to the extent it did so) means that confidence in the HAL Model should properly be regarded as undermined such that the CAA was wrong in law to have taken that approach.

HAL Model's performance in estimating 2022 passenger numbers

- 9.113 In assessing the performance of a forecast against actual outturns, it appears to us appropriate to evaluate the forecast based on the information that was available at the time it was made. Given that any forecasting exercise will involve a margin of error, the use of a forecast may have been erroneous if we observe both:
- (a) a systematic and material divergence of the forecast from actual outturns, and
 - (b) the methodology or the facts used at the time of the forecast were likely to have caused that systematic error in ways that could have been anticipated at the time.
- 9.114 The HAL Model's mid-forecasts for 2022 in HAL's RBP, RBP update and RBP Update 2 underestimated actual 2022 passenger numbers of 61.6 million by 15.7%, 29.9% and 26.1% respectively.¹¹¹³
- 9.115 We note that the forecasts within the HAL Model constitute a range of scenarios, and the realisation of a favourable scenario does not imply that the forecasts were wrong. This is particularly relevant due to the challenges and uncertainty posed by the COVID-19 pandemic.
- 9.116 More importantly, however, as stated above in 9.108 we consider the relevant forecasts to be those made by the CAA, which are upward revisions of HAL's forecasts.
- 9.117 Whilst we consider that the HAL Model's performance in estimating 2022 passenger numbers is relevant evidence for us to consider, it does not, in our view, demonstrate that the CAA erred by placing any reliance on the HAL Model as part of its own determination of passenger forecasts. The CAA formed its own

¹¹¹¹ CAA, Exhibit GF1, to French 1, 31 May 2023, pages 335 and 336, Letter from Heathrow to CAA, 26 January 2022, proposing that the CAA use the CMA template confidentiality ring undertakings as a starting point for establishing a confidentiality ring.

¹¹¹² [CAA Response](#), paragraph 197.

¹¹¹³ CMA's calculations from passenger forecast numbers from Berridge 1, Appendix 2.

view of the HAL Model and reached its own independent judgement of the appropriate forecasts to use. This does not in our view indicate an error.

Alternative information

- 9.118 The Airlines argued that the CAA had access to alternative information that it could have used to create a passenger forecast (namely booking data and external forecasts).¹¹¹⁴
- 9.119 In this regard, at Final Decision stage ‘Step 1’ of the CAA’s ‘Four Steps’ used forward booking data to estimate the passenger numbers for 2023.
- 9.120 Furthermore, in Step 3 in the ‘Four Steps’ (detailed below) the CAA ‘sense-checked’ its forecasts with comparable external forecasts.
- 9.121 Given that the CAA did, in fact, make use of the suggested alternative information, we do not agree with the Airlines’ criticism of the CAA in this regard, We therefore do not find that the CAA was wrong in fact or law on this account.

The CAA’s Adjustments

- 9.122 We assess the Airlines’ arguments that there could be no confidence that the CAA’s adjustments had resolved the identified errors and/or not undermined the internal logic of the model, such that its output was arbitrary and not as intended. In this context, the Airlines also submitted that these adjustments were insufficient as the CAA had underestimated outturn of 2022 passenger numbers.
- 9.123 Taking account of our assessment of the CAA’s adjustments and the additional points below, we do not consider that the Airlines have substantiated this allegation such that we should make a finding that the CAA was wrong on this basis. The amendments made by the CAA followed a detailed review of the model, assumptions and inputs. In assessing the model, the CAA told us that it:¹¹¹⁵
- (a) carefully and extensively reviewed the methodology and spreadsheets to establish a good understanding of how the models work and interact;
 - (b) took account of a review by Steer (commissioned by HAL to assess the methodology), to ensure that the models had been coded correctly; and
 - (c) ran sensitivities and checked how their adjustments alter the outputs.
- 9.124 At each stage of the consultation process,¹¹¹⁶ the CAA commissioned an independent external review of its forecast approach by Skylark. In addition, the

¹¹¹⁴ [VAA NoA](#), paragraph 4.83(c), [Delta NoA](#), paragraph 4.67(c).

¹¹¹⁵ [Initial Proposals](#), Section 1, page 23, paragraph 2.23.

¹¹¹⁶ These include Initial Proposals, Final Proposals and Final Decision.

CAA 'sense-checked' the outputs against external forecasts, adjusting accordingly.¹¹¹⁷

- 9.125 Having regard to those points, we conclude that the CAA was not wrong on the basis its assessment and subsequent review of the model was insufficient to generate confidence in its adjustments to the model – both in general and specifically in relation to the alleged errors – while not undermining the internal logic of the model. It took a reasonably careful and reasoned approach to the adjustment and checking of the model of the kind it appears to us a prudent regulator, in the circumstances, was entitled to, and should acting properly, have taken.
- 9.126 In relation to the Airlines' submission that the CAA's adjustments were insufficient as the CAA, in its Initial and Final Proposals, underestimated outturn of 2022 passenger numbers, our view is that this does not demonstrate an error by the CAA in setting the passenger forecast. We take account that:
- (a) 2022 was a particularly difficult year to forecast passenger numbers given uncertainty around the speed of recovery from COVID-19 pandemic and the operational constraints facing Heathrow and the aviation sector more broadly.
 - (b) The forecasts are risk-weighted based on different scenarios, and the realisation of a different outcome does not necessarily mean that the forecasts were 'wrong'.
 - (c) Taking those points together, our judgement is that the difference between forecasts and outturns in 2022 were not indicative of a methodological or other error such that the CAA's Final Decision as to the passenger forecast was based on an error of fact, was wrong in law or was wrong owing to an error in the exercise of a discretion.

Other relevant considerations

- 9.127 In addition to our assessment of the Airlines' contentions above, we further note that, as stated at paragraph 9.59 above, the alternative of the CAA developing its own model (as suggested by the Airlines) involved a range of risks and potentially significant delay. Our view is that the incremental benefits of this approach are likely to be small given that the CAA had the opportunity to review and change the inputs and assumptions of the HAL Model (as described above).

¹¹¹⁷ This was done during the Final Proposals and the Final Decision stages.

Overall conclusions on the HAL Model Substantive Errors

- 9.128 In the light of our detailed review and assessment of the Parties' submissions and supporting evidence, and as set out above, we find that the CAA did not err in fact, law or in the exercise of a discretion, in relying on the HAL Model when setting the passenger forecast for the H7 control period.
- 9.129 In our judgement, the CAA's Final Decision was not wrong as the Airlines contended:
- (a) The CAA did not make an error of fact on which the Final Decision was based when formulating its passenger forecast by using the HAL Model as a starting point for its forecasts, thereby relying on flawed evidence and assumptions.
 - (b) The CAA was not wrong in law (or, in respect of (iv), by erring in the exercise of a discretion) because it used the HAL Model as a starting point for its passenger forecast and in doing so:
 - (i) breached its duty to carry out its functions in a manner which it considers will further the interests of users of air transport services regarding the range, availability, continuity, cost and quality of airport operation services;
 - (ii) breached its duty to have regard to the need to promote economy and efficiency by HAL in its provision of airport operation services at Heathrow Airport;
 - (iii) breached its duty to have regard to the principles that regulatory activities should be carried out in a way which is transparent, accountable, proportionate and consistent, and targeted only at cases in which action is needed; or
 - (iv) relied on flawed evidence and assumptions, made methodological errors or failed to take proper account of relevant considerations.
 - (c) The CAA did not make an error of fact on which the Final Decision was based in using the HAL Model to the extent it did when formulating its passenger forecast, because in doing so the CAA relied on flawed evidence and assumptions (by unjustifiably relying on the HAL Model which was wrong and not fit for purpose).
 - (d) The CAA was not wrong in law in using the HAL Model to the extent it did in formulating its passenger forecast because in doing so the CAA:
 - (i) breached its duty to carry out its functions in a manner which it considers will further the interests of users of air transport services

regarding the range, availability, continuity, cost and quality of airport operation services (by wrongly relying on the HAL model, and as a result setting the H7 passenger forecast too low);

- (ii) breached its duty to have regard to the need to promote economy and efficiency by HAL in its provision of airport operation services at Heathrow Airport (by setting the H7 passenger forecast too low and, as a result, failing to incentivise HAL to ensure efficiency);
 - (iii) breached its duty to have regard to the principles that regulatory activities should be carried out in a way which is transparent, accountable, proportionate and consistent, and targeted only at cases in which action is needed (by relying on a model which has not been subjected to scrutiny by stakeholders); or
 - (iv) relied on flawed evidence and assumptions (wrongly relying on the HAL model despite evidence that it is not fit for purpose), made methodological errors (relying on erroneous inputs from HAL's model to arrive at its passenger forecast) or failed to take proper account of relevant considerations (failing to deal appropriately with the shortcomings in the HAL Model).
- (e) The CAA did not make an error of fact on which the Final Decision was based when formulating its passenger forecast because the use of the HAL Model produced a flawed output.

9.130 Accordingly, we determine that the CAA's Final Decision was not wrong either because it was based on an error of fact or because it was wrong in law as contended by the Airlines in their appeals based on the HAL Model Substantive Errors. We do not therefore, allow the appeals on that basis and, in the relevant respects, confirm the Final Decision.

The 4-Step Errors

Summary of our approach and overall conclusion on the alleged 4-Step Errors

9.131 In this section, we answer the following question:

Was the Final Decision wrong because it was based on errors of fact, was wrong in law, or an error was made in the exercise of a discretion, in making the four step adjustments when setting the passenger forecast for the H7 control period?

9.132 Taking account of the Airlines' submissions on the alleged 4-Step Errors, the subsidiary questions we have considered in our assessment, in order to determine the above question, are:

- (a) In Step 1, did the CAA ignore the impact of Local Rule A and threatened capacity restrictions: (i) in coming to a conclusion for passenger numbers in 2022; (ii) in constructing the appropriate baseline of demand for 2023 onward, and so made errors of fact on which the Final Decision was based or was wrong in law?
- (b) In Step 1, did the CAA make errors of fact on which the Final Decision was based, was it wrong in law or did it make an error in the exercise of a discretion in that it: (i) found that 2023 traffic levels would be 92% of 2019 levels; (ii) treated forward booking data for 2023 as an upper bound?
- (c) In Step 2, did the CAA make errors of fact on which the Final Decision was based or was it wrong in law because it downgraded its passenger forecast for 2023 in response to macroeconomic forecasts?
- (d) In Step 3, did the CAA make errors of fact on which the Final Decision was based, was it wrong in law or did it make an error in the exercise of a discretion in that it did not uplift its forecasts in light of its cross checks against external forecasts?
- (e) In Step 4, did the CAA make errors of fact on which the Final Decision was based or was it wrong in law in that it applied a Shock Factor of 0.87% and applied this Shock Factor in full to 2023 despite some months of 2023 having already elapsed?

9.133 The process leading to the four steps approach and each of the steps, is outlined in paragraph 9.27 above. Following an in-depth review and assessment of the Parties' submissions and supporting evidence, and on the basis of the considerations set out in further detail below, we find that, save in one respect described in the following paragraph, the CAA did not make errors of fact on which the Final Decision was based, nor err in law or in the exercise of a discretion, in taking the four steps approach when setting the passenger forecast for the H7 control period.

9.134 We find that, insofar as it comprises the selection of the figure of 0.87% as the Shock Factor to be applied to the passenger forecast, the Final Decision was wrong in law. We conclude that the CAA erred because it failed properly to assess whether HAL's calculations of that figure were correct and thus failed to take account of relevant considerations and evidence and made a decision without adequate foundation in the evidence. This aspect of its decision – its selection of the 0.87% figure – was in that sense irrational.

Preliminary matter - admissibility of actual passenger data post-dating the Final Decision

- 9.135 Before assessing each of the arguments relating to the four steps, we first consider the admissibility of actual passenger numbers for February to June 2023. These passenger numbers were provided to the Group within a set of slides that was handed up during the Hearing on Ground C. They were also referred to in the Airlines' Closing Statement, in which they submitted that, '[a]lready for 2023, the actuals have proven to exceed the CAA's assumptions to such an extent that its forecast is clearly deficient'. Confirmed passenger number data for February to June 2023 (the **Post-Decision Passenger Data**) was not considered by the CAA in making the Final Decision, which was published on 8 March 2023. This is because data for the months March to June 2023 had not yet been collected and only provisional (unconfirmed) data for the month of February 2023 was available at that time.¹¹¹⁸
- 9.136 Paragraph 23(3) to Schedule 2 of the Act stipulates that the Group must not have regard to any matter, information or evidence (hereafter, for ease of reference, 'evidence') if it was not considered by the CAA in making the decision under appeal unless:
- (a) the evidence could not reasonably have been provided to the CAA during the period in which the CAA was making the decision; and
 - (b) the '[evidence] is likely to have an important effect on the outcome of the [...] appeal, either by itself or taken together with other [evidence].'
- 9.137 The Post-Decision Passenger Data clearly meets the first criterion as this could not reasonably have been provided to the CAA while it was making the Final Decision since it was not in existence at that time.
- 9.138 The key issue is whether such data will meet the second criterion: that is, whether it is likely to have an important effect on the outcome of the appeal.
- 9.139 As we note above, in their Closing Statement the Airlines submitted that data from January to June 2023 (ie data for January and February 2023 combined with the Post-Decision Passenger Data) show that '... the actuals have proven to exceed the CAA's assumptions to such an extent that its forecast is clearly deficient'. They submitted that this data showed that HAL had carried 37.1 million passengers as at June 2023, as against a forecast of 35.3 million from the CAA. This meant that HAL was well on course to outperform the CAA's forecast for 2023, needing only

¹¹¹⁸ CAA response to CMA RFI H7 C001, 3 July 2023, Question 4a ii.

to achieve a load factor of 68.4% for the remainder of the year (against the actual load factor achieved during January to June 2023 of 76%).¹¹¹⁹

9.140 We have considered the Post-Decision Passenger Data and come to the view that it is unlikely to have an important effect on the outcome of these appeals, either alone or in conjunction with other evidence (including the data for January 2023 and February 2023 to which the Airlines' Closing Statement refers). There are three reasons:

- (a) First, the CAA made a forecast: a forward-looking assessment that is always liable to be higher or lower than the out-turn. That the out-turn is higher, in this case, does not necessarily mean the forecast was wrong (the same being true where the out-turn is lower).
- (b) Second, and the first point notwithstanding, the difference between a forecast and an out-turn may say in some cases something about whether the forecast was wrong (see paragraph 9.113). Here, however, the difference does not appear to us to pass that threshold. Taking account of the Post-Decision Passenger Data, the difference between the CAA's forecast to June 2023 and the out-turn was 1.8 million passengers. That is in the context of a forecast for the H7 period of 375.5 million passengers. In their response to our Provisional Determination the Airlines emphasised that the Post-Decision Passenger Data showed that the CAA's estimate was 5% too low for the first six months of 2023. The Airlines submitted that this 'shows clearly that the forecast was unduly negative, and will remain too low to the detriment of consumers.'¹¹²⁰ We do not share this view: we would not expect the CAA's forecast to be perfectly accurate and we are not persuaded that a similar level of under-forecast is necessarily likely to continue throughout the remainder of the H7 price control period.
- (c) The third point is linked to the second. The Post-Decision Passenger Data represents four months of actual observed passenger numbers. However, the CAA's passenger forecast is for the H7 period as a whole which does not conclude until 2026. There is still a substantial period of time before the conclusion of the H7 control period and, while passenger numbers may have been higher than forecast at this stage, they may be lower than forecast later in the period. This might be the case if, for example, a greater than anticipated shock were to materialise later during the H7 control period.

¹¹¹⁹ Airlines' Closing Statement, paragraph 27 and Slide 1 of the Airlines' Slides for Ground C Hearing.

¹¹²⁰ Airlines Response to PD, paragraph 4.15.1.

9.141 We therefore conclude that the Post--Decision Passenger Data is inadmissible.¹¹²¹ We address the Airlines' submission¹¹²² (with which we disagree) that this conclusion is inconsistent with our conclusions on the Shock Factor at paragraph 9.309 below.

Step 1 – use of 2022 actuals

9.142 In this section, we consider whether the CAA made errors of fact in Step 1 by ignoring the impact of Local Rule A (**LRA**) and threatened capacity restrictions, thereby relying on flawed evidence and assumptions:

- (a) in coming to a conclusion for passenger numbers in 2022; or
- (b) in constructing the appropriate baseline of demand for 2023 onward.

9.143 By way of context, LRA imposed a daily cap of 100,000 departing passengers from Heathrow between mid-July and the end of October 2022 (although the cap was gradually lifted from mid-September up to its complete elimination at the end of October).¹¹²³

9.144 The Airlines submitted that the CAA ought to have used an adjusted figure to take into account the fact that passenger numbers would have been higher in 2022 if it had not been for the capacity restrictions. Further the Airlines submitted that the CAA had no good reason not to make an upward adjustment to the 2022 passenger figures.¹¹²⁴

9.145 The CAA submitted that the Airlines' submissions on LRA disclose no error.¹¹²⁵

9.146 We assess the Airlines' arguments in detail by considering the following topics in turn:

- (a) adjusting the 2022 passenger figure upwards;¹¹²⁶
- (b) the relevance of LRA for the H7 forecast;¹¹²⁷ and
- (c) double counting between the treatment of LRA and other elements of the price control.¹¹²⁸

¹¹²¹ It would also follow, for the same reasons, that even if the Post-Decision Passenger Data had been admissible (eg absent the relevant provision of the Act), it would not have materially affected our view on any of the grounds of appeal.

¹¹²² Airlines Response to PD, paragraph 4.15.2.

¹¹²³ [Final Decision](#), paragraph 1.33, Footnote 7.

¹¹²⁴ [VAA NoA](#), paragraphs 4.94 and 4.95, [Delta NoA](#), paragraph 4.70, [BA NoA](#), paragraph 3.11.8.

¹¹²⁵ [CAA Response](#), paragraph 228.1.

¹¹²⁶ [VAA NoA](#), paragraphs 4.94 and 4.95, [Delta NoA](#), paragraph 4.70, and [BA NoA](#), paragraph 3.11.8. [VAA NoA](#), paragraph 4.96(c), [BA NoA](#), paragraph 3.11.8(c), and [VAA NoA](#), paragraph 4.96(d), [Delta NoA](#), paragraphs 4.73-4.75.

¹¹²⁷ [VAA NoA](#), paragraph 4.97, [Delta NoA](#), paragraphs 4.76-4.79, and [BA NoA](#), paragraph 3.11.9.

¹¹²⁸ [VAA NoA](#), paragraph 4.96(a) and [BA NoA](#), paragraph 3.11.8(a); and [VAA NoA](#), paragraph 4.96(b) and [BA NoA](#), paragraph 3.11.8(b).

Adjusting the 2022 passenger figure upwards

- 9.147 In updating the passenger numbers used in setting the H7 price control between Final Proposal and Final Decision, the CAA replaced a forecast of 2022 passenger numbers with actual 2022 figures. The result was an increase from 55.4 million (unshocked Final Proposal forecast) to 61.6 million.¹¹²⁹
- 9.148 The Airlines submitted that the CAA should have adjusted the 2022 passenger figure upwards to account for the capacity restrictions (ie LRA) which were in place during summer 2022.¹¹³⁰
- 9.149 In particular, the Airlines submitted that:
- (a) contrary to the CAA's reasoning in the Final Decision rejecting a similar submission the Airlines had made during the Final Proposals consultation,¹¹³¹ adjusting the 2022 passenger figure upward to account for LRA would not act to penalise HAL,¹¹³² nor would it create perverse incentives on HAL in the future;¹¹³³ and
 - (b) the failure to adjust the 2022 passenger figure upward acted to reward HAL for failing to invest in operational capacity in 2022.¹¹³⁴
- 9.150 The CAA submitted that the CAA's decision not to adjust passenger numbers for LRA was reasonable and proportionate.¹¹³⁵ It also submitted that LRA was not needed solely due to issues with HAL's lack of preparation for returning traffic, but also because of difficulties that airlines and other service providers had in maintaining operational resilience at that time.¹¹³⁶
- 9.151 Our view is that, given the delays in concluding the process of making the Final Decision, there was no need for the CAA to forecast passenger numbers for 2022 as actual passenger numbers were available. It was those actual numbers the CAA used. It was not wrong, therefore, not to adjust the number upwards to account for the effect of LRA in 2022.

Relevance of LRA for the H7 passenger forecast

- 9.152 The Airlines submitted that the result of the CAA's errors on its treatment of LRA was that the CAA erroneously underestimated passenger forecasts for 2023 and onwards.¹¹³⁷ In particular, Delta submitted that the effect of LRA between July and

¹¹²⁹ [Final Decision](#), paragraphs 1.53–1.57.

¹¹³⁰ [VAA NoA](#), paragraphs 4.94 and 4.95, [Delta NoA](#), paragraph 4.70, [BA NoA](#), paragraph 3.11.8.

¹¹³¹ [Final Decision](#), paragraph 1.45.

¹¹³² [Delta NoA](#), paragraph 4.72.

¹¹³³ [VAA NoA](#), paragraph 4.96(c), [BA NoA](#), paragraph 3.11.8(c).

¹¹³⁴ [VAA NoA](#), paragraph 4.96(d), [Delta NoA](#), paragraphs 4.73–4.75.

¹¹³⁵ [CAA Response](#), paragraph 228.1.

¹¹³⁶ [CAA Response](#), paragraph 228.1.

¹¹³⁷ [VAA NoA](#), paragraph 4.97, [Delta NoA](#), paragraphs 4.76–4.79, [BA NoA](#), paragraph 3.11.9.

October 2022 affected both airlines' plans and consumer confidence in flying from Heathrow and will have had a negative impact on the total number of passengers who used Heathrow in November and December 2022.¹¹³⁸ The Airlines cited news articles on BBC News, the Financial Times and Time Out magazine published on 26 October 2022 which warned that passenger caps might return over the Christmas period.¹¹³⁹

9.153 However, the July to October 2022 passenger numbers were not used as a baseline for the forecast for the years 2023 to 2026. Rather the CAA's approach to forecasting passenger numbers for these years was as follows:

- (a) The CAA's forecast for 2023 is based on (i) actual passenger numbers for November and December 2022, as compared with passenger numbers for those months in 2019, and (ii) forward booking for 2023 as of December 2022;¹¹⁴⁰
- (b) The CAA's forecast for 2024 is based on a combination of:
 - (i) The CAA's Final Decision forecast for 2023;
 - (ii) The CAA's Final Proposal forecast for 2023 and 2024, which was an output of the CAA Amended HAL Model; and
 - (iii) The CAA's observation that the CAA's Final Decision forecast for 2023 was 80% of the difference between the CAA's Final Proposal forecast for 2023 and 2024.
- (c) The forecasts for 2025 and 2026 are obtained by applying the methodology for 2024 in a similar way.¹¹⁴¹

9.154 Given the way in which the forecasts for 2023 to 2026 were derived (ie the H7 forecast for 2023 to 2026 did not place any reliance on actual passenger numbers for Jul-Oct 2022), while it is possible that LRA reduced passenger numbers during the period it was in place (ie more passengers would have used Heathrow absent LRA between mid-July and end of October 2022), we do not consider this to be relevant in the context of the H7 forecast.

9.155 As to the potential effect of LRA on passenger numbers in November and December 2022 (and therefore on the CAA's forecast for 2023-2026), we consider that the Airlines did not provide any convincing evidence of this point. In particular, the articles cited by the Airlines were commenting on the possibility that passenger

¹¹³⁸ [Delta NoA](#), paragraph 4.78a.

¹¹³⁹ VAA, Exhibit MW1 to Webster 1, pages 268–275.

¹¹⁴⁰ CAA, CAA response to CMA RFI H7 C001, 3 July 2023, Question 3; French 1, paragraph 4.44; and [Final Decision](#), paragraph 1.56.

¹¹⁴¹ French 1, paragraph 4.45.

caps might return in the 2022 Christmas period. We note that, in the event, this did not happen and that the Airlines have not presented any evidence that press coverage on this possibility had a depressing effect on passenger numbers.

9.156 Consequently, our view is that the CAA was not wrong in that, by not taking LRA into account, this led the CAA to erroneously underestimated passenger forecasts for 2023 and onwards.

Alleged Step 1 Double counting Errors

9.157 The Airlines also submitted that there was no reason to discount the passenger forecast on the basis of the risk of similar capacity restrictions in future since this risk was accounted for elsewhere in the forecasting exercise (namely, the risk-weighted approach to forecasting, the Step 4 Shock Factor, and other risk sharing mechanisms).¹¹⁴²

9.158 Our view is that this concern does not have any evidential basis for the following reasons:

- (a) In setting its passenger forecast at Step 1, the CAA did not put weight on the possibility that something similar to LRA could be introduced during the H7 period.¹¹⁴³
- (b) As regards the 2022 forecast: there was no evidence that the CAA had factored in the risk of future capacity restrictions (akin to LRA) when deciding to use actual passenger numbers for 2022.
- (c) As regards the 2023 forecast: as explained above in paragraph 9.153(a), the CAA used (i) actual passenger numbers for November and December 2022, as compared with passenger numbers for those months in 2019, and (ii) forward booking for 2023 as of December 2022.
- (d) As regards the 2024-2026 forecasts: as explained above in paragraph 9.153, the CAA did not use 2022 passenger numbers as a baseline for the 2023 to 2026 forecasts.

9.159 Given those points, the CAA did not as the Airlines contend discount passenger forecast on the basis of the risk of similar capacity restrictions. The CAA made no error in that regard as alleged.

¹¹⁴² [VAA NoA](#), paragraph 4.96(b), [BA NoA](#), paragraph 3.11.8(b).

¹¹⁴³ Transcript of Ground C Hearing, page 60, lines 22-25.

Conclusion – use of 2022 actuals

9.160 In the light of the above, our view is that the CAA did not err in Step 1 by ignoring the impact of Local Rule A and threatened future capacity restrictions. The Final Decision was not wrong on that account.

Step 1 – 2023 forecast

9.161 In this section, we consider whether the CAA made errors in Step 1:

- (a) by finding that 2023 passenger numbers would be 92% of 2019 levels;
- (b) by choosing a lower bound for 2023 which assumed a one percentage point growth in passenger numbers as compared to the 2019 position; and
- (c) by treating forward booking data for 2023, as of December 2022, as an upper bound.

9.162 The Airlines also submitted that both the CAA's lower bound and its upper bound estimates for 2023 were too low.¹¹⁴⁴

9.163 The CAA submitted that it did not err when it treated forward booking data for 2023 as an upper bound.¹¹⁴⁵ It also submitted that the Final Decision clearly established the basis for the lower bound.¹¹⁴⁶

9.164 VAA further submitted that the CAA's forecast was demonstrably wrong taking into account actual passenger numbers as of February 2023.¹¹⁴⁷ The Airlines submitted that the 2023 actuals are unsurprising and were being reflected in the information, including booking data, that the Airlines sent to the CAA prior to the Final Decision.¹¹⁴⁸

9.165 We assess the Airlines' arguments by considering the following topics in turn:

- (a) the lower bound of the 2023 forecast in the Final Decision;
- (b) the upper bound of the 2023 forecast in the Final Decision; and
- (c) the use of actual 2023 passenger numbers.

¹¹⁴⁴ [VAA NoA](#), paragraph 4.102, [Delta NoA](#), paragraph 4.86, [BA NoA](#), paragraph 3.11.15; [Delta NoA](#), paragraph 4.83; and [VAA NoA](#), paragraph 4.104, [Delta NoA](#), paragraph 4.85, [BA NoA](#), paragraph 3.11.17; [VAA NoA](#), paragraph 4.106, [Delta NoA](#), paragraph 4.87; [BA NoA](#), paragraph 3.11.18 and 3.11.19; [VAA NoA](#), paragraph 4.107.

¹¹⁴⁵ [CAA Response](#), paragraph 228.3.

¹¹⁴⁶ [CAA Response](#), paragraph 228.2.

¹¹⁴⁷ [VAA NoA](#), paragraph 4.107.

¹¹⁴⁸ Airlines Closing Statement, paragraph 27.

Lower bound of the 2023 forecast

9.166 We understand that the CAA set its lower bound forecast for 2023 at 90% of 2019 figures (ie around 72.8 million passengers) by:

- (a) taking, as its starting point, the actual passenger figures for November and December 2022, as a proportion of the equivalent 2019 figures (89%);
- (b) coming to the view that passenger numbers would keep growing in 2023 (ie outperform the November and December 2022 figures), but that downside risks would limit the scale of that growth; and
- (c) quantifying this growth rate in passenger numbers for 2023 as one percentage point. This meant the CAA added 1% to its 89% starting point, leading to a lower bound estimate of 90%.¹¹⁴⁹

9.167 The Airlines submitted that the CAA's lower bound estimate of 90% of 2019 levels was wrong as it:

- (a) was unduly pessimistic given the available evidence:
 - (i) actual passenger numbers for January to March 2023 were 92.5%, 94.8%, and 95.4% of 2019 levels (respectively);¹¹⁵⁰ and
 - (ii) the growth of HAL passenger numbers as expressed as a proportion of 2019 numbers over March to December 2022 (25 percentage points from March to December 2022);¹¹⁵¹ and
- (b) was inconsistent with the CAA's recognition that COVID-19 related requirements had been lifted.¹¹⁵²

9.168 In its Response, the CAA submitted that:

At the time of fixing CAA's passenger forecasts for the Final Decision, there were clear downside risks to continued traffic growth, including but not limited to industrial action, shortage of labour in the aviation industry, a resurgence of the COVID-19 pandemic and an escalation of the war in Ukraine. Despite these risks, CAA considered that passenger numbers would continue to increase, but in the face of these risks a reasonable lower bound for that increase was of the order of one percentage point.¹¹⁵³

¹¹⁴⁹ [Final Decision](#), paragraphs 1.53–1.55.

¹¹⁵⁰ [VAA NoA](#), paragraph 4.102, [Delta NoA](#), paragraph 4.86, [BA NoA](#), paragraph 3.11.15.

¹¹⁵¹ [Delta NoA](#), paragraph 4.83.

¹¹⁵² [VAA NoA](#), paragraph 4.104, [Delta NoA](#), paragraph 4.85, [BA NoA](#), paragraph 3.11.17. See also [Final Decision](#), paragraph 3.17.

¹¹⁵³ French 1, paragraph 5.94.

9.169 In response to questions from the CMA regarding the cut-off date for data used in the Final Decision, the CAA explained that:

December 2022 was the latest data available to CAA passenger forecasting team at the point at which it fixed its passenger forecast for the Final Decision (early January 2023). This is because, before publication of the Final Decision, the passenger forecast needed to be Quality Assured, the data fed into the calculations for other building blocks (opex, etc), the overall price control reviewed and approved by the CAA Board and the decision written up.¹¹⁵⁴

9.170 The CAA also submitted that it had continued to monitor emerging data on actual passenger numbers up to publication. It explained that:

for additional assurance, the CAA reviewed all passenger and booking data available up to the point it published its Final Decision in early March 2023. This included the confirmed January 2023 passenger numbers and a qualitative assessment of traffic in February 2023.¹¹⁵⁵

Our assessment of the evidence submitted by the Airlines

9.171 As a preliminary matter, we first consider the admissibility of the evidence relied upon by the Airlines:

- (a) Taking account of the CAA's evidence about the data on which the Final Decision was based, our view is that the confirmed February 2023 and March 2023 actual passenger numbers are and should be treated as Post-Decision Passenger Data. For the reasons given above, we consider that they are inadmissible (see paragraphs 9.135 to 9.141).
- (b) The confirmed January 2023 passenger numbers and unconfirmed February 2023 passenger numbers pre-dated the Final Decision (and, indeed, were considered by the CAA) and are admissible.

9.172 We next consider whether the admissible evidence (confirmed January 2023 and unconfirmed February 2023 passenger numbers) demonstrates that the CAA's lower bound estimate of 90% of 2019 levels was wrong.

9.173 Our view is that the admissible data does not show that the CAA's lower bound estimate was wrong.

¹¹⁵⁴ CAA response to CMA RFI H7 C001, 3 July 2023, Question 4.

¹¹⁵⁵ CAA response to CMA RFI H7 C001, 3 July 2023, Question 4a ii).

- (a) We do not consider that it would have been reasonable for the CAA to rely on the **unconfirmed** February 2023 data and it was not wrong in not doing so. We therefore focus on the January 2023 data.
- (b) The Airlines submitted that actual passenger data for January 2023 was 92.5% of **January 2019** data (data from **48** months beforehand) – 2.5 percentage points above the CAA’s lower bound.
- (c) We note that the CAA’s actual calculation of the lower bound was based on two months data (November and December 2022) which were compared against the same months at the end of 2019 (November and December 2019 – data from **36** months beforehand). Had the CAA continued to use two months data to calculate its lower bound (ie had it used December 2022 and January 2023 data) then it would not come to a result materially different to the 90% it ultimately adopted. The CAA could have either:
 - (i) compared the December 2022 and January 2023 data with December 2019 and **January 2019** data (which we note are not consecutive months), in which case it would have found that actual data for those two months was on average 90.5% of the same months in 2019 (which is only 0.5 percentage points above the CAA’s lower bound); or, alternatively,
 - (ii) compared the December 2022 and January 2023 data with December 2019 and **January 2020**¹¹⁵⁶ data (this approach would have had the advantage of being consecutive months), in which case it would have found that actual data for those two months was on average 89.3% of the equivalent months from 36 months previous. This is 0.7 percentage points below CAA’s lower bound.
- (d) Of the two approaches, our judgement is that the latter approach would have been preferable since comparison with **January 2019** passenger numbers may understate pre-pandemic passenger levels given the growth in passenger numbers seen during the course of 2019. For this reason, comparison of January 2023 passenger numbers against January 2019 passengers may overstate the extent of recovery in passenger numbers to pre-pandemic levels.

9.174 In their Response to our Provisional Determination, the Airlines submitted that it is ‘simply irrational to suggest that the relevant comparator for airlines to use is [January] 2020’ because ‘to do so would prevent comparison between years’.¹¹⁵⁷ We do not agree with the Airlines’ submission. In comparing passenger numbers in November and December 2022 with pre-pandemic levels, the CAA used as its

¹¹⁵⁶ The January 2020 data does not appear to have been affected by COVID-19.

¹¹⁵⁷ Airlines Response to PD, paragraph 4.15.3.

benchmark passenger numbers in the same month immediately before the outbreak of COVID-19. For December 2022, this was December 2019. We consider that comparing passenger numbers in January 2023 with those in January 2020 is consistent with this approach.¹¹⁵⁸

- 9.175 For completeness, our further view is that it was reasonable for the CAA to set end December 2022 as a cut-off date for the use of actual passenger figures in its forecast, ie approximately two months ahead of publishing its Final Decision, and not to revisit its assessment in the light of the (confirmed) January 2023 and (unconfirmed) February 2023 passenger figures. It is not inconsistent with a fair process and the making of an appropriate substantive decision for a regulator to take a pragmatic approach as to, in this case, a relevant cut-off date for assessable data which reduces the risk of introducing errors into the decision (in this case the passenger forecast). That, it appears to us, is what the CAA did here. It is also important that a regulator can take a sensible and pragmatic approach generally to the assessment of evidence that may be capable of continuous updating, on which other elements of its decision (ie the price control) depend, so that its decision-making process reaches a conclusion in the interests of good administration. Again, that is what it appears to us the CAA did. It would only have been appropriate for the CAA to revisit the lower bound assessment if the passenger outturn figures in early 2023 had been very substantially different from that expected by the CAA at the time it finalised the 2023 forecast. This was not the case.
- 9.176 Further, in our view a higher growth rate for the last three, six, and nine months of 2022 (eg from March, June and October to December) does not necessarily imply a high rate would be sustained in 2023. We consider this is especially the case as Heathrow gets closer to its full capacity following passenger recovery post COVID-19. We also consider that the growth rate in the later months of 2022 (eg November and December as used by the CAA) is likely to be more informative in that respect as they are closer to 2023, since at that point in time, more time had elapsed since the lifting of the COVID-19 pandemic restrictions. For example, we consider the later months of 2022 might be less affected by the initial increase in demand following the lift of COVID-19 restrictions in the earlier part of 2022. While there is little difference between the periods October-December 2022 and November-December 2022 in terms of the time elapsed since the lifting of such restrictions, we do not consider that using the former period is a clearly superior alternative (and nor, accordingly, is the approach the CAA adopted outside the range of approaches reasonably open to it or liable to result in a material error of

¹¹⁵⁸ We looked at reported monthly passenger numbers at Heathrow over the period leading up to the COVID-19 pandemic. We found no evidence to suggest that passenger numbers in January 2020 were materially impacted by COVID-19. In particular, we found that passenger numbers increased in January 2020 compared with January 2019, and at a rate in line with that seen during 2019. We also noted that a global pandemic was not declared until 11 March 2020 (see [WHO 11 March 2020 announcement](#) (accessed on 9 October 2023)).

fact on which the Final Decision was based). In other words, we consider that the CAA's focus on the latter period (November-December 2022) was not wrong.

- 9.177 Accordingly, we conclude that the evidence put forward by the Airlines does not show that the CAA's 90% lower bound estimate for 2023 was unduly pessimistic based on the information the CAA had at the time of making the decision. The CAA's decision was not wrong on that account.

Consistency with COVID-19 requirements being lifted

- 9.178 The Airlines pointed to a paragraph from the Final Decision, which refers to a measure which was in force at Heathrow being unlikely to further consumers' interests 'now that COVID-19 related requirements have been lifted'.¹¹⁵⁹
- 9.179 We consider that the CAA's lower bound forecast is consistent with the statement that 'COVID-19 related requirements have been lifted', given the CAA's explanation that there were other downside risks that were likely to dampen passenger growth in 2023.

Conclusion – lower bound of 2023 forecast

- 9.180 Therefore, for the reasons set out above, our finding is that the CAA's lower bound for the 2023 forecast was not wrong.

Upper bound of 2023 forecast

- 9.181 The CAA set its upper bound forecast for 2023 at 94% of 2019 figures (ie around 76 million passengers) by using the value of forward bookings for 2023 (as reported in December 2022) as a proportion of the equivalent 2019 levels.¹¹⁶⁰
- 9.182 The Airlines submitted that the CAA's upper bound estimate of 94% of 2019 levels (based on forward bookings) was wrong for the following reasons:^{1161,1162}
- (a) the December 2022 forward bookings were likely to have been depressed as a result of threatened capacity caps for Winter 2022;¹¹⁶³
 - (b) the cyclical nature of ticket sales typically sees significant sales in periods early in year with January historically being the largest month for bookings;¹¹⁶⁴

¹¹⁵⁹ [Final Decision](#), paragraph 3.17. They are referring to the 'ease of understanding Heathrow's covid-19 safety information' measure.

¹¹⁶⁰ [Final Decision](#), paragraph 1.55.

¹¹⁶¹ Ground C: Airlines agreed issues for determination, paragraph 22.

¹¹⁶² [VAA NoA](#), paragraph 4.106, [Delta NoA](#), paragraph 4.87; [BA NoA](#), paragraphs 3.11.18 and 3.11.19.

¹¹⁶³ [VAA NoA](#), paragraph 4.106, [BA NoA](#), paragraphs 3.11.18 and 3.11.19.

¹¹⁶⁴ [VAA NoA](#), paragraph 4.106, C Walker 1, paragraph 143(a)(i); Dawe 1, paragraph 100.8(b).

- (c) the double counting of downside risks within Step 1 and also between Step 1 and Steps 2 and 4;
- (d) it is unclear whether the CAA took account of positive effect of the resumption of the 80:20 slot rule;
- (e) current on-sale capacity data indicates passenger levels in 2023 exceeding 94% of 2019 levels; and
- (f) at the Final Proposal stage booking data had been used to determine the lower bound for the 2022 passenger forecast.

9.183 We consider these in turn below.

Impact of threatened capacity caps

9.184 The Airlines submitted that December 2022 forward bookings were likely to have been depressed as a result of threatened capacity caps for Winter 2022.¹¹⁶⁵ The Airlines submitted that while HAL did not go ahead with the planned caps, the damage had already been done to consumer and airline confidence in winter travel via Heathrow.¹¹⁶⁶

9.185 In support of their arguments, the Airlines submitted that HAL had written to airlines on 5 October 2022 advising them that ‘some levels of [passenger] demand could be undeliverable across the airport ecosystem’ and inviting their input on forecasted demand and measures to be taken, referencing the capacity reduction in place through LRA at the time (until 29 October 2022). The Airlines said that while HAL eventually decided against the reintroduction of capacity restrictions for winter 2022, this was after public statements on the potential for such restrictions over the Christmas period that resulted in media reports which would inevitably have caused damage to consumer confidence.¹¹⁶⁷

9.186 The Airlines specifically referred to the following HAL statements:¹¹⁶⁸

- (a) A 11 October 2022 statement warning that it ‘expect[ed] peak days at Christmas to be very busy’ and was working with airlines to develop a ‘more targeted mechanism’ to address the situation, and CEO John Holland-Kaye commented that Heathrow Airport was not yet ‘back to full capacity’.
- (b) A 26 October 2022 statement that referenced a ‘targeted mechanism’ which could potentially affect certain ‘peak days in the lead up to Christmas’ and

¹¹⁶⁵ [VAA NoA](#), paragraph 4.106, [BA NoA](#), paragraphs 3.11.18 and 3.11.19.

¹¹⁶⁶ Dawe 1, paragraph 100.8; Webster 1, paragraph 121-122, C Walker 1, paragraph 134.

¹¹⁶⁷ Dawe 1, paragraph 100.8; Webster 1, paragraph 121-122; [Delta NoA](#), paragraph 4.78.

¹¹⁶⁸ Dawe 1, paragraph 100.8; Webster 1, paragraph 121-122; [Delta NoA](#), paragraph 4.78.

stated that meeting demand at peak times involved ‘a huge logistical challenge’ relating to recruitment.

- 9.187 The CAA submitted that threatened capacity caps would not have made a significant difference to the observed booking data unless airlines were specifically not selling seats or had reduced their capacity, which, to the CAA’s knowledge, was not the case.¹¹⁶⁹
- 9.188 We note that while it is possible that the negative press coverage could have been damaging to consumer confidence the Airlines have not submitted any evidence that, in particular, the statements made by HAL in Autumn 2022 had the effect of depressing forward booking for 2023 (as of December 2022).
- 9.189 On that basis, our view is that the Airlines have not demonstrated that December 2022 forward bookings were likely to have been depressed as a result of threatened capacity caps for Winter 2022 and that the CAA was wrong, as a result, to consider that booking data an appropriate basis for determining an upper bound for the 2023 passenger number forecast.

January largest month for bookings

- 9.190 The Airlines submitted that January was (and is) typically the largest month for bookings.¹¹⁷⁰
- 9.191 The CAA accepted that January is a significant month for bookings but submitted that it is not relevant here, because the level of booking data that the CAA used was relative to the booking data in December 2019.¹¹⁷¹
- 9.192 We agree with the CAA submission that it is not relevant whether January is typically the largest month for bookings given that the CAA’s approach was based on 2023 forward bookings as of December 2022 relative to the 2020 forward booking data as of December 2019. We also note that the CAA found the seasonality pattern of forward booking to be broadly similar between 2022 and 2019, which is relevant as it suggests the comparison between forward booking as of December 2022 and as of December 2019 is ‘like-for-like’.¹¹⁷²
- 9.193 Accordingly, our view is that the Airlines have not demonstrated the CAA’s use of forward booking data for 2023 as of December 2022 was not appropriate for the purposes of determining an upper bound for 2023 passenger number forecast, such that the CAA was wrong to use it.

¹¹⁶⁹ [CAA Response](#), paragraph 228.3b.

¹¹⁷⁰ [VAA NoA](#), paragraph 4.106, C Walker 1, paragraph 143(a)(i); Dawe 1, paragraph 100.8(b)

¹¹⁷¹ [CAA Response](#), paragraph 228.3c.

¹¹⁷² [CAA Response](#), paragraph 228.3c.

Double counting of downside risks

9.194 The Airlines submitted that the CAA had already captured downside risks in other elements of its forecast. In particular, they submitted that:

- (a) to the extent any downside risks considered at the upper bound also informed the lower bound and the mid-point, those risks would have been double counted (ie within Step 1);
- (b) to the extent the CAA has considered macroeconomic risks, these are the duplicative of Step 2; and
- (c) to the extent the CAA has considered non-economic risks, eg industrial action, these are duplicative of Step 4.¹¹⁷³

9.195 We consider these in turn below.

Alleged double counting within Step 1

9.196 The CAA submitted that it had factored in downside risks in setting its upper and lower bounds as well as its choice of the mid-point (ie non-economic risks, including staffing challenges for airlines, airports and ground handlers). The CAA has taken these risks into account by using its judgement.¹¹⁷⁴

9.197 We consider this approach is consistent with the CAA's forecast for 2023 being risk-weighted.¹¹⁷⁵ That is, as defined by the CAA, a forecast that takes account of the range and probability of different outcomes (which, we note, are liable to affect both upper and lower bound estimates).¹¹⁷⁶

9.198 In particular, we consider that the approach taken of considering a range of possible outcomes (ie in defining upper and lower bounds, and then taking an average of the two) is consistent with that explicitly adopted in the CAA Amended HAL Model.¹¹⁷⁷

9.199 In the light of this, our view is that the CAA was not wrong to take account of downside risks at both the upper and lower bound, and in taking the mid-point of its 2023 forecast. We do not agree with the Airlines that to the extent any downside risks considered at the upper bound also informed the lower bound and

¹¹⁷³ [VAA NoA](#), paragraph 4.106, [Delta NoA](#), paragraph 4.87; [BA NoA](#), paragraphs 3.11.18–3.11.20.

¹¹⁷⁴ [Final Decision](#), paragraph 1.55 and 1.56.

¹¹⁷⁵ In setting its 2023 forecast in the Final Decision, CAA explained: 'We also note there remain non-economic risks to the continued recovery in passenger numbers, including staffing challenges for airlines, airports and ground handlers. Bearing these factors in mind, we consider that the **risk-weighted** outcome would be likely to be lower than the current level of bookings. In this light, our judgement is that an appropriate forecast of the number of passengers using Heathrow airport in 2023 is 92 per cent of 2019 levels, being the midpoint between 90 per cent and 94 per cent.' (emphasis added) ([Final Decision](#), paragraph 1.56).

¹¹⁷⁶ Transcript of Ground C Hearing, page 75, lines 19-20.

¹¹⁷⁷ [Final Proposals](#), Table 1.4, page 21, and paragraph 1.79.

the mid-point, those risks would have been double-counted. Nor do we accept the argument, made by the Airlines in their response to the Provisional Determination, that the CAA's risk-weighted approach meant that the CAA had failed in its task to produce an accurate forecast.¹¹⁷⁸ Forecasting is by its nature a probabilistic exercise and it is not wrong to attempt to weight different scenarios to produce a single estimate.

Alleged double counting between Step 1 and Step 2

9.200 With respect to the alleged double counting between Step 1 and Step 2, the CAA submitted:

the CAA considered booking data to be a suitable upper bound due to non-economic constraints to passenger traffic, in particular because of likely industrial action. This is unrelated to the economic impact on consumer demand which CAA accounted for under Step 2.¹¹⁷⁹

9.201 Our view is, that the approach taken by the CAA at Step 1 in defining an upper bound for 2023 passenger number did not take account of the impact of emerging information on the weakening macroeconomic outlook that was considered at Step 2 (that is, the potential negative implications of Oxford Economics latest UK GDP forecast published in December 2022 on consumer demand).¹¹⁸⁰

9.202 Accordingly, we find that there is no double-counting between Step 1 and Step 2 and the CAA was not wrong on that basis.

Alleged double counting between Step 1 and Step 4

9.203 With respect to the alleged double counting between Step 1 and Step 4, the CAA submitted:

The main reason for the CAA using forward bookings as upper rather than as lower bound was the risk of industrial action which was very high when it finalised the forecast. [...] [D]ue to the risk of industrial action, CAA considered it likely that bookings in 2023 would be discouraged and constrained relative to the booking levels seen in December 2022. [...] [J]ust because industrial action seemed imminent at the time of the forecast does not mean that there will be no further industrial action over the H7 period. So, CAA continued to apply a shock factor in Step 4 of its forecast.¹¹⁸¹

¹¹⁷⁸ Airlines Response to PD, paragraph 4.16.

¹¹⁷⁹ French 1, paragraph 5.102.

¹¹⁸⁰ French 1, paragraph 5.102.

¹¹⁸¹ French 1, paragraphs 5.103 and 5.104.

- 9.204 The CAA also stated that the type of industrial action considered at Step 1 seemed different from what the Shock Factor is designed to capture. It also explained that the Shock Factor is designed to capture things that cannot reasonably be forecast and could occur at any time, while the risk of industrial action at Step 1 was known and seemed a very real possibility for 2023.¹¹⁸²
- 9.205 Based on these submissions, our view is that there is some potential for double counting given that at both Steps 1 and 4 the CAA took account of the risks of industrial action and the impact this could have on passenger numbers. However, we note that industrial action is just one of a number of categories of events driving the value of the Shock Factor used by the CAA at Step 4¹¹⁸³ and that such action is a very small driver of the Shock Factor used by the CAA.¹¹⁸⁴ We consider, therefore, that in practice the effect of any such double counting would likely be de minimis.
- 9.206 Moreover, we agree with the CAA that at the time of finalising the forecast industrial action was a potentially major known risk likely to affect passenger numbers in 2023. The CAA was not, therefore, in our view, wrong to regard these risks of industrial action as having distinct profiles. Nor, as a result, was it wrong in its decision not to account for this risk via the Shock Factor alone.
- 9.207 Accordingly, our conclusion is that it is most unlikely that there is material double counting of risks associated with industrial action in 2023, and the CAA's decision was not wrong because of it.

Impact of 80:20 rule

- 9.208 By way of background, the CAA explained that the 80:20 slot rule entails that an airline has to fly 80 per cent of its slots in a season (either summer or winter) for the airline to be allocated the same slots automatically for the same season the following year. The CAA explained that this rule was relaxed during the COVID-19 pandemic in order for the airlines not to be forced to fly empty or near-empty flights to retain their slots but that the 80:20 rule has now been re-introduced.¹¹⁸⁵
- 9.209 The Airlines submitted that the CAA appeared not to have taken account of points which would mitigate the downside risks, including the reintroduction of the 80:20 slot rule.¹¹⁸⁶
- 9.210 The CAA submitted that:

¹¹⁸² Transcript of Ground C Hearing, page 59, lines 14-19.

¹¹⁸³ CAA response to CMA RFI H7 C001, 3 July 2023, Question 11; and Berridge 1, Appendix 3 – shock events.

¹¹⁸⁴ Strike action accounts for two of the 17 events used for the calculation of the Shock Factor (ie excluding COVID-19); CAA response to CMA RFI H7 C001, 3 July 2023, Question 11.

¹¹⁸⁵ Transcript of Ground C Hearing, page 64, line 20 to page 65, line 8.

¹¹⁸⁶ [VAA NoA](#), paragraph 4.106, [Delta NoA](#), paragraph 4.87; [BA NoA](#), paragraph 3.11.18 and 3.11.19.

[I]n the CAA's experience, the level of forward booking data in December 2022 (94% of 2019 levels) on which it based its forecast is consistent with the 80:20 slot rule under normal operations. Hence, the CAA did not consider it necessary to apply any further adjustments for the incentive effects of the 80:20 slot rule.¹¹⁸⁷

- 9.211 The Airlines' argument was that the reintroduction of the 80:20 rule would incentivise them to operate more flights and that this would have a positive impact on passenger numbers. The CAA explained that its judgement was that the levels of booking at December 2023 were enough to maintain slot rights for the following season and that the 80/20 rule should not therefore provide any great pressure on airlines.¹¹⁸⁸ We note that the Airlines have not provided any evidence to demonstrate that the CAA's judgement on this was wrong.
- 9.212 Our view, therefore, is that the Airlines have not demonstrated that the CAA erred in failing to make further adjustments to account for on the 80:20 rule in determining the upper bound for the 2023 passenger forecast. We do not find the CAA's decision wrong for that reason.

On-sale capacity for 2023

- 9.213 The Airlines submitted that other metrics (specifically on-sale capacity for 2023) suggested passenger levels will exceed 94% of 2019 levels.¹¹⁸⁹
- 9.214 The CAA submitted that, while it was aware of the latest data on seat capacity when it set the forecast, it decided to base its forecast on bookings rather than on seat capacity as it considered bookings to be a better predictor of future passenger numbers than seat capacity. It submitted that bookings more closely reflect passenger demand than seat capacity, as seat capacity will be affected by supply-side decisions, such as airlines seeking to maximise yields.¹¹⁹⁰
- 9.215 We note that the Airlines have not provided any evidence to indicate that the CAA's assessment (ie its preference for using forward booking data over on-sale capacity) was incorrect.
- 9.216 Accordingly, in our view, the Airlines have not demonstrated that on-sale capacity was a materially superior metric to forward bookings. We note that the CAA had considered pros and cons of both approaches. On this basis, we do not find that the CAA's choice of relying on forward bookings, as opposed to on-sale capacity, to estimate an upper bound forecast for 2023 was wrong.

¹¹⁸⁷ French 1, paragraph 5.106; See also Transcript of Ground C Hearing, page 65, lines 15-20.

¹¹⁸⁸ Transcript of Ground C Hearing, page 64, line 20 to page 65, line 8.

¹¹⁸⁹ [VAA NoA](#), paragraph 4.106, [Delta NoA](#), paragraph 4.87; [BA NoA](#), paragraphs 3.11.18 and 3.11.19.

¹¹⁹⁰ French 1, paragraph 5.108.

Forward bookings data as a lower bound

- 9.217 We note that the CAA used forward booking data as a lower bound in the 2022 forecast for the Final Proposal (62% of 2019 data), and as an upper bound in the 2023 forecast in Final Decision (94% of 2019 data).¹¹⁹¹
- 9.218 Delta submitted that the CAA was wrong to conclude that the forward bookings should be used as an upper bound for the 2023 forecast as:
- (a) the fact that the majority of bookings for the year were yet to be made is of limited relevance, and given the general upwards trend in passenger numbers it was more likely and reasonable to expect that passenger numbers would continue to grow and exceed expectations reflected in the forward bookings data; and
 - (b) the position in relation to non-economic risks (including staffing challenges) was no worse at that time as compared to when the H7 Final Proposals were published, and instead the outlook in relation to staffing challenges was more positive as business returned to usual following the COVID-19 pandemic.¹¹⁹²
- 9.219 The CAA submitted that the reason why it made this change in approach was due to changes in the environment by the time it made the forecast for the Final Decision. The CAA considered it to be important to account for this change in order not to misinterpret the forward booking data.¹¹⁹³ More specifically, the CAA submitted that:
- (a) When the forecast for the Final Proposal was made, travel restrictions were being eased as the COVID-19 Omicron variant wave subsided, and therefore the CAA expected bookings to accelerate.¹¹⁹⁴
 - (b) When the forecast for the Final Decision was made, ie in December 2022, there were no accelerating effects from the easing of travel restrictions. The CAA also submitted there were other contributing factors for the potential deceleration of bookings in 2023, namely: anticipated and expected industrial action, industry and sector resourcing not having recovered to pre-pandemic, and Heathrow beginning to be affected by the runway constraint in 2023.¹¹⁹⁵
- 9.220 We agree with the Airlines that the fact that the majority of bookings for the year were yet to be made in and of itself is of limited relevance given that that CAA's approach was to compare the level of forward booking as at December 2022 with those as at December 2019. However, we note that the CAA gave other

¹¹⁹¹ [Final Decision](#), paragraph 1.10, 1.55 and 1.56.

¹¹⁹² [Delta NoA](#), paragraph 4.87.

¹¹⁹³ French 1, paragraph 5.95–5.97.

¹¹⁹⁴ French 1, paragraph 5.96.

¹¹⁹⁵ French 1, paragraph 5.97.

explanations as to why it considered forward bookings to be an upper bound in the Final Decision.¹¹⁹⁶

- 9.221 In relation to the Airlines' argument that the outlook on staffing challenges was more positive at the Final Decision stage as business returned to usual following the COVID-19 pandemic, we note that this is a matter on which the Airlines and the CAA took different views. We consider this is an area where the CAA was entitled to a margin of appreciation. In particular, we note the CAA considered staffing challenges and reached a different conclusion to that submitted by the Airlines, ie that staffing challenges were likely to contribute to a deceleration of bookings.¹¹⁹⁷ It is not clear that the Airlines' view should be regarded as clearly superior. It appears to us that this is a matter on which the CAA, as expert regulator, was entitled to exercise the judgement that it did, based on its assessment.¹¹⁹⁸
- 9.222 Moreover, in the light of the significant uncertainties that were continuing to affect air travel in 2022 and, related to this, the large difference between the level of forward bookings at Final Proposals (62% of 2019 levels) and at the Final Decision (94% of 2019 levels), our view is that the CAA was not wrong to use forward bookings differently (ie as an upper bound) in the Final Decision. It had to make a judgement in difficult and evolving circumstances. It did so on a reasoned basis that did not involve the rejection of a clearly superior alternative judgement that it should have reached.
- 9.223 Consequently, we do not conclude that the CAA was wrong to use forward bookings as an upper bound for the 2023 forecast.

Conclusion – upper bound of 2023 forecast

- 9.224 For the reasons above, our conclusion is that the CAA's approach to estimating the upper bound for the 2023 passenger forecast was not wrong.

Step 1 – notional capacity of the airport

- 9.225 In this section, we consider whether the CAA made errors in Step 1 in its assumptions relating to the capacity of Heathrow airport.
- 9.226 In the Final Decision, the CAA assumed a terminal capacity cap of 85 million passengers would apply for later years of the forecast. This assumption was

¹¹⁹⁶ [Final Proposals](#), paragraph 1.56.

¹¹⁹⁷ [Final Proposals](#), paragraph 1.56.

¹¹⁹⁸ We note that in [Final Decision](#), paragraph 1.37 the CAA said: 'Easter saw delays and cancellations at Heathrow and elsewhere as staffing and capacity shortages caused airports and airlines to struggle to meet returning demand.' It also said, in paragraph 1.56: 'We also note there remain non-economic risks to the continued recovery in passenger numbers, including staffing challenges for airlines, airports and ground handlers. Bearing these factors in mind, we consider that the risk weighted outcome would be likely to be lower than the current level of bookings.'

based on a technical note by HAL which had been shared with the CAA.¹¹⁹⁹ In relation to its forecast for the later years of H7 the CAA stated that it considered it appropriate to ‘forecast some slowdown of the rate of the recovery in passenger numbers, since it is likely that the initial return of passengers was boosted by an element of pent-up demand. In addition, continuing increases to traffic will become more difficult to achieve as the capacity of Heathrow airport is approached.’¹²⁰⁰

- 9.227 The Airlines submitted that ‘CAA may have used an inappropriately low number for Heathrow airport’s overall terminal capacity’.¹²⁰¹ The CAA explained in evidence submitted together with its Response that it considered a cap of 85 million passengers annually to be a ‘reasonable theoretical capacity for Heathrow, based on the current configuration and infrastructure of terminals, and Heathrow’s absolute planning cap of 480 000 air transport movements (ATMs) per year’.¹²⁰²
- 9.228 In their Closing Statement the Airlines maintained that the CAA had erred when considering the capacity of the airport. The Airlines submitted ‘CAA has erred in setting the forecast for 2024-2026 with reference to Heathrow’s current terminal capacity which is based on an artificial cap on demand driven by slots and permitted operating times’.¹²⁰³ They submitted that the notional capacity of the airport is 85.5 million passengers a year and the Airlines would expect a forecast to allow for growth at least up to terminal capacity. The Airlines further noted that there are a number of ways to grow passenger numbers without increasing the number of air traffic movements (eg through increasing the average gauge (number of seats per departure) and/or seat configuration).¹²⁰⁴
- 9.229 Our view is that the CAA did not err on this point. Its assessment that passenger growth would be expected to slow as passenger numbers get close to Heathrow’s theoretical capacity is a reasoned and reasonable one the CAA as expert regulator was entitled to make. The CAA used its regulatory judgement in coming to a conclusion on the 85 million theoretical capacity cap, after having assessed technical analysis from HAL, as well as the rate of growth as Heathrow approached that capacity in 2024-2026. It cannot, in our view, be said to have been wrong on account of having made a decision based on errors of fact, without foundation in the evidence or that it was not entitled to make because there was a clearly superior alternative open to it.

¹¹⁹⁹ [Final Decision](#), paragraph 1.64 and footnote 13.

¹²⁰⁰ [Final Decision](#), paragraph 1.46. See also paragraph 1.64: ‘We would expect growth to slow as the runway capacity begins to limit the ability to increase passengers up to the capacity as easily as would be the case if such constraints did not exist’.

¹²⁰¹ Dawe 1, paragraph 101.

¹²⁰² French 1, paragraph 4.21d, footnote 27.

¹²⁰³ Airlines Closing Statement, paragraph 49.

¹²⁰⁴ Airlines Closing Statement, footnote xiv.

9.230 We therefore find, in relation to 2024-2026, that the CAA did not err in assuming a notional capacity of 85 million passengers per annum and that growth would slow as passenger numbers approached these levels.

Step 2 – GDP adjustment

9.231 By way of context, at Step 2 the CAA considered what impact the latest forecasts for the economic outlook should have on the passenger forecasts. In its Final Proposals the CAA had relied upon an economic forecast of UK GDP from Oxford Economics dated March 2022. At the time of the Final Decision, the CAA relied upon an updated Oxford Economics forecast dated December 2022. Taking account of the updated economic forecast, which entailed a worsened outlook for UK GDP, the CAA applied a downward adjustment to the passenger forecast arrived at following Step 1. In assessing the likely impact of the worsened GDP forecast, the CAA looked to the experience of the 2008 recession to indicate how changes to UK GDP affect passenger demand at Heathrow based on data presented by the AOC/LACC on behalf of the ‘Airline Community’ in response to the Initial Proposals.¹²⁰⁵ The CAA then applied this downwards adjustment (of around 1%) to all forecast years of H7 (2023 to 2026).¹²⁰⁶

9.232 The Airlines submitted that the application of a downwards adjustment was arbitrary and unjustified and therefore wrong.¹²⁰⁷

9.233 The CAA submitted that none of the Airlines’ arguments on Step 2 showed it to be erroneous and that its adjustment was therefore reasonable.¹²⁰⁸

9.234 We assess the Airlines’ arguments in detail by considering the following topics in turn:

- (a) Heathrow’s resilience to macroeconomic factors;
- (b) interaction between Step 2 and the HAL Model; and
- (c) double counting between Step 2, each of Step 1 and Step 4, and the Traffic Risk Sharing (**TRS**) mechanism.

9.235 We consider whether the CAA erred because of a lack of transparency in relation to the adjustment at Step 2 at paragraphs 9.82 to 9.86 above.

¹²⁰⁵ CAA response to CMA RFI H7 C003, 20 July 2023, Q1b; [AOC/LACC response](#) to the Initial Proposals, page 12, Figure 9: ‘Heathrow resilience compared to Gatwick and Manchester post 2008 GFC’. This response had been provided to the CAA on behalf of LACC, AOC and IATA, together referred to in said response as the ‘Airline Community’.

¹²⁰⁶ [Final Decision](#), paragraph 1.58 to 1.60.

¹²⁰⁷ [VAA NoA](#), paragraph 4.116, [Delta NoA](#), paragraph 4.94, [BA NoA](#), paragraph 3.11.29.

¹²⁰⁸ [CAA Response](#), paragraph 230.

Heathrow's resilience to macroeconomic factors

- 9.236 The Airlines submitted that it was inappropriate to apply a downwards adjustment at Step 2 because HAL's business is well-insulated to UK macroeconomic factors.¹²⁰⁹
- 9.237 The CAA responded that there is no merit in this complaint precisely because the CAA analysed the GDP impact on passenger numbers during the financial crisis in 2008/9 at Heathrow based on data presented by AOC/LACC on behalf of the 'Airline Community' in response to the Initial Proposals.¹²¹⁰ The CAA said that this ensured that the Step 2 adjustment accounted for the extent to which Heathrow is more robust to changes in GDP.¹²¹¹
- 9.238 On this basis, our finding is that it is clear that the CAA recognised the arguments being made at the time on the resilience of HAL, assessed evidence presented on the extent to which HAL's business was insulated from UK macroeconomic factors and factored their findings into the adjustment made at Step 2. On those bases, the CAA did not err in this connection.
- 9.239 In their Closing Statement, the Airlines submitted that the CAA's explanation of its methodology at Step 2 revealed that it did not take into account 'the resilience of passenger numbers at Heathrow airport to changes in GDP **over a reasonable period of time**'¹²¹² (emphasis added). We note that the CAA relied on evidence (which was a 3-month moving average) presented by the AOC/LACC on behalf of the airline community in response to the Initial Proposals, as an example of 'Heathrow's general resilience to shocks'.¹²¹³ Given its provenance and contents, we see no reason why it should not have done so. We also note that the Airlines have not presented any evidence on what would have been a better period. On this basis, we do not find the CAA to have been wrong.

Interaction between Step 2 and HAL Model

- 9.240 The Airlines also submitted that the application of a downwards adjustment was arbitrary and unjustified and therefore wrong because it was inappropriate to apply downwards adjustments when the HAL Model was already unduly pessimistic.¹²¹⁴

¹²⁰⁹ [VAA NoA](#), paragraph 4.116, [Delta NoA](#), paragraph 4.94, [BA NoA](#), paragraph 3.11.29.

¹²¹⁰ CAA response to CMA RFI H7 C003, 20 July 2023, Q1b; [AOC/LACC response](#) to the Initial Proposals, page 12, Figure 9: 'Heathrow resilience compared to Gatwick and Manchester post 2008 GFC'. As noted above, this response was provided to the CAA on behalf of LACC, AOC and IATA, together referred to in that response as the 'Airline Community'.

¹²¹¹ [CAA Response](#), paragraph 230.2.

¹²¹² Airlines Closing Statement, 2 August 2023, paragraph 50a.

¹²¹³ CAA response to CMA RFI H7 C003, 20 July 2023, Q1b; [AOC/LACC response](#) to the Initial Proposals, page 12, Figure 9: 'Heathrow resilience compared to Gatwick and Manchester post 2008 GFC'. This is a chart representing year-on-year changes to passenger numbers at London Heathrow, London Gatwick, and Manchester airport calculated as a 3 month moving average between January 2008 and February 2010.

¹²¹⁴ [VAA NoA](#), paragraph 4.116, [Delta NoA](#), paragraph 4.94, [BA NoA](#), paragraph 3.11.29.

- 9.241 The CAA submitted that passenger demand at Heathrow had previously fallen during recessions (for example, following the economic crisis that started in 2008). It submitted that for the CAA not to have accounted for the predicted worsening economic outlook would not have been reasonable.¹²¹⁵
- 9.242 We note that the macroeconomic outlook (in the form of GDP forecasts) was an input to the CAA Amended HAL Model, and more generally to the CAA's forecasting approach at the Initial Proposal and Final Proposal stage.¹²¹⁶ Likewise, that there was evidence of the effect on passenger demand from previous economic downturns.
- 9.243 On that basis, the CAA was entitled to take the view that the macroeconomic outlook was a relevant consideration to which it should have regard. It was not, in our view, wrong to adjust its forecast post-Final Proposals to take account of new information on that outlook so as to reach a view on a passenger forecast that reflected the information available at the time the forecasts were finalised.

Double counting

- 9.244 The Airlines submitted that the application of a downwards adjustment was arbitrary and unjustified and therefore wrong because the CAA double counted downwards risks already taken into account in other steps, including:
- (a) the pessimistic baseline for 2023 selected at Step 1;
 - (b) the Shock Factor applied in Step 4; and
 - (c) the use of the TRS mechanism which protects HAL from downward passenger risk.¹²¹⁷
- 9.245 The CAA submitted that the Shock Factor accounts for non-economic effects, and therefore the CAA was right to amend its forecast for economic effects in the way that it did.¹²¹⁸
- 9.246 Our view is that:
- (a) The CAA did not consider macroeconomic risks as defined in Step 2 (that is, the impact of a negative GDP shock on consumer demand) at Step 1.¹²¹⁹

¹²¹⁵ [CAA Response](#), paragraph 230.1.

¹²¹⁶ [Final Proposals](#), paragraph 1.58, [Initial Proposals](#), paragraph 2.18, and HAL, First Witness Statement of Oxera, (**Oxera 1**), 22 May 2023, paragraph 3.7.

¹²¹⁷ [VAA NoA](#), paragraph 4.116, [Delta NoA](#), paragraph 4.94, [BA NoA](#), paragraph 3.11.29.

¹²¹⁸ French 1, paragraph 5.112.

¹²¹⁹ [Final Decision](#), paragraph 1.56; and French 1, paragraph 5.102.

- (b) The CAA did not consider macroeconomic risks in Step 4 either as the Shock Factor in Step 4 in principle accounts for non-economic risks.¹²²⁰ Where the CAA erred, as we find below, was in its failure to verify the calculations comprising the Shock Factor, not as to the shock events included in its scope.
- (c) The TRS mechanism determines the allocation of the impact of variation in actual passenger numbers from forecasts.¹²²¹ Passenger forecasting is a distinct step, which should not be affected by whether there is a TRS in place or not.

9.247 Accordingly, we conclude that the CAA was not wrong on account of double counting between Step 2 and either of Step 1, Step 4 or the TRS mechanism as contended by the Airlines.

Conclusion – GDP adjustment

9.248 In the light of the above, we find that the CAA did not err in Step 2 by downgrading its passenger forecast for 2023 in response to macroeconomic forecasts.

Step 3 – external forecasts

9.249 In this section, we consider whether the CAA made errors in Step 3 by not uplifting its forecast in the light of its cross-checks against external forecasts.

9.250 At Step 3 the CAA obtained and performed a cross-check against external traffic forecasts which were relevant for H7, many of which had been updated since the Final Proposal, and compared those with the CAA's own forecast.¹²²² From this exercise, the CAA found that its updated forecast was within the range of the external forecasts, starting at the upper end and ending near the lower end.¹²²³ The CAA concluded that its passenger forecast for the Final Decision was validated by comparisons with the independent, external forecasts and it had no need to make further amendments to reflect them.¹²²⁴

9.251 The Airlines submitted that the CAA was wrong not to make an upwards adjustment in the light of the external forecasts.¹²²⁵

9.252 The CAA responded that the Airlines' argument does not show that the CAA's assessment in Step 3 was wrong.¹²²⁶

¹²²⁰ [Final Decision](#), paragraph 1.66; and French 1, paragraph 5.112.

¹²²¹ [Final Decision](#), paragraphs 2.6 and 2.7.

¹²²² [Final Decision](#), paragraph 1.62.

¹²²³ [Final Decision](#), paragraph 1.64.

¹²²⁴ [Final Decision](#), paragraph 1.65.

¹²²⁵ [VAA NoA](#), paragraph 4.118, [Delta NoA](#), paragraph 4.97, [BA NoA](#), paragraph 3.11.31.

¹²²⁶ [CAA Response](#), paragraph 231.

9.253 We assess the Airlines arguments in detail by considering the following topics in turn:

- (a) comparison between the external forecasts and the CAA's;
- (b) whether the external forecasts are risk-weighted; and
- (c) historical performance of the AlixPartners recommended forecast.

External forecasts vs the CAA's

9.254 The Airlines submitted that the CAA was wrong not to make an upwards adjustment in the light of the external forecasts because the CAA's (unshocked) forecast was at the very low-end of the amended external forecasts it used. They also submitted that, had the CAA compared its shocked forecast with the external forecasts, it would have been more pessimistic than the amended external forecasts it used.¹²²⁷

9.255 The CAA submitted that the Airlines' arguments assumed that the forecast comparison was on an exactly 'like for like' basis. It also submitted that the comparison was not on an exactly like for like basis since the CAA's forecast was a risk-weighted forecast. It further explained that the external forecasts were not Heathrow-specific and, as such, did not fully account for Heathrow-specific factors, such as future capacity constraints at the airport. It submitted that it was therefore reasonable for the CAA forecast to be in the bottom half of the range.¹²²⁸

9.256 Our view is that the CAA was well within the margin of appreciation that should be afforded to it as the expert regulator when exercising its regulatory judgement to not have made adjustments at Step 3. This is especially the case given that external forecasts are not Heathrow-specific, the context of significant uncertainty arising from the pandemic and the fact that the CAA forecast is within the range of the external forecasts. These are all factors that, we consider, the CAA was entitled to consider relevant and on which to place weight in its assessment.

9.257 While, in terms of consistency, it may have been preferable for the CAA to have compared its shocked forecast to the external forecasts, it does not appear that doing so would have changed the overall picture given the size of the Shock Factor adjustment at Step 4. For example, the difference between the CAA's unshocked and shocked forecast for 2023 expressed as a percentage of 2019 numbers is approximately 0.2%, ie 92.1% compared to 91.9%.¹²²⁹ This would be

¹²²⁷ [VAA NoA](#), paragraph 4.118, [Delta NoA](#), paragraph 4.97, [BA NoA](#), paragraph 3.11.31.

¹²²⁸ [CAA Response](#), paragraph 231.

¹²²⁹ CMA's analysis of [Final Decision](#), Table 1.6. The analysis assumes a figure of 80.9 million for 2019 passenger numbers. This is obtained by dividing 74.4 million (2023 passenger numbers at Step 1) by 0.92 (given CAA set its 2023 forecast at 92% of 2019 levels at Step 1).

hardly visible on the chart presented by the CAA in the Final Decision comparing the various forecasts.¹²³⁰

9.258 Our view, therefore, is that the CAA was not wrong not to have made an upward adjustment because the CAA's unshocked forecast was in the bottom half of the range of external forecasts.

Whether the external forecasts are risk-weighted

9.259 The Airlines submitted that the CAA referred to its forecast as being risk-weighted, but it was unclear what this meant or how it differed from external forecasts.¹²³¹

9.260 The CAA explained that:

[...] a risk-weighted forecast is one that takes account of the range and probability of different outcomes. So, we know when the HAL model calculates it has its four different output scenarios, and the forecast that comes out of HAL's forecast model is the median forecast of that range. Other models that we looked at, we didn't have in as much detail to see what went into them, but if they are generating a point forecast rather than a range, they may choose to use modal forecast or the most likely rather than the median. Which, in the case of passengers at the time, we thought was likely to be higher than the median forecast.¹²³²

9.261 As we have already noted (at paragraph 9.258), our view is that the CAA was not wrong not to have uplifted its forecast following the cross-check made with these external forecasts. We consider this was the case given external forecasts are not Heathrow specific, the context of significant uncertainty arising from the pandemic and the fact that the CAA forecast is within in range of the external forecasts.

9.262 In our further view, whether the external forecasts are risk-weighted is only one of the potential considerations in assessing the comparison between these external forecasts and the CAA's. However, that is of limited relevance given the other factors we consider demonstrate that the CAA's approach was not wrong.

The AlixPartners' recommended forecasts

9.263 The Airlines submitted that external forecasts produced a more accurate forecast for 2022 than the CAA's forecast. They submitted that the mid-point of two external forecasts (the ACI World Airport Traffic Forecast and the Tourism Economics/International Air Transport Association (**IATA**) forecast) recommended

¹²³⁰ [Final Decision](#), paragraph 1.63 and Figure 1.4.

¹²³¹ [VAA NoA](#), paragraph 4.118, [Delta NoA](#), paragraph 4.97, [BA NoA](#), paragraph 3.11.31.

¹²³² Transcript of Ground C Hearing, page 75, lines 19 to page 76, line 2.

by AlixPartners (57.8 million) was much closer to the true final number for 2022 (61.6 million), than the CAA's forecast (54.9 million) and HAL's (45.5 million).¹²³³

- 9.264 We note that the two external forecasts referred to were among the list of external forecasts used by the CAA at the Final Proposal stage and one of them (the IATA forecast) at the Final Decision stage.¹²³⁴ We note the CAA decided not to use the ACI World Airport Traffic Forecast in the Final Decision because it was 'only updated infrequently and, so, in exercising our judgement, we have decided that this forecast is not current enough to be used for this Final Decision'.¹²³⁵
- 9.265 We also note that at Final Proposal stage the CAA said that it had explored a broad range of external forecasts and identified ten in addition to the HAL and AOC/LACC forecasts, seven of which it determined to be of sufficient detail, relevance, and robustness to be of use for forecasting passenger numbers for H7.¹²³⁶
- 9.266 Our view is that the CAA's approach is not wrong on the basis that, at Final Decision stage, it should have singled out two out of seven available external forecasts in Step 3 and based its view on these, but failed to do so. Had it done so, without an objective basis for doing that, the CAA is liable to have placed undue weight on that evidence, at the expense of proper regard to other relevant evidence. Such a course would have been inconsistent with the approach taken at the Final Proposal stage and would have resulted in the CAA not taking account of available information that it had considered to be informative at an earlier stage in the process.
- 9.267 We also take the view, however, that it was reasonable for the CAA to have excluded the ACI forecast from the list of external forecasts to be used at Step 3 in the Final Decision for the reasons stated by the CAA, given level of uncertainty at the time around the likely speed of recovery from COVID-19.
- 9.268 Our conclusion, therefore, is that the CAA was not wrong in not focusing on the two forecasts recommended by AlixPartners and to have excluded one of these from the set of external forecasts used at Final Decision stage.

Conclusion – external forecasts

- 9.269 In the light of the above, we find that the CAA did not err in Step 3 by not uplifting its forecast further to its cross-checks against external forecasts.

¹²³³ [VAA NoA](#), paragraph 4.118, [Delta NoA](#), paragraph 4.97, [BA NoA](#), paragraph 3.11.31.

¹²³⁴ [Final Decision](#), paragraph 1.61 and Table 1.4.

¹²³⁵ [Final Decision](#), paragraph 1.61.

¹²³⁶ [Final Proposals, Section 1](#), paragraph 1.35.

Step 4 – Shock Factor

- 9.270 In this section, we consider whether the CAA made errors in Step 4 by applying a Shock Factor of 0.87% and in applying it in full to 2023.
- 9.271 At Step 4, the CAA applied a Shock Factor to the years where the number of passengers was a forecast (2023 to 2026) as it considered that this would improve forecast accuracy for the period as a whole by taking account of asymmetric non-economic downside risks (ie events such as adverse weather, volcanic eruptions, terrorism or strike action). The size of the Shock Factor remained unchanged from that used for the Final Proposals at 0.87%.¹²³⁷
- 9.272 The Airlines submitted that the CAA was wrong to apply a Shock Factor at all, wrong to apply a Shock Factor of 0.87%, because that figure was arbitrary and unsupported by evidence, and wrong in applying it in full to 2023.¹²³⁸
- 9.273 The CAA submitted that none of the Airlines' criticisms of its Step 4 adjustment was well founded.¹²³⁹
- 9.274 We assess the Airlines' arguments in detail by considering the following topics in turn:
- (a) double counting between Step 4, and each of Step 1, Step 2, and adjustments made to HAL's cost of capital;
 - (b) whether it was appropriate to apply the Shock Factor to the whole of 2023;
 - (c) whether the selection of the 0.87% figure for the Shock Factor was sufficiently supported by evidence.

Double counting

- 9.275 The Airlines each submitted that 'Overall, the Appellant contends that there is no merit in applying any Shock Factor and this should be removed'.¹²⁴⁰ The Airlines' argument is that the application of the Shock Factor amounts to double counting of downside risk accounted for in Steps 1 and 2 and in the calculation of the cost of capital. We take these in turn below.

Step 1 and Step 2

- 9.276 The Airlines submitted that there is a potential overlap between the Shock Factor and the CAA's downwards adjustment made at Steps 1 and 2 of its

¹²³⁷ [Final Decision](#), paragraph 1.66.

¹²³⁸ [VAA NoA](#), paragraphs 4.121-4.125, [Delta NoA](#), paragraph 4.87 and 4.100-4.102, [BA NoA](#), paragraphs 3.11.35-3.11.38.

¹²³⁹ [CAA Response](#), paragraph 232.

¹²⁴⁰ [VAA NoA](#), paragraph 4.125, [Delta NoA](#), paragraph 4.102, [BA NoA](#), paragraph 3.11.38.

methodology.¹²⁴¹ With regard to Step 1, the Airlines submitted that there is double counting between Steps 1 and 4 of the risks of industrial action. With regards to Step 2, the Airlines submitted that there is double counting of macroeconomic risks between Steps 2 and 4.

9.277 The CAA submitted:

- (a) that the Shock Factor is not duplicative of Step 1, as the Shock Factor is supposed to capture any unforeseen risks to passenger numbers. The CAA explained that the prospect of industrial action at the time the CAA set its forecast was expected rather than being an unexpected shock.¹²⁴²
- (b) that the Shock Factor is not duplicative of Step 2 as the Shock Factor accounts for non-economic effects, as opposed to Step 2 which concerns economic effects.¹²⁴³

9.278 As discussed in paragraph 9.205 above, our view is that while Step 4 and Step 1 might both provide for risks associated with strike action in 2023, in practice the effect of such double counting is likely to be extremely small (and therefore de minimis). We also find that the risks associated with strike action in 2023 had a different profile to those later in the H7 period, as described in paragraph 9.206 above. Accordingly, the CAA was not wrong on this account.

9.279 With regard to Step 2, as discussed in paragraph 9.246(b) above, the CAA did not consider macroeconomic risks in Step 4, as the Shock Factor accounts, in principle, for non-economic risks only.

9.280 Our view therefore is that the Airlines have not demonstrated that there is material double counting between Step 4, and either of Step 1 or Step 2 and the CAA was not wrong on that basis.

Cost of capital

9.281 The Airlines submitted that the Shock Factor was duplicative of other adjustments made to HAL's cost of capital.¹²⁴⁴

9.282 The CAA submitted that the cost of capital does not take account of known asymmetric risk, as opposed to the Shock Factor.¹²⁴⁵

¹²⁴¹ [VAA NoA](#), paragraphs 4.121-4.125, [Delta NoA](#), paragraph 4.87 and 4.100-4.102, [BA NoA](#), paragraphs 3.11.35-3.11.38.

¹²⁴² [CAA Response](#), paragraph 232.1.

¹²⁴³ French 1, paragraph 5.112.

¹²⁴⁴ [VAA NoA](#), paragraphs 4.121-4.125, [Delta NoA](#), paragraphs 4.87 and 4.100-4.102, [BA NoA](#), paragraphs 3.11.35-3.11.38.

¹²⁴⁵ [CAA Response](#), paragraph 232.2.

9.283 Our view is that in the cost of capital the CAA provided for remuneration for symmetric risks whereas the Shock Factor is applied to correct for the skew in traffic forecasts (ie to produce an unbiased central forecast). We therefore agree with the CAA there is no interaction between the Shock Factor and the cost of capital and in the Final Decision each addressed different sources of risk. On that basis, there is no double counting between Step 4 and the cost of capital.

Conclusion on double counting

9.284 In the light of the above, our judgement is that the CMA was not wrong to apply a Shock Factor when setting its H7 passenger forecast.

Applying the Shock Factor to the whole of 2023

9.285 The Airlines submitted that it was inappropriate to apply the Shock Factor to the whole of 2023 given that the CAA's Final Decision was taken part way through the year and at the time the CAA had actual passenger data for the early part of the year and up to date forward booking data on which it should have relied.¹²⁴⁶

9.286 The CAA submitted that it would have been incorrect to apply the Shock Factor only partially for 2023. It explained that the passenger forecast for the Final Decision used actual data for the whole of 2022, but no data on passengers actually using the airport for 2023 was available at that time. The CAA therefore submitted that the whole of 2023 was subject to potential downward risks and that, therefore, the CAA's application of the Shock Factor to the whole of 2023 accounts for this.¹²⁴⁷

9.287 First, in response to the Airlines' submission we note that the CAA's forecast for 2023 passenger numbers was not based on actual 2023 data (see paragraph 9.24).

9.288 Second, that where forecasts are based on forward-looking booking data, however up-to-date this data was at the time, the resulting passenger forecasts will be vulnerable to the types of downside risk which are considered in the application of the Shock Factor.

9.289 Third, that an implication of the Airlines' argument is that the Shock Factor should not be applied for any months in a year where passenger numbers are known at the time the CAA published its Final Decision. We consider this to be inconsistent with the purpose and application, as described by the CAA, of the Shock Factor. In particular, the expectation is that the application of the Shock Factor will work in HAL's favour in years when the impact of non-economic shocks is below average,

¹²⁴⁶ [VAA NoA](#), paragraphs 4.121-4.125, [Delta NoA](#), paragraphs 4.87 and 4.100-4.102, [BA NoA](#), paragraphs 3.11.35-3.11.38.

¹²⁴⁷ [CAA Response](#), paragraph 232.3.

but that this benefit compensates them for years when the impact of such shocks is above average. The approach proposed by the Airlines would undermine this mechanism.

- 9.290 Consequently, our judgement is that the CAA was not wrong not to have accounted for any actual 2023 data beyond the cut-off date and not wrong, therefore, to have applied the Shock Factor to all its 2023 forecast.

Whether there was adequate supporting evidence for the selection of the 0.87% Shock Factor value

- 9.291 This challenge relates to the 0.87% figure selected for the Shock Factor by the CAA on the basis that the CAA used HAL's unverified calculations and the figure had no proper evidential basis.
- 9.292 At the Initial Proposals stage the CAA had proposed a Shock Factor of 1.07% based on a figure taken from HAL's RBP.¹²⁴⁸ This figure was slightly lower than the 1.2% figure that had been applied during Q6.¹²⁴⁹ At Final Proposals, the CAA had proposed a new Shock Factor of 0.87%. The CAA explained that this new figure had been selected as it was 'consistent with the updated estimate HAL applied to its RBP Update 2 forecasts'.¹²⁵⁰ In the Final Decision the CAA continued to apply a Shock Factor of 0.87%. The CAA noted that this 0.87% figure was 'a value which HAL also used for its forecast in its December 2022 Investor Report'.¹²⁵¹
- 9.293 The Airlines submitted that the selection of the 0.87% figure for the Shock Factor was unsupported by any evidence and therefore arbitrary.¹²⁵² In particular, BA submitted that 'the selection of 0.87% as the appropriate figure for the Shock Factor appears wholly arbitrary, **based upon an unvalidated calculation made by HAL...**'¹²⁵³ (emphasis added). VAA and Delta similarly submitted that the selection of 0.87% was 'not supported by any robust evidence'.¹²⁵⁴ We note that, prior to these appeals, the same concern was raised during the Final Proposals consultation.¹²⁵⁵
- 9.294 Prior to our Provisional Determination the CAA submitted that the CAA's calculation of the Shock Factor was not arbitrary, but rather based on reasonable

¹²⁴⁸ [Initial Proposals](#), paragraphs 2.40 and 2.41.

¹²⁴⁹ [CAP1103: Economic regulation at Heathrow from April 2014: Final Proposals](#), 3 October 2013, paragraph 3.20.

¹²⁵⁰ [Final Proposals](#), paragraphs 1.19, 1.27 and 1.77.

¹²⁵¹ [Final Decision](#), paragraph 1.66.

¹²⁵² [VAA NoA](#), paragraphs 4.121-4.125, [Delta NoA](#), paragraphs 4.87 and 4.100-4.102, [BA NoA](#), paragraphs 3.11.35-3.11.38.

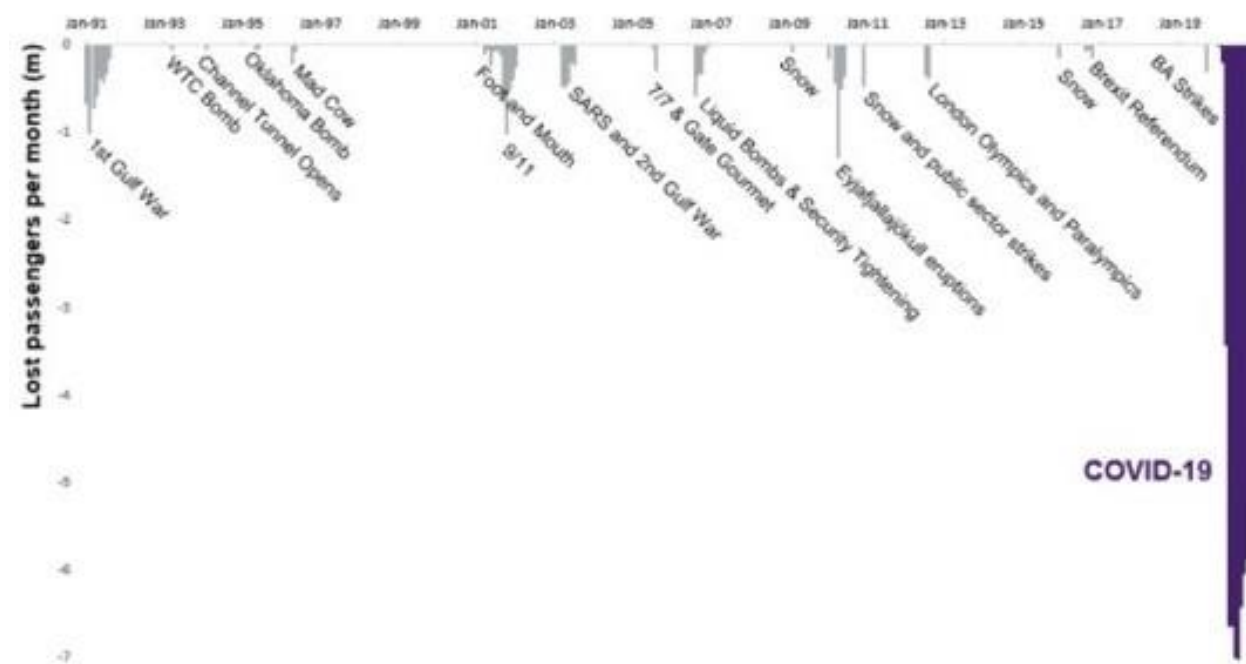
¹²⁵³ [BA NoA](#), paragraph 3.11.37

¹²⁵⁴ [VAA NoA](#), paragraph 4.124, [Delta NoA](#), paragraph 4.101.

¹²⁵⁵ For example, in its response to the CAA's final proposals, BA had submitted 'we are concerned that the CAA has simply used Heathrow's updated, proposed numbers without additional challenge' and that this risked the CAA placing reliance 'on selective information provided by HAL to justify certain cost increases'. BA, [British Airways Response to CAP2365 Economic regulation of Heathrow Airport Ltd H7 Final Proposals](#), 9 August 2022, paragraph 11.17.

evidence.¹²⁵⁶ The CAA explained that the calculation of the 0.87% figure was based on HAL's data and assumptions about the average annual impact that a series of demand shocks had had on passenger numbers in the period 1991 to date (excluding COVID-19). The CAA explained that it had seen the full list of shocks included in HAL's calculation of the Shock Factor and exercised its judgement in deciding whether the shocks feeding into the calculation were appropriate. In particular, the CAA asked that HAL remove the COVID-19 pandemic from the list of shocks to be fed into the calculation.¹²⁵⁷ The shocks events included in the calculation are shown in diagrammatic form in Figure 9.2 below (note that the COVID-19 shock was excluded).

Figure 9.2: HAL's calculated passenger impacts from historical shock events



Source: HAL's [RBP June 2021 Update](#), page 54, Figure 2

9.295 The CAA acknowledged that it had not reviewed HAL's calculation which generated the 0.87% figure.¹²⁵⁸ However, the CAA submitted that the method of calculating the Shock Factor had been established in Q6. It noted that the H7 and Q6 Shock Factors were largely based on the same historical data (Q6 was based on shock events between 1991 and 2014, the H7 Shock Factor included the data from 1991-2014 and three further small shock events that had occurred after 2014).¹²⁵⁹ The CAA further submitted that the fact that the Shock Factor in H7 was lower than the Shock Factor in Q6 (1.2%) gave the CAA a reasonable amount of

¹²⁵⁶ [CAA Response](#), paragraph 232.4.

¹²⁵⁷ CAA response to RFI H7 C001, 3 July 2023, Question 11.

¹²⁵⁸ CAA response to CMA RFI H7 C004, 9 August 2023, Question 1, paragraph 1.

¹²⁵⁹ CAA response to CMA RFI H7 C004, 9 August 2023, Question 1.

reassurance that HAL was not putting undue bias in the Shock Factor calculations for H7.¹²⁶⁰

- 9.296 When questioned as to why the CAA had not checked HAL's calculation of the 0.87% figure, the CAA submitted that it was not straightforward for CAA to accurately check the estimates and, given the relatively small size of non-covid shocks identified since Q6, 'it did not seem likely that HAL was exaggerating their effect to gain an advantage in the price control decision'.¹²⁶¹ The CAA also submitted that it considered that the size of the Shock Factor 'was within the bounds of what it would expect' and that it had therefore judged that 'it was not necessary to take further steps to check HAL's calculation of the Shock Factor'.¹²⁶²
- 9.297 In our Provisional Determination, we provisionally concluded that the CAA's selection of the 0.87% figure was insufficiently supported by evidence and was therefore wrong. We explained that we considered that the calculation and application of the Shock Factor was plainly an important component of the overall passenger forecast (and, in turn, the price control). The accuracy of its calculation was correspondingly important.
- 9.298 In response to our Provisional Determination, the CAA, notwithstanding its submissions set out at paragraphs 9.292 to 9.296 above, accepted that it
- '...was wrong to select 0.87% as the Shock Factor figure to apply to the passenger forecast, insofar as the CAA has not demonstrated fully that it had conducted an appropriate 'sense check' of HAL's method behind the calculation, both for Q6 and for H7'.¹²⁶³
- 9.299 Our conclusion, taking account of the CAA's admission and the following, is that the CAA erred because it failed properly to assess whether HAL's calculations of that figure were correct and thus failed to take account of relevant considerations and evidence and made a decision without adequate foundation in the evidence. This aspect of its decision – its selection of the 0.87% figure – was irrational. It was wrong in law.
- 9.300 We note in this connection that the relevance of the consideration – the accuracy of HAL's calculation and the need to verify it – was highlighted to the CAA during the consultation process, as set out above. The CAA neither did that, nor as far as

¹²⁶⁰ Transcript of Ground C Hearing, page 86, lines 19 to 25, and page 86, line 25 to page 87, line 6. CAA response to CMA RFI H7 C004, 9 August 2023, Question 1a

¹²⁶¹ CAA response to CMA RFI H7 C004, 9 August 2023, Question 1.a., paragraph 3.

¹²⁶² CAA response to CMA RFI H7 C004, 9 August 2023, Question 1.b., paragraph 8.

¹²⁶³ CAA Response to PD, paragraph 31.

can be ascertained from the Final Decision (which makes no mention of that response) did it have regard to and take into account that response.¹²⁶⁴

- 9.301 We have taken into account HAL's representations in response to our Provisional Determination, that the CAA validated the Shock Factor calculation in Q6 and that it was the product of consultation and validation in Q7. In respect of both, we note again the CAA's admissions (paragraphs 9.295 to 9.298). We also note that, as described in HAL's representations, what the CAA considered and consulted upon in Q6 and H7, respectively, was 'the reasons for' the Shock Factor and 'the relevant events that should be taken into account,' and 'the scope of events to be included'. The concept of the Shock Factor was consulted upon extensively, but – given that HAL's calculations were not shared with the CAA – it is clear that the calculations themselves, and (contrary to HAL's submissions) the methodology underpinning those calculations, were not properly checked and verified by the CAA on either occasion, as it acknowledges.¹²⁶⁵
- 9.302 In making our assessment, we also take into account that it is true that the 0.87% figure the CAA selected was significantly lower than the 1.2% figure which had applied during Q6, but we do not share the view that the CAA expressed prior to our Provisional Determination that the 0.87% figure is necessarily 'within the bounds' of what would be expected.¹²⁶⁶ To come to such a view the CAA would have needed at least to have conducted some basic 'sense check' of HAL's methodology behind the calculation. However, no such validation check was conducted. Nor has the CAA been able to point us to any similar check which might have been conducted to support the selection of the 1.2% figure during Q6. Notwithstanding HAL's submissions to the contrary,¹²⁶⁷ the CAA has acknowledged both shortcomings. The omission on the part of the CAA to conduct any check on the calculation methodology is particularly unfortunate given the concern regarding the reliability of the 0.87% figure had been raised during the Final Proposals consultation process.
- 9.303 A further factor we have considered is that, in response to our Provisional Determination, HAL submitted to us evidence (which had not previously been provided to, or sought by, the CAA) which HAL said showed that the 0.87% Shock Factor level was not wrong.¹²⁶⁸ Further, HAL submitted that even if the CAA had

¹²⁶⁴ We also note consider that a failure– in line with the obligations set out in *Coughlan* at paragraph 9.43 above – to ensure that the product of consultation was conscientiously taken into account when taking the decision to apply a 0.87% Shock Factor may involve a procedural error. We do not consider this shows the consultation as a whole was not transparent or flawed: the Airlines were able to respond intelligently to the CAA's proposed approach, the error occurred in relation to the CAA's failure to take appropriate steps following that response.

¹²⁶⁵ HAL Response to PD, paragraphs 72 – 81.

¹²⁶⁶ CAA response to CMA RFI H7 C004, 9 August 2023, Question 1.b., paragraph 8.

¹²⁶⁷ HAL submitted that the PD was incorrect in that the CMA's reasoning was inaccurate insofar that the CAA did carry out sense checks (HAL Response to PD, paragraphs 72 and 73). The CAA submitted that it did not perform any checks of the calculation methodology (see paragraphs 9.295 to 9.298).

¹²⁶⁸ HAL Response to PD, Annex C3, Guide to the 0.87% Shock Factor.

erred procedurally, we should confirm the 0.87% Shock Factor figure.¹²⁶⁹ This evidence was not considered by the CAA at any point during the H7 consultation process when it appears to us that it reasonably could have been. That being so, it appears to us that the material may not be admissible in these appeal proceedings as it may fail to satisfy the condition for admissibility under paragraph 23(3)(a) of Schedule 2 to the Act.¹²⁷⁰

9.304 In any event, even assuming the afore-mentioned evidence were admissible, given the late stage at which this material was put to us (long after close of written pleadings and the hearings), and given the statutory deadline to which we are subject (which means there is not time to ensure that the material is properly scrutinised during these appeal proceedings) we do not consider that we could fairly reach a view on the interpretation of that evidence. We therefore decline to do so. Accordingly, we do not consider that we are in a position to conclude that the 0.87% Shock Factor level was not wrong.

9.305 We are also of the view that the CAA's error in law here is material.¹²⁷¹ We have come to this view based on the following three factors:

- (a) First, the error has the potential to have a significant impact on the overall level of the price control set by the CAA. We are not in a position to say whether the 0.87% figure was definitively wrong or not wrong in a mathematical sense, nor to what extent. It is plausible that on closer inspection the 0.87% figure may transpire to be too high or, possibly, too low, perhaps significantly so. Equally plausibly, it may be that HAL's calculation of 0.87% was appropriate. We cannot be assured, for example, that the correct figure is not significantly lower than 0.87% which would have an effect on the overall level of the charge control. If, for example, the correctly calculated figure was 30% lower, the effect on the passenger forecast would be an increase of around 0.8 million to around 376.3 million, and on the price control would be a decrease of around 5 pence to £23.01.¹²⁷² The potential, and unknown but plausible, magnitude of the error is an important factor in why we regard it as material.
- (b) Second, the error also has the potential to have a significant effect on future price controls. That is, while we would not expect a regulator to repeat the practice of making decisions based on untested evidence, if we were to consider the error not to be material, it would provide vindication of that approach and could lead to the use of the H7 Shock Factor figure as the

¹²⁶⁹ HAL Response to PD, paragraphs 82 to 84.

¹²⁷⁰ For the relevant wording of the statute see paragraph 9.136 above.

¹²⁷¹ Regarding factors relevant to materiality, see the Legal Framework at paragraphs 3.47–3.55.

¹²⁷² Source: CMA calculation (Note that the estimated impact of a 30% reduction in the Shock Factor on the price control does not take account of the impact higher passenger numbers may have on costs and other sources of revenue).

starting point for any such factor in future price controls (as was the case with the Q6 figure in the H7 consultation process).

- (c) Third, in our Provisional Determination we explained that we did not consider that the cost of addressing the error would be disproportionate to the value of the error because this would not entail the CAA having to conduct its passenger forecasting exercise afresh. We explained that our understanding was that the CAA could sense check the Shock Factor, and – if necessary – apply a revised Shock Factor to the unshocked passenger forecast as it stood at the time of the Final Decision. In their responses to the Provisional Determination, none of the Parties disagreed with our viewpoint that remittal would not entail the reopening of the entire passenger forecasting exercise. Further, the CAA expressed a preference for us to remit the matter back to it.¹²⁷³ HAL submitted that we should confirm the 0.87% Shock Factor level, but as we explained at paragraph 9.304 above, we do not consider that it would be possible to do so in the remaining time available. Accordingly, we remain of the view that the cost of addressing the error via remittal would not be disproportionate.

9.306 We also note, in the context of a remittal, that, as we describe in paragraph 9.246(b) above, the CAA erred in failing to verify the calculations comprising the Shock Factor, not as to the shock events included in its scope. Remittal provides the CAA with an opportunity to sense check HAL's calculations and to ensure that in practice the calculation accurately and appropriately reflects the events included within that scope.

9.307 We have taken into account that, in their response to our Provisional Determination, the Airlines submitted that our conclusion that the Post-Decision Passenger Data was inadmissible (see paragraph 9.141 above) was inconsistent with the determination that the failure to verify the Shock Factor was a material error.¹²⁷⁴ The Airlines compared the 1.8 million difference in passenger numbers in the inadmissible data with the 0.8 million difference in our illustrative example source at paragraph 9.305(a) above.

9.308 We disagree with this submission. The scale of the potential error is only one factor which led us to conclude that the error in respect of the Shock Factor was material. It is also relevant that the error might have an impact on future price controls and was not disproportionate to correct. Further, the 0.8 million figure was illustrative only, the true scale of the error might be greater. It is this uncertainty which contributes to its materiality as we cannot be assured it is not trivial. By contrast, the fact that the overall passenger forecast as at mid-2023 may be 1.8 million too low for that year, and which is one factor in the assessment of the

¹²⁷³ CAA's Response to PD, paragraph 39.

¹²⁷⁴ Airlines Response to PD, paragraph 4.15.2.

materiality of that point, does not necessarily tell us that the multi-year passenger forecast overall is wrong.

Conclusion – Shock Factor

9.309 In the light of the above, our judgement is that, when setting its H7 passenger forecast:

- (a) the CAA was not wrong in principle in applying a Shock Factor to the forecast years 2023 to 2026 and it did not provide for any material double-counting; and
- (b) the CAA was not wrong to apply a Shock Factor to the whole of 2023; but
- (c) the CAA was wrong in law to select 0.87% as the level of the Shock Factor to be applied to the passenger forecast because it failed properly to validate whether HAL's calculations of that figure were correct and thus failed to take account of relevant considerations and evidence and made a decision without adequate foundation in the evidence.

9.310 The latter of those findings is limited in this sense. It is a finding that the CAA was wrong to select 0.87% as the Shock Factor figure to apply to the passenger forecast that, as set out in this determination, we do not otherwise find to have been wrong. We only find the Final Decision to have been wrong insofar as it comprised the selection of the 0.87% level of the Shock Factor to be applied.

Overall conclusions on the 4-Step Errors

9.311 In the light of our detailed review and assessment of the Parties' submissions and supporting evidence, and as set out above, we find that, save in one respect (see below), the Final Decision was not wrong because it was based on errors of fact, was wrong in law, or an error was made in the exercise of a discretion, in making the four step adjustments when setting the passenger forecast for the H7 control period.

9.312 We determine that, in making the four step adjustments the CAA:

- (a) In Step 1, did not ignore the impact of Local Rule A and threatened capacity restrictions: (i) in coming to a conclusion for passenger numbers in 2022; (ii) in constructing the appropriate baseline of demand for 2023 onward, and so make errors of fact on which the Final Decision was based or was wrong in law.
- (b) In Step 1, CAA did not make errors of fact on which the Final Decision was based, nor was it wrong in law and nor did it make an error in the exercise of

a discretion in that it: (i) found that 2023 traffic levels would be 92% of 2019 levels; (ii) treated forward booking data for 2023 as an upper bound.

- (c) In Step 2, the CAA did not make errors of fact on which the Final Decision was based nor was it wrong in law because it downgraded its passenger forecast for 2023 in response to macroeconomic forecasts.
- (d) In Step 3, the CAA did not make errors of fact on which the Final Decision was based, nor was it wrong in law and nor did it make an error in the exercise of a discretion in that it did not uplift its forecasts in light of its cross checks against external forecasts.
- (e) In Step 4, the CAA did not make errors of fact on which the Final Decision was based nor was it wrong in law in that it applied a Shock Factor in full to 2023 despite some months of 2023 having already elapsed.

9.313 We do not, therefore, allow the appeal on any of the above bases and, in relevant respects, confirm the Final Decision.

9.314 The Final Decision was, however, in our judgement, wrong in law insofar as it comprises the selection of the figure of 0.87% as the Shock Factor to be applied to the passenger forecast. We determine that the CAA erred because it failed properly to assess whether HAL's calculations of that figure were correct and thus failed to take account of relevant considerations and evidence and made a decision without adequate foundation in the evidence. This part of its decision – its selection of the 0.87% figure - was irrational. Accordingly, we allow the appeal in respect of this part of the Final Decision.

Asymmetric Risk Allowance Error

9.315 The penultimate matter we turn to concerns a deficiency – which the CAA accepts occurred – in the calculation of HAL's revenue requirement resulting from the CAA failing to update the allowance for asymmetric risk to reflect the higher outturn traffic in 2022. This failure meant the CAA over-estimated HAL's revenue requirement by around £7 million.¹²⁷⁵ The Airlines alleged, and we have accordingly considered whether, the failure meant the Final Decision was wrong in that it was based on errors of fact because, in failing to update the allowance for asymmetric risk to reflect the higher outturn passenger traffic in 2022, the CAA relied on flawed evidence and assumptions. They also alleged, and we have considered whether, the Final Decision was wrong because the CAA was wrong in law by not so updating the allowance for asymmetric risk and thus failed to take account of relevant considerations.

¹²⁷⁵ [VAA NoA](#), paragraphs 4.128-4.4.130, [Delta NoA](#), paragraphs 4.106-4.108, [BA NoA](#), paragraphs 5.10.1-5.10.5.

- 9.316 Whilst the CAA did not dispute that HAL's revenue requirement was overstated by around £7 million, it contended that this deficiency is not material. The CAA also submitted that it would not be appropriate to correct the revenue requirement in isolation, but that each input variable for 2022 outturn data should be corrected on a consistent basis.¹²⁷⁶
- 9.317 We note that adjusting downwards HAL's revenue requirement by £7 million as proposed by the Airlines would reduce the average passenger charge for H7 by less than 0.1% (from £23.06 to approximately £23.04).¹²⁷⁷
- 9.318 Our determination is that the deficiency in relation to the Asymmetric Risk Allowance is so small as to be immaterial. It is insignificant in size, it is one-off- in nature and therefore will have no impact on future price controls, and nor is it an error on a point of principle that might have wider significant for other regulatory cases.¹²⁷⁸
- 9.319 Accordingly we do not find the Final Decision to be wrong on this account: it was not wrong as a matter of fact or law as contended by the Airlines.

Overall assessment of passenger forecast

- 9.320 We have also lastly considered, in response to the Airlines' submissions on the Provisional Determination, the appropriateness of CAA's passenger forecast 'in the round.' That is, in the light of the errors and shortcomings we have identified and any cumulative effect they may have.
- 9.321 In that connection, we:
- (a) take account of the uncertain context in which the CAA made its forecast, as described in paragraphs 9.3 and 9.4 above;
 - (b) observe, as set out in paragraph 9.4 above, that, in that uncertain context, the CAA's forecast was less than 5% lower than the Airlines', and significantly higher than HAL's; and
 - (c) note that, while there may have been an immaterial element of double counting between steps 1 and 4 of the CAA's four-steps, the only error we have found in respect of the otherwise correct forecast was in respect of the level of the Shock Factor to be applied thereto.

¹²⁷⁶ Hoon 2, paragraph 29.4.

¹²⁷⁷ [Final Decision](#), Summary, paragraph 64 and Table 7.

¹²⁷⁸ See the discussion of materiality in Chapter 3 – Legal Framework.

9.322 In that context, there is no particular cumulative effect to which we consider we should have regard. Nor, in our view, was CAA's passenger forecast wrong on the basis of any 'in the round' assessment.

10. Ground D: AK factor

Introduction

10.1 This chapter covers HAL's allegation that the CAA erred by including an additional correction factor in respect of the years 2020 and 2021, in the form of the AK factor in HAL's H7 licence conditions, and specifically one which had the effect of treating HAL as having over-recovered revenue in relation to each of development capex, business rates and the passenger mix adjustment.

Background to the standard K factor

10.2 The CAA's approach to setting the price control involves capping passenger charges at the maximum revenue yield per passenger (**Mt**) in each year of the price control. The price cap is designed to allow the recovery of efficiently incurred costs and an appropriate return on capital.

10.3 This price cap is based in part on assumptions, which may turn out differently from the figures estimated. Prior to the start of each regulatory year, HAL forecasts the relevant components of the maximum yield according to the formula in the Licence, and then sets charges in a way that best secures that the average yield per passenger does not exceed the value of Mt. In practice, the 'correct' value of Mt is only known with a time lag, when all components of the formula can be calculated using final information.¹²⁷⁹

10.4 HAL's Licence therefore contains, and has contained since the Q4 price control in 2006,¹²⁸⁰ a condition providing for a correction factor (or K factor) intended to 'true up' any over or under-recovery of revenue that has arisen in a prior year (typically two years prior) due to differences between outturn and assumptions.¹²⁸¹ The CAA described the main purpose of the K factor in its Response. The CAA referred to the mechanism as a symmetrical (and in that sense neutral) mechanism which:¹²⁸²

- (a) where HAL has over-recovered revenues compared with the maximum allowed yield, returns the over-recovery in the form of lower airport charges two years later; and
- (b) where HAL has under-recovered revenues compared with the maximum allowed yield, allows HAL to recoup the shortfall through higher airport charges two years later.

¹²⁷⁹ Toal 2 paragraphs 3.3-3.4.

¹²⁸⁰ Economic regulation of Heathrow Airport: H7 Final Decision', CAP2524, March 2023 (Final Decision) (see: [Final and Initial Proposals for H7 price control | Civil Aviation Authority \(caa.co.uk\)](#)), Section 3, paragraph 14.31

¹²⁸¹ [HAL NoA](#), paragraph 268.

¹²⁸² Toal 2 paragraph 4.2.

- 10.5 According to the CAA, under the K mechanism over-recovery occurs in circumstances when the outturn yield per passenger (defined as outturn airport charge revenue divided by outturn passenger volume) exceeds the level specified in the price cap (referred to as the maximum allowable yield Mt in the licence).¹²⁸³
- 10.6 There are three main factors which may result in the maximum allowable yield Mt differing from the forecast value used to set charges, giving rise to a positive or negative value of the K factor. These are the development capex adjustment, the business rates adjustment, and the passenger mix adjustment (a brief description of each of these factors is set out below). The development capex and business rates adjustments are ‘add-ons’ to the standard ‘building blocks’ approach used in regulatory price controls, allowing a timelier adjustment to prices to reflect actual development capex and business rates compared with forecast.¹²⁸⁴

Development capex (Dt) adjustment

- 10.7 When setting HAL’s price control, the CAA includes an allowance for financing costs (ie the WACC) on the amount of capex which is expected to progress from development to core during the price control period. In the absence of any in-period adjustment mechanism, HAL could potentially benefit from capex being lower and/or undertaken at a later point in time than had been assumed when the price control was set, because it would have been allowed to set its charges aimed at recovering financing costs that it did not then, in fact, face. Alternatively, HAL could potentially face a disincentive to accelerate/increase capex because charges would not reflect the financing costs associated with the additional capex until the next price review.
- 10.8 HAL’s charge control takes account of this by including an adjustment term (Dt) in the formula which establishes its maximum allowed yield per passenger in year t, where Dt is the value of financing costs associated with the difference between the ‘development capex’ assumed within the price control and the capex HAL did ultimately undertake (which could be lower or higher than forecast). The CAA told us that this term had been introduced in the Q6 price control given the need for flexibility in HAL’s capital investment plan and it continues to apply for H7.¹²⁸⁵

Business rates (BRt) adjustment

- 10.9 There is a similar adjustment for business rates, but here there is a partial pass-through of costs if they are higher than assumed, or a partial return of the savings should the outturn level of business rate costs be lower than assumed. At the time the Q6 price control was set, a national revaluation of business rates for

¹²⁸³ Toal 2, paragraph 4.5.

¹²⁸⁴ Toal 2, paragraph 7.6.

¹²⁸⁵ Toal 2, paragraph 7.2.

commercial property was anticipated to take place in 2017. As there was some uncertainty over the level of business rates that HAL would be required to pay from 2017 onwards (HAL estimated at that time that it would be required to pay a higher rate than the CAA's estimates indicated), a BRt term was incorporated in the Licence for the Q6 period. The Q6 decision implemented an 80% sharing with customers of any differences between actual and allowed costs, with 20% retained by HAL so that it bore some risk of cost increases and had an incentive to reduce its business rates liability. This was symmetrical, so 80% of any reduction in business rates was passed to customers in the form of a lower price cap, with the potential for the opposite to occur. In the event, HAL's actual business rates were lower than anticipated when set at Q6. When the interim price caps for 2020 and 2021 were concluded, although by that point the actual cost of business rates was known, the 'over-allowance' and the corresponding BRt adjustment term were retained. The BRt term does not apply for H7 as no revaluation is envisaged in this period.

Passenger mix adjustment

10.10 The third component relates to a true-up adjustment for the outturn passenger mix, which may lead to actual revenues from HAL's suite of individual airport charges differing from the price cap. Each year HAL will make assumptions on how the airport is used, by how many passengers, by passenger mix (eg long-haul or short-haul) and where it sources its revenue from (eg Air Traffic Movements (**ATMs**), aircraft parking, size of planes, environmental standards of planes, short or long-haul destination of planes etc). Again, this true-up ensures that actual revenues on a per passenger basis do not exceed the CAA's price cap.

Final Decision on the AK factor

10.11 The calculation of the (interim) price caps for 2022 and 2023 did not include a K factor adjustment term because of the use of the simplified interim price caps for those years.¹²⁸⁶ As a result, no correction was therefore applied in respect of any deemed over or under-recovery in the years 2020 and 2021.

10.12 The Final Decision included an additional mechanism (through the **AKt term**) designed to true-up HAL's revenues from 2020 and 2021 to align those revenues with what HAL should have recovered had its revenues been in line with the allowed yield under the price control in those years.¹²⁸⁷ This mechanism was known as the 'additional correction factor', or **AK factor**.

10.13 HAL's passenger numbers fell sharply in 2020 and recovered only slowly in 2021. In response to the lower passenger numbers, HAL significantly reduced its capex

¹²⁸⁶ [Final Decision](#), paragraph 14.29.

¹²⁸⁷ [Final Decision](#), paragraph 14.28.

spend over the same period. When considering the application of the AK factor mechanism, the CAA decided that HAL's actual revenues per passenger had exceeded the allowed yield per passenger during that period. The CAA found that in 2020 HAL recovered around £91 million and in 2021 around £74 million more than it should have done (on the basis of the per passenger charge) which it stated in the Final Decision was largely because of the mismatch between its forecast passenger numbers and those that actually used the airport. As a result, the CAA decided that HAL had recovered around £166 million more revenue than it should have done under the price control for those two years, notwithstanding the impact of the COVID-19 pandemic. The CAA said this was also an effect of the increased proportion of HAL's revenues that came from take-off/landing and parking charges in those years when passenger numbers were significantly reduced.¹²⁸⁸

- 10.14 The CAA said the AKt term effects the adjustments needed to take account of the revenue entitlements and obligations HAL was subject to in regulatory years 2020 and 2021. The CAA said that if the AKt term was not included in the price control, there would be no mechanism to address this issue. This term, the CAA stated, reflects normal regulatory practice and is consistent with the CAA's approach to 'truing up/down' over- or under recovery of the allowed yield as against the actual revenues collected by the airport used at least since the start of Q4.¹²⁸⁹
- 10.15 The CAA decided that this term was necessary to protect consumers against windfall gains/losses arising from a divergence between the forecast and actual number of passengers at the airport. It also said that this was not retrospective as it secured that the revenues that HAL generated in those years align with the price control obligations it was subject to at that time.¹²⁹⁰
- 10.16 As set out in chapter 5 (paragraph 5.43), the CAA considered the case for a COVID-19 related RAB adjustment in 2020 and 2021, noting that the impact of the pandemic had created exceptional circumstances and that it had recognised the need to consider how the regulatory framework should change in response to these challenges.¹²⁹¹ In doing so, it considered HAL's likely losses in 2020 and 2021 (and where the risk in relation to passenger volumes laid). It decided that an adjustment of £300 million would be appropriate given its statutory duties to protect consumers and have regard to HAL's financeability (but not to cover losses relating to the fall in passenger numbers as a result of the pandemic, the passenger volume risk having generally been borne by HAL's investors). The CAA did not consider that a further adjustment to reduce HAL's previously established

¹²⁸⁸ [Final Decision](#), paragraph 14.30.

¹²⁸⁹ [Final Decision](#), paragraph 14.31.

¹²⁹⁰ [Final Decision](#), paragraph 14.32.

¹²⁹¹ [CAA October 2020 Consultation](#), paragraph 13.

obligations to pay back the over recovery of revenue it had made would be appropriate or consistent with the CAA's statutory duties.¹²⁹²

- 10.17 The CAA said that it had considered whether introducing the term would have an unduly negative impact on the notional company's ability to finance its activities and it considered that it would not have such an effect. The CAA conducted stress testing on the Final Decision and found that the adjustment under the AKt term had a materially smaller impact than the reduction in passenger numbers modelled in its stress test. Therefore, the CAA was satisfied that the stress test scenario would be financeable, and it was confident that the AKt term would be financeable.¹²⁹³
- 10.18 The CAA stated that the most significant difference from the usual 'Kt' term was that it allowed HAL to spread these adjustments over a number of regulatory years. This was implemented so that HAL could decide to bring forward or push back the amount of this over-recovery that it passes through into charges in a given year during H7. The CAA set out that this provided HAL with a degree of extra flexibility to assist in managing financeability issues.¹²⁹⁴
- 10.19 HAL objected to the inclusion of the AKt term, including on the grounds of lack of consultation. In the Final Decision, the CAA set out that the statutory requirement for consultation was satisfied by the inclusion of this term in the Final Proposals. The CAA considered HAL's comments on this provision and decided that this provision was in the interests of consumers for the reasons set out in the Final Proposals and its Final Decision.¹²⁹⁵
- 10.20 The CAA therefore decided to include in HAL's Licence as part of the H7 price control a condition¹²⁹⁶ applying the AK factor to the over-recovery it concluded HAL had made in respect of each of capex, business rates and the passenger mix adjustment for 2020 and 2021.
- 10.21 HAL has appealed against the decision to include that condition in its Licence. It contended in its NoA¹²⁹⁷ that the Final Decision had resulted in an over-recovery adjustment of £258 million, higher than the £166 million that the CAA had quoted in its Final Decision. In the CAA's Response,¹²⁹⁸ it agreed with this revised figure. BA and Delta (the **Airline Interveners**)¹²⁹⁹ also agreed that the AK factor adjustment was £258 million.

¹²⁹² [Final Decision](#), paragraph 14.33.

¹²⁹³ [Final Decision](#), paragraph 14.34.

¹²⁹⁴ [Final Decision](#), paragraphs 14.31 and 14.35.

¹²⁹⁵ [Final Decision](#), paragraph 14.37.

¹²⁹⁶ Licence Condition C1.22 and C1.23

¹²⁹⁷ [HAL NoA](#), paragraph 274.

¹²⁹⁸ [CAA Response](#) paragraph 236 and Toal 2, paragraph 6.2 both refer to an over-recovery of £253 million. This is in 2020 CPI-real price base and is equivalent to the £258 million figure provided by HAL.

¹²⁹⁹ [BA, Application for permission to intervene and Notice of Intervention \(BA Nol\)](#), 22 May 2023, paragraph 4.1.14(e); [Delta, Application for permission to intervene and Notice of Intervention \(Delta Nol\)](#), 22 May 2023, paragraph 4.14 (e).

Issues to determine

Overall statutory question for determination

10.22 HAL contended that the inclusion in its Licence of an additional correction factor in respect of the years 2020 and 2021, in the form of the AK factor, is ‘unreasonable and therefore wrong’ and that the adjustment was ‘neither required nor justified’.¹³⁰⁰

10.23 Accordingly, the overall statutory question for our determination is:

Was the Final Decision wrong because it was wrong in law, or because the CAA made an error in the exercise of a discretion, in applying the AK factor mechanism in respect of 2020 and 2021?

Subsidiary questions for determination

10.24 Taking account of HAL’s submissions, the subsidiary questions for our assessment, in order to determine the overall statutory question, are whether the CAA was wrong in law or in the exercise of a discretion:

- (a) to apply the AK factor in light of the losses HAL made in 2020 and 2021?
- (b) to include an adjustment that accounts for an underspend on capex in 2020 and 2021?
- (c) to include an adjustment that accounts for an over recovery caused by HAL’s business rates out-turning at levels lower than the Q6 allowance?
- (d) to include an adjustment for an over-recovery in per passenger charges in 2020 and 2021 as a result of the airlines operating flights at Heathrow with fewer numbers of passengers than before the COVID-19 pandemic?

10.25 In the remainder of this chapter, we describe the submissions and evidence put forward by the parties on this ground. The submissions are grouped thematically under each of the subsidiary questions. We first summarise the submissions put forward by HAL in support of the legal grounds of appeal above. We then summarise the CAA’s Response. We have then also included submissions from BA and Delta, the interveners on this ground. Following the submissions, we then set out our assessment and determination of the overall statutory question. We have set out our determination on relief for this ground in chapter 16.

¹³⁰⁰ [HAL NoA](#), paragraphs 275 and 287.

Parties' submissions

HAL's submissions

- 10.26 HAL submitted that the CAA was wrong to apply the AK factor to the years 2020 and 2021 for several reasons. The purpose of a K factor is to correct for any over or under-recovery of revenue relative to efficiently incurred costs (as reflected by the per passenger yield cap). It is therefore ultimately intended to avoid excess returns.¹³⁰¹ HAL submitted that it is wrong to think of the excess yields identified by a mechanical application of the K factor formula automatically as over-recovery. HAL contended that this mechanism is crude in that it works sufficiently well in years where deviations between the plan and outturn are small. However, this mechanism breaks down when there are large deviations between plan and outturn, such as very low passenger numbers.¹³⁰²
- 10.27 HAL submitted that it did not earn excess returns in 2020 and 2021; rather it experienced 'catastrophic' financial performance due to the COVID-19 pandemic. HAL said that an AK factor adjustment of £258 million would equate to over 25% of all aeronautical revenues received by HAL in 2020 and 2021,¹³⁰³ which had been almost 70% below target, and would almost unwind the effect of the CAA's £300 million RAB adjustment.¹³⁰⁴
- 10.28 HAL also stated that the AK factor was retrospective and would require HAL to return revenues it never earned, or revenue that was rightly raised to recover actually incurred costs.¹³⁰⁵
- 10.29 HAL submitted that for the reasons set out in its NoA, a retrospective revenue reduction across the years 2020 and 2021 by means of the AK factor was neither required nor justifiable.¹³⁰⁶

Development capex Dt adjustment

- 10.30 HAL submitted that the capex adjustment was based on the difference between incurred and allowed capex, but that the CAA made no assessment of whether the original capex budget remained appropriate in the light of revised passenger numbers, or whether there were sufficient outturn revenues available against which to set the expenditure. HAL contended that this assessment is not generally necessary where, as in a 'normal' year, the deviations in outturn are small and previously set capex budgets generally remain appropriate. However, HAL set out

¹³⁰¹ [HAL NoA](#), paragraph 275.

¹³⁰² [HAL NoA](#), paragraphs 270 and 277.

¹³⁰³ AK factor adjustments were £91.4m in 2020 and £166m in 2021 (£258 million total). HAL's aeronautical revenues from pax charges were £572m in 2020 and £466m in 2021.

¹³⁰⁴ [HAL NoA](#), paragraphs 275 and 276.

¹³⁰⁵ [HAL NoA](#), paragraph 287.

¹³⁰⁶ [HAL NoA](#), paragraph 287.

that the logic behind the calculation breaks down in extreme years where large deviations in revenue clearly require adjustments to expenditure as well that cannot be accommodated by the AK factor formula.¹³⁰⁷

- 10.31 HAL submitted that in 2020 and 2021, lower capex arose because of lower passenger numbers and large revenue reductions. Amongst other measures, HAL chose to delay £1 billion of capex¹³⁰⁸ and it submitted that it was clearly right for it not to continue its capex programme apace, which would otherwise have risked financial distress of the business.¹³⁰⁹
- 10.32 HAL submitted that the CAA was wrong in applying the AK factor to the capex underspend because the capex adjustment was intended to account for the return on any over or underspend in capex relative to plan, to prevent an over-recovery of revenue. The AK factor assumes that there was an over-recovery related to return on capex irrespective of the actual level of revenue achieved. In 2020 and 2021, returns on RAB were negative and, therefore, HAL submitted that there cannot have been any return on capex, but the formula insists that the non-existent return should be clawed back. HAL contended that even if revenue had been zero, the mechanism would still have identified HAL as having over recovered. By applying the AK factor to 2020 and 2021, the CAA failed to recognise that these were not 'normal' years.¹³¹⁰

Business rates BRt adjustment

- 10.33 HAL submitted that the CAA was wrong to apply the AK factor to recover excess business rates of £75 million because the revenue adjustment is intended to ensure that there is no over-recovery of revenue for costs that Heathrow does not incur. At the 2017 revaluation, HAL's business rates liabilities fell significantly below the assumed level set at Q6, out-turning at levels lower than assumed at Q6. It was agreed at the time of the Q6 settlement that HAL would retain 20% of the benefit and 80% would be returned in the form of lower charges to airlines. This adjustment remained in place, but HAL submitted that it should not do so as HAL's reduced revenue in 2020 and 2021 meant HAL did not over-recover or benefit from windfall gains.¹³¹¹

Passenger mix adjustment

- 10.34 HAL submitted that the CAA was wrong to apply the AK factor to per passenger rates because this adjustment reflects the outturn mix of landing and departure

¹³⁰⁷ [HAL NoA](#), paragraph 280.

¹³⁰⁸ HAL, Response to CMA RFI H7 D001, 30 June 2023. HAL told us its underspend on development capex was £1.76bn in the period 2020-2021, £552m in 2020 and £1.209bn in 2021.

¹³⁰⁹ [HAL NoA](#), paragraph 283.

¹³¹⁰ [HAL NoA](#), paragraphs 280-283.

¹³¹¹ [HAL NoA](#), paragraphs 284 and 285.

charges differing from the forecast mix used to set the charges. Airlines operated flights with few passengers on board during 2020 and 2021 and the minimum departure charges that airlines paid meant that the charge per passenger was unusually high. The minimum departure charge is specifically designed to recover costs in the case of low passenger numbers. Operating the flights was a commercial decision made by the airlines and the minimum departure charges were paid to cover costs related to the flights that HAL actually incurred. HAL submitted that given the overall loss of revenue it would be inappropriate to return these additional charges.¹³¹²

Response to our Provisional Determination

10.35 In response to our Provisional Determination that the CAA erred in law and in the exercise of discretion in the way that it mechanically applied the AK factor, HAL agreed.¹³¹³ HAL welcomed the rigorous work undertaken by the CMA in relation to remedies for the AK factor.¹³¹⁴ We have further outlined HAL's submissions on relief in chapter 16 and have taken account of these submissions in making our final determination.

CAA Response

10.36 The CAA submitted that in 2020 and 2021 HAL recovered more money through its airport charges than was allowed by its price control. In 2020, HAL recovered around £91 million more and in 2021 around £162 million more than it should have done, largely as a result of a mismatch between its forecast of passenger numbers and those that actually used the airport. The CAA submitted that HAL recovered around £253 million more revenue (in 2020 Consumer Price Index (**CPI**)-real prices) than it was entitled to under the price control for those two years, notwithstanding the impact of the COVID-19 pandemic.¹³¹⁵ As we noted in paragraph 10.21 above, there is no disagreement between the Parties on the amount of the over-recovery (were the AK factor to be applied as the CAA decided).

10.37 The CAA contended that the over-recovery or under-recovery of price control revenue is not unusual. The CAA submitted that it is normal regulatory practice to include a correction factor mechanism that provides for an appropriate adjustment (in the case of over-recovery through lower charges in future years and in the case of under-recovery through higher charges in future years). It is also normal regulatory practice for the correction factor to roll-over from one price control period to another. Otherwise, the licensee would have incentives to overcharge

¹³¹² [HAL NoA](#), paragraph 286.

¹³¹³ HAL, Response to PD, 22 September 2023 (**HAL Response to PD**), paragraph 6.

¹³¹⁴ HAL Response to PD, paragraph 7.

¹³¹⁵ [CAA Response](#), paragraph 236. This is higher than the original H7 Final Decision figure of £166 million. The CAA acknowledged the higher figure was the correct amount further to HAL's NoA.

consumers, and consumers' interests would be damaged by the failure to return the over-recovery of revenue.¹³¹⁶

- 10.38 The CAA submitted that its intervention to ensure that HAL was held to its Q6 price cap was no different to the actions that the CAA had taken on multiple previous occasions. The K factor had been a regular feature of HAL's charges calculation over a period of more than 15 years (since at least the start of Q4 in 2003/04). In each price control, the charges calculation formula had changed to reflect policy changes, but the K factor, in its original form, has always been there.¹³¹⁷ The CAA submitted that based on this clear track record, the only reasonable expectation that HAL and its investors could have formed was that the same true-up mechanism would apply to any over or under-recovery of airport charges revenues in the years 2020 and 2021.¹³¹⁸
- 10.39 The CAA submitted that the question of whether HAL should be entitled to recoup some of its losses in 2020 and 2021 was a different question. The CAA was entitled to consider this issue independently from its enforcement of the price cap. The CAA's position on this matter was set out in the series of decisions it made on the adjustment of HAL's RAB, with the CAA ultimately finding that HAL should receive a RAB uplift of £300 million.¹³¹⁹
- 10.40 The CAA contended that HAL's suggestion that it did not in fact over-recover is completely at odds with its approach in earlier stages of the H7 process. It raised no concerns on the K factor at the Initial Proposals stage, included the K factor in its own 2022 charges consultation in August 2021, published over-recovery of airport charges revenue in 2020 and 2021 in terms of yield per passenger in its regulatory accounts for 2020 and 2021, and, in its 2022 airport charges consultation, HAL consulted on an airport charge of £37.63 per passenger based on its revised business plan assumptions and using a correction factor formula consistent with previous years' calculations.¹³²⁰
- 10.41 The CAA submitted that for practical reasons, adjustments can occur no earlier than two years after the year concerned, and therefore its decision is not 'retrospective'. The AK factor addressed the omission of a K factor mechanism in the interim price caps for 2022 and 2023. The CAA's decision gave effect at the first reasonable opportunity to the price cap that HAL agreed to adhere to in 2020 and 2021.¹³²¹

¹³¹⁶ [CAA Response](#), paragraph 237.

¹³¹⁷ [CAA Response](#), paragraph 242.

¹³¹⁸ [CAA Response](#), paragraph 243.

¹³¹⁹ [CAA Response](#), paragraph 244.

¹³²⁰ [CAA Response](#), paragraph 248.

¹³²¹ [CAA Response](#), paragraphs 253 and 254.

Development capex Dt adjustment

- 10.42 The CAA submitted that HAL had agreed with airlines as part of the commercial deal accompanying the iH7 price control¹³²² that the maximum yield it would receive in 2020 and 2021 would be fixed in accordance with the adjustment formula. The CAA contended that as HAL had exceeded that maximum yield, there must now be a correction, regardless of why HAL over-recovered.¹³²³
- 10.43 The CAA submitted that the capex adjustment term in the Mt formula was consciously inserted into the licence at the start of the Q6 period to ensure that airlines would benefit from lower charges if HAL chose not to proceed with planned capital investments. The CAA acknowledged that there was a potential need for HAL to revise its capex programme in the light of reduced passenger volumes during 2020 and 2021, but it did not consider that HAL had provided justification for overriding the agreed allocation of capex risk and HAL did not raise this issue at any stage of the H7 process.¹³²⁴

Business rates BRt adjustment

- 10.44 The CAA submitted that, during the Q6 period, HAL was able to negotiate a reduction in the business rates that it pays. The CAA decided, at that time, that any benefit HAL had secured should be shared with airlines and it inserted terms into the Licence to give effect to this policy. The CAA submitted that the allocation of risk was entirely clear, and HAL had provided no reason to think that this decision was wrong or that the agreed allocation of risk should not stand.¹³²⁵

Passenger mix adjustment

- 10.45 The CAA submitted that the fact that the over-recovery arose because airlines made a commercial decision to fly planes with fewer passengers on board was irrelevant. While 2020 and 2021 were exceptional years and passenger numbers turned out to be significantly lower than forecast, this did not in itself provide a reason that HAL should be allowed to retain charges that were significantly in excess of that allowed by the price control.¹³²⁶

¹³²² The interim H7 price control, running from 1 January 2020 until 31 December 2021.

¹³²³ [CAA Response](#), paragraph 249 and 250.

¹³²⁴ [CAA Response](#), paragraph 251.1.

¹³²⁵ [CAA Response](#), paragraph 252.2.

¹³²⁶ [CAA Response](#), paragraph 251.3.

Response to our Provisional Determination

10.46 In response to our Provisional Determination that it was wrong in law and in the exercise of a discretion in the way it applied the AK factor, the CAA said, its previous submissions notwithstanding, that it:

[...] recognises that its assessment of the application of the AK term was carried out at a high level and accepts the CMA's provisional finding that this fell short of what might reasonably be implied by the CAA's duty of inquiry including that the CAA did not sufficiently assess whether all of the AK term should be returned to consumers. As a result, the CAA agrees that the level of the AK term should be further reviewed in the light of the CAA's statutory duties and the findings of the CMA's Final Determination.¹³²⁷

10.47 The CAA also submitted in that response, alongside the above admission, that that there are important inter-relationships between the development capex adjustment, the business rates adjustment, and the passenger mix adjustment. In particular, HAL will usually have good information on the level of its business rates and capital programme for the year ahead and, even if the business rates and capex terms lead to adjustments in allowed revenue, this does not necessarily give rise to a significant correction factor.¹³²⁸

10.48 The CAA further submitted in the same response that, while circumstances were different in 2020 and 2021, the correction factor and, ultimately, the AK term largely arose from changes in passenger numbers, with lower than expected capex in 2020 making a contribution to over recovery in that year. The CAA submitted that the position was different in 2021, when HAL would have been able to reasonably anticipate both lower business rates and lower levels of capex in setting charges for 2021. Therefore, the CAA submitted that the over-recovery for that year appears to largely relate to the difficulties HAL experienced in accurately forecasting passenger numbers.¹³²⁹ We have taken account of these submissions, and the CAA's admission, in making our final determination.

Interveners' submissions

10.49 The Airline Interveners, BA and Delta, submitted that HAL had agreed and accepted the K factor mechanism as part of the Q6 regulatory settlement and it was consistent with the approach taken in Q6 and earlier periods. The CAA's holding and interim price caps temporarily deferred the application of a K factor pending finalisation of the H7 price control and in order to support HAL's short-term working capital. However, the CAA had made clear that it anticipated further

¹³²⁷ CAA, Response to PD, 22 September 2023 (**CAA Response to PD**), paragraph 35.

¹³²⁸ CAA Response to PD, paragraph 33.

¹³²⁹ CAA Response to PD, paragraph 34.

adjustments in order to account for the correction factor. Despite HAL's suggestions to the contrary, there was nothing new or novel about the AK factor, save for the amendment to allow HAL to spread the relevant adjustment over a number of regulatory years.¹³³⁰

10.50 Furthermore, the Airline Interveners submitted that the AK factor was not retrospective for the reasons set out by the CAA in the Final Decision; rather it was a continuation of an agreed formula from previous price controls and simply secured that the revenues HAL had generated in 2020 and 2021 aligned with the price control obligations HAL was subject to at that time.¹³³¹

10.51 The Airline Interveners submitted that HAL made a number of erroneous statements in its NoA in relation to the K factor and the AK factor as follows:¹³³²

- (a) HAL stated: 'The purpose of a K factor is to correct for any over or under-recovery of revenue relative to efficiently incurred costs ... (as reflected by the per passenger yield cap)'. However, HAL then cited figures concerning total aeronautical charges and operating losses in support of its argument that the K factor was not necessary to protect consumers against windfall gains. The Airline Interveners submitted that this was a misdirection by HAL as to the relevant metric. They noted that, as described in the AP Intervention Report, the CAA's adjustment factor was clearly intended to ensure that the correct yield per passenger is recovered.
- (b) HAL stated that the '(A)K-factor is relatively crude tool that works sufficiently well in years where deviations between plan and outturn are small but breaks down in years where deviations are large'. The Airline Interveners submitted that this was also incorrect. The maximum allowable yield is per passenger, so the deviation per passenger is the only relevant factor. The mechanics of the 'tool', insofar as it concerns the per passenger yield cap, are unchanged by deviations between plan and outturn.
- (c) HAL stated that the 'logic behind the calculation breaks down in extreme years where large deviations in revenue clearly require adjustments to expenditure as well that cannot be accommodated by the (A)K-factor formula'. The Airline Interveners submitted that this was the point of the capex adjustment element of the formula and, moreover, that the CAA was fully aware of the 'extreme years' argument when it constructed the AK factor mechanism.

¹³³⁰ [BA, Application for permission to intervene and Notice of Intervention \(BA Nol\)](#), 22 May 2023, paragraph 4.1.7; [Delta, Application for permission to intervene and Notice of Intervention \(Delta Nol\)](#), 22 May 2023, paragraph 4.7.

¹³³¹ [BA Nol](#), paragraph 4.1.8; [Delta Nol](#), paragraph 4.8.

¹³³² [BA Nol](#), paragraphs 4.1.9(a) and (b), 4.1.10 and 4.1.11; [Delta Nol](#), paragraphs 4.9(a) and (b), 4.10 and 4.11.

(d) HAL stated that even if no revenue was recovered in a given year, the AK factor would still calculate an over-recovery. BA and Delta submitted that whilst this is correct, HAL failed to acknowledge that any such over-recovery would be calculated on actual passenger numbers through the airport, so would be negligible.

10.52 The Airline Interveners set out that HAL did not draw attention to the fact that the application of a correction factor can also result in a positive adjustment. HAL was not appealing the K factor for the H7 period (2022 and beyond) or appealing other elements of the formula of potential benefit to HAL, such as the bonus factor.¹³³³

10.53 The Airline Interveners submitted, in regard to HAL's statement that returning the relevant revenues would unwind the effect of the CAA's RAB adjustment, that this was effectively a request by HAL for a COVID-19 related adjustment on top of the existing £300 million RAB adjustment. They set out that the CAA clearly addressed this issue in the Final Decision, where the CAA considered that a further adjustment to reduce HAL's previously established obligations to pay back the over recovery of revenue would not be appropriate or consistent with its statutory duties.¹³³⁴

10.54 The Airline Interveners noted HAL's statement that it had over-recovered to a greater extent than the CAA previously understood. Specifically, HAL indicated that applying the yield calculation with the correct input data suggested that HAL over-recovered revenues of circa £91.4 million in 2020 and £166 million in 2021 – £258 million¹³³⁵ in total. This revised figure from HAL is consistent with the AP Intervention Report and the Airlines' own calculations based on the information available to them. They submitted, and assumed that the CAA would agree, that it was important these errors are corrected as part of the CMA appeal process.¹³³⁶

Development capex Dt adjustment

10.55 The Airline Interveners submitted that they believed that HAL had done nothing to 'earn' the over-recovered revenues. They submitted that HAL wanted to retain sums intended for, and thereby earn a return on, capex that HAL had not spent, and this would be contrary to a key principle of incentive-based regulation.¹³³⁷

Business rates BRt adjustment

10.56 The Airline Interveners submitted that HAL wanted to retain 100%, rather than 20%, as specified in the formula, of the benefit from lower business rates, which

¹³³³ [BA Nol](#), paragraph 4.1.12; [Delta Nol](#), paragraph 4.12.

¹³³⁴ [BA Nol](#), paragraph 4.1.14(d); [Delta Nol](#), paragraph 4.14(d).

¹³³⁵ CPI - 2020 prices.

¹³³⁶ [BA Nol](#), paragraphs 4.1.14(e) and (f); [Delta Nol](#), paragraphs 4.14(e) and (f).

¹³³⁷ [BA Nol](#), paragraph 4.1.14(a); [Delta Nol](#), paragraph 4.14(a).

would mean it would receive an allowance for costs it had not paid. They submitted that this is contrary to incentive-based regulation.¹³³⁸

Passenger mix adjustment

- 10.57 The Airline Interveners submitted that airlines argued strongly against the level of the interim holding cap which the CAA proposed in both consultation processes. The operation of low utilisation flights during the COVID-19 pandemic was an example of airlines trying to maintain service where demand existed. They submitted that during the pandemic HAL benefitted from significantly greater commercial revenues from cargo-only flights than envisaged at the Q6 price control. This helped to reduce HAL's losses, and HAL has not appealed other elements of the formula which have proven advantageous to it.¹³³⁹
- 10.58 The Airline Interveners submitted that the CAA's correction factor was clearly intended to ensure that the correct yield per passenger is recovered, and it was inappropriate for HAL to seek to put this to one side to obtain retrospective protection against traffic risk. In addition, airlines suffered large losses by running plans with low load factors whilst generating consumer benefits for those passengers who were able to travel.¹³⁴⁰

Response to Provisional Determination

- 10.59 Additionally, in response to our Provisional Determination that the CAA had erred in the way it applied the AK factor, the Airline Interveners submitted that, to the extent that consideration of an adjustment to the AK factor is linked to questions around HAL's financial position following the COVID-19 pandemic, this was clearly and squarely addressed in the CAA's work on the RAB adjustment (as set out in our assessment in the Provisional Determination).¹³⁴¹ The Airline Interveners also submitted that the CAA did give consideration to the application of the AK factor as demonstrated by our findings in the Provisional Determination.¹³⁴² We have taken account of these submissions in making our final determination.

Our assessment

- 10.60 In this section we consider the arguments made by HAL in relation to the AK factor (taking account also of the CAA's and Airline Interveners' submissions). We begin by setting out a summary of our approach and the conclusions we have reached based on our analysis. We then set out our detailed assessment of general

¹³³⁸ [BA Nol](#), paragraph 4.1.14(b); [Delta Nol](#), paragraph 4.14(b).

¹³³⁹ [BA Nol](#), paragraph 4.1.13; [Delta Nol](#), paragraph 4.13.

¹³⁴⁰ [BA Nol](#), paragraph 4.1.14(c); [Delta Nol](#), paragraph 4.14(c).

¹³⁴¹ Airlines, Response to PD, 22 September 2023 (**Airlines Response to PD**), paragraph 5.2.2.

¹³⁴² Airlines Response to PD, paragraph 5.2.1.

considerations about the AK factor, before considering, in similar detail, each of the three components of the AK factor adjustment in turn.

Summary of our approach and conclusions

- 10.61 We have considered HAL's contentions that the Final Decision was wrong because it was wrong in law, or because the CAA made an error in the exercise of a discretion, in applying the AK factor mechanism in respect of 2020 and 2021. We have considered both whether the CAA was wrong to apply any AK factor at all and whether it was wrong to apply the mechanism in the way it did in line with the legal framework in chapter 3.
- 10.62 HAL's submissions included that the CAA (i) was wrong to think of the excess yields identified by a mechanical application of the K factor formula automatically as over-recovery, and (ii) made no assessment of whether the original capex budget remained appropriate in the light of revised passenger numbers, or whether there were sufficient outturn revenues available against which to set the expenditure. We have therefore assessed in particular whether the CAA had regard to relevant considerations and met its duty of enquiry in deciding to apply the AK factor as it did.
- 10.63 Following an in-depth review and assessment of the Parties' submissions and supporting evidence, and on the basis of the considerations set out in further detail below, we have determined that the CAA was not wrong to have considered that **some** adjustment through the application of an AK factor should apply. Such an adjustment is a standard part of the regulatory settlement and all parties could have foreseen the possibility of HAL over-recovering some revenue and the need for some correction.
- 10.64 However, we determine that the Final Decision was wrong because the CAA was wrong in law and in the exercise of a discretion in the way it applied the AK factor. It applied the AK factor mechanistically in respect of development capex, business rates and passenger mix adjustments making a calculation as it would have done absent the exceptional events of the COVID-19 pandemic and their effects on passenger volumes and revenues. That is, as if those effects had not occurred and applying the correction factor, in full, as it would have done in a 'normal' year.
- 10.65 In the highly unusual circumstances that applied, the CAA was wrong not to have considered whether it was appropriate to apply the AK factor in that way. It gave similar consideration to other aspects of the regulatory settlement, such as the RAB adjustment, but did not do that here.
- 10.66 Our assessment of the possible outcomes, in terms of the recovery of revenue in respect of development capex, business rates and the passenger mix, demonstrates the potential for the mechanistic application of the AK factor to treat

HAL as having recovered revenues to a greater extent than was the case in reality. That assessment indicates that there were plainly relevant considerations in that regard which the CAA was wrong not to take into account.

10.67 The CAA did not, however, have regard to those considerations and, by not doing so, fell short of its duty of enquiry. It assumed that, rather than properly considered whether, the AK factor should apply in the way it decided. It was not in a position rationally to conclude that it should so apply. A clearly superior alternative – considering those factors and deciding on that basis the appropriate extent to impose the AK factor in line with its statutory duties – was open to it but not pursued.

General considerations about the AK factor

10.68 We note first the CAA's evidence that a correction (K) factor adjustment – to true-up retrospectively any identified over or under-recovery of revenue two years previously – has been applied to price control calculations related to HAL since 2003/04.¹³⁴³ We consider it uncontroversial that, when iH7 (the interim H7 price control, running from 1 January 2020 until 31 December 2021) was determined (in 2019), it would have been reasonable for HAL and its investors to have expected such an adjustment factor to be applied to an over-recovery of revenue in relation to 2020 and 2021 were there one.¹³⁴⁴ HAL's submissions raise the question of whether – notwithstanding what prior expectations may have been – the circumstances of the pandemic mean that the CAA was wrong to apply such a correction factor in relation to 2020 and 2021, either at all or in the way that it did, in particular because of:

- (a) the losses HAL made in 2020 and 2021;¹³⁴⁵ and/or
- (b) the specific ways in which revenue had been identified as having been over-recovered as a result of the development capex Dt adjustment, the business rates BRt adjustment, and the outturn mix of charges.¹³⁴⁶

10.69 With respect to the first point, we note that the CAA, in its Final Decision,¹³⁴⁷ explicitly considered the relevance of HAL's losses in 2020 and 2021 to the inclusion of the AK factor to adjust for identified over-recovery in 2020 and 2021. Our view is that the CAA was not wrong to treat those losses as having been already taken into account in its Final Decision as part of its RAB adjustment assessment (which we have considered under Ground A), or to conclude – in the

¹³⁴³ Toal 2, paragraphs 2.1-2.6.

¹³⁴⁴ Given, for example, [HAL NoA](#) paragraph 268.

¹³⁴⁵ This aligns with subsidiary question 1 in paragraph 11.24 a.

¹³⁴⁶ This aligns with subsidiary questions 2, 3 and 4 in paragraph 11.24 b-d.

¹³⁴⁷ [Final Decision](#), paragraph 14.33.

light of this – that it would not be appropriate to change the identified level of the correction factor to reflect those losses.

10.70 We take account specifically in this connection that the CAA said:¹³⁴⁸

We considered the case for a RAB covid-19 related RAB adjustment in 2020 and 2021 and explained our approach further in chapter 10 (The Regulatory Asset Base). In doing so we took into account HAL's likely losses in 2020 and 2021 and decided that an adjustment of £300 million would be appropriate given our statutory duties to protect consumers and have regard to HAL's financeability. In this context we do not consider that a further adjustment to reduce HAL's previously established obligations to pay back the over recovery of revenue it has made would be appropriate or consistent with our statutory duties.

10.71 In other words, the CAA considered the appropriate response in terms of the H7 price control to the effects of the pandemic. It concluded that passenger volume risk, and consequent losses, were generally borne by HAL's investors. It decided that a certain RAB adjustment was consistent with its statutory duties but that it should not otherwise compensate HAL and its investors for those losses (which would not be consistent with its duties). In that light, our view is that the CAA was also not wrong to conclude that the existence of such losses was not itself a reason not to include a correction factor where HAL over-recovered certain revenues.

10.72 We note HAL's view that the purpose of this form of correction factor is 'to correct for any over or under-recovery of revenue relative to efficiently incurred costs', and ultimately to 'avoid excess returns.'¹³⁴⁹ However, the use of a correction factor forms one part of a broader set of price control arrangements, and – as considered below – relates to a relatively small set of specific potential sources of identified under or over-recovery. Our view is that we would not expect there to be any necessary direct or straightforward relationship between HAL's overall returns and the appropriate overall level of the correction factor to be applied, and again therefore that the losses HAL incurred in 2020 and 2021 do not – by themselves – provide a justification for not applying an adjustment factor to address identified over-recovery. That is particularly the case where the CAA had concluded that HAL's investors generally bore passenger volume risk and the CAA was not, in our view, wrong to do so.

10.73 We also take into account that the CAA (and HAL) knew, when the interim price caps for 2020 and 2021 were concluded, that HAL's actual business rates were lower than anticipated during Q6. When the interim price caps for those years

¹³⁴⁸ [Final Decision](#), paragraph 14.33.

¹³⁴⁹ [HAL NoA](#), paragraph 275.

were concluded, although the actual cost of business rates was known the ‘over-allowance’ and the corresponding BRt adjustment term were retained. The CAA accordingly had a basis to expect that HAL would have over-recovered some revenue and that an adjustment term would be necessary.

10.74 We note in the connection referred to in the previous paragraph that as early as the iH7 Decision in 2019 the CAA said:¹³⁵⁰

HAL proposed that the business rates revaluation term (‘BRt’) that is currently included in its Licence is no longer necessary. It suggested that the business rates revaluation took place in 2017 so less uncertainty exists around the level of business rates that HAL will pay during 2020 and 2021. [...]

We note that the business rate revaluation led to a reduction in costs for HAL and this should be reflected in the price control mechanism for the remainder of the Q6 price control. HAL has subsequently agreed the revaluation is not reflected in the commercial deal and the business rate factor should remain.

10.75 In other words, in 2019 the CAA was aware that the outcome of the 2017 revaluation was a lower level of HAL’s business rates than had been allowed for when the maximum allowed yield per passenger had been set for 2020 and 2021. It was noting, with HAL’s agreement, that the BRt term should be retained to account for an over-recovery that would otherwise arise in the iH7 period (2020 and 2021).

10.76 On these bases, we do not find that the CAA was wrong, in law or in the exercise of its discretion, to consider that there should be **some** adjustment factor applied to the over-recovery of revenue in relation to 2020 and 2021. However, we also consider that the size of correction factor adjustment identified in relation to 2020 and 2021 (£258 million) and the highly unusual circumstances within which it arose (and which underpinned the scale of HAL’s losses), meant that careful consideration of the appropriateness of this level of AK factor adjustment – and of the specific ways in which revenue had been identified as having been over-recovered – was merited. Given the evidence that has been submitted to us (discussed further below), our view is that the CAA did not give sufficient consideration to these matters or to the extent to which the application of AK factor adjustment that had been identified would be expected to be consistent with the discharge of its statutory duties. We note six general points in this regard.

¹³⁵⁰ CAA, Exhibit RT2, Exhibit to the second witness statement of Robert Toal. Economic regulation of Heathrow Airport Limited, from January 2020: notice of proposed licence modifications, Appendix C, paragraphs 7 and 9, pages 742-743. (Public version see: [CAP1825: Economic regulation of Heathrow Airport Limited from January 2020: notice of proposed licence modifications \(caa.co.uk\)](https://www.caa.co.uk/CAP1825-Economic-regulation-of-Heathrow-Airport-Limited-from-January-2020-notice-of-proposed-licence-modifications))

- 10.77 First, the CAA gave the application of the AK factor some consideration. That is evident from what it said in the Final Decision as set out above. We have regard to that. Our concern, however, is that the scale of the correction it applied through the AK factor was calculated in a mechanistic way, as it would have been calculated absent the COVID-19 pandemic and its effects on passenger volumes and revenue. That is, assuming that the scale of the correction factor should be calculated as it would, in full, in what HAL characterised as a ‘normal’ year, without considering properly whether, in the exceptional circumstances that applied, that was appropriate.
- 10.78 Second, in other aspects of its decision-making, the CAA recognised that the COVID-19 pandemic resulted in unusual circumstances and that it was appropriate to consider whether and how the regulatory settlement might be adjusted in response. In relation to the RAB adjustment, for example, the CAA said that it was very clear that the impact of the pandemic had created exceptional circumstances and that it had recognised the need to consider how the regulatory framework should change in response to these challenges, and that it had started to address issues in its work on the review of HAL’s H7 price control.¹³⁵¹ The CAA made and retained the £300 million RAB adjustment as a result of those considerations.
- 10.79 Third, as we note in paragraph 10.39 above, as the CAA set out in its response to the appeal, the question of whether HAL should be entitled to recoup some of its losses in 2020 and 2021 is a different question to the extent it was appropriate to apply an adjustment for over-recovery of revenue.¹³⁵² Put another way, it was a separate issue for consideration.
- 10.80 Fourth, in its August 2022 response to the CAA’s Final Proposals, HAL’s submissions included that:
- (a) The size of the AK factor adjustment was £258 million.¹³⁵³
 - (b) The majority of the identified AK factor adjustments were related to two specific adjustments – for development capex and business rates – with the remainder reflecting small differences in the actual yield achieved as a result of how the mix of charges compared to what had been forecast.¹³⁵⁴
 - (c) In relation to development capex and business rates adjustments, the AK factor adjustment would effectively remove revenue that HAL did not actually receive.¹³⁵⁵

¹³⁵¹ [CAA October 2020 Consultation](#), paragraphs 13 and 14.

¹³⁵² [CAA Response](#), paragraph 244.

¹³⁵³ [HAL response to CAA Final Proposals](#), paragraph 12.10.5.

¹³⁵⁴ [HAL response to CAA Final Proposals](#), paragraph 12.10.6.

¹³⁵⁵ [HAL response to CAA Final Proposals](#), paragraph 12.10.12.

- (d) The CAA had not explained how these adjustments protected consumers given that the protection intended was to avoid over-recovery of revenues yet actual revenues were much lower than assumed.
- (e) The CAA's holding cap and Initial Proposals did not include an AK correction factor for 2020 and 2021. HAL submitted that this was only included in the CAA's Final Proposals and so did not benefit from the scrutiny that it could have received had it been consulted upon earlier in the process. Consequently, HAL submitted that the CAA failed in its public law duty to consult adequately on this new condition.¹³⁵⁶

10.81 HAL appears, therefore, to have raised some concerns about the application of the AK factor in the aftermath of the pandemic.

10.82 Fifth, we also note that the CAA's Final Decision (incorrectly) referred to the size of the AK factor adjustment as £166 million, and (incorrectly) stated that this level of over-recovery was 'largely an effect of the increased proportion of HAL's revenues in those years that came from take off/landing and parking charges in those years when passenger numbers were significantly reduced'.¹³⁵⁷ We note that the Final Decision did not include an assessment of the appropriateness of the identified AK factor adjustment resulting from the difference in the mix of charges in 2020 and 2021 that was associated with significantly reduced passenger numbers, and made no reference to either the development capex or the business rates adjustment.

10.83 Sixth, we note that in its Final Decision the CAA referred to the AK factor as effecting the adjustments that were needed to take account of the revenue entitlements and obligations HAL was subject to in 2020 and 2021.¹³⁵⁸ Similarly, in its Response, the CAA said that 'objectively speaking' HAL had over-recovered in 2020 and 2021 because its outturn yield had been higher than the maximum yield as calculated by means of the formula which applied for those years, and that the AK factor was being applied to ensure that HAL was being held to its price cap.¹³⁵⁹ When we questioned the CAA on its rationale at the Ground D hearing, it told us that:¹³⁶⁰

We didn't spend a long period of time thinking about whether applying the correction factor itself was the right thing to do or not. That for us was, as I said, a straightforward working of the price control.

¹³⁵⁶ [HAL response to CAA Final Proposals](#), paragraph 12.10.14; HAL response to Licence Condition C1.19, page 296.

¹³⁵⁷ [Final Decision](#), paragraph 14.30.

¹³⁵⁸ [Final Decision](#), paragraph 14.31.

¹³⁵⁹ [CAA Response](#), paragraph 247.

¹³⁶⁰ Transcript of Ground D Hearing, 24 July 2023, page 19, lines 8 to 10.

- 10.84 In other words, the CAA did not consider whether this¹³⁶¹ was the case in relation to the question of over-recovery and the extent to which an AK factor should be applied. This is in contrast to the approach it took with the RAB adjustment, in relation to which, as we note in paragraph 10.78 above, the CAA said that it was very clear that the impact of the pandemic had created exceptional circumstances and that it had recognised the need to consider how the regulatory framework should change in response. The CAA therefore did not act consistently.
- 10.85 We also note the CAA's submissions in response to our Provisional Determination as set out in paragraphs 10.46 to 10.48. What the CAA said may be correct, but the point remains that, as the CAA has itself acknowledged, it did not properly consider matters in relation to the AK factor adjustments.
- 10.86 In the light of the above, in our view the CAA did not sufficiently assess the extent to which the price control formulae that applied in 2020 and 2021 resulted in appropriate levels of over-recovery being identified for those years, or the extent to which adjusting for those identified levels of over-recovery were likely to be consistent with the discharge of its statutory duties. While we consider holding HAL to the price control conditions that applied in 2020 and 2021 to have been an important consideration in such an assessment, our view is that – given the scale of the identified correction factors – the extent to which the price control formulae appropriately identified over-recovery in those years also required critical evaluation, given the highly unusual circumstances that prevailed. As set out above, our assessment of the evidence that has been submitted to us in relation to the sources of the identified AK factor adjustment leads us to consider that there are strong reasons to question the appropriateness of the £258 million adjustment, in particular in relation to the scale of that part of the identified over-recovery that relates to the development capex (Dt) adjustment.
- 10.87 Furthermore, in our judgement this matter raises issues that differ substantively from those that the CAA considered in its RAB adjustment assessment in the Final Decision, and in its assessment of HAL's request for a RAB adjustment which the CAA provided for in April 2021 (and upheld in the Final Decision). This is for the following reasons:
- (a) The CAA's assessment in the Final Decision included consideration of the extent to which exogenous volume-related risks were allocated to HAL under the price control arrangements that applied in 2020 and 2021. In our view the design of the development capex Dt adjustment, in particular, makes HAL materially worse off (and users materially better off) than they would have been had the relevant levels of capex turned out in line with forecasts, ie it further increases HAL's losses when volumes are low.

¹³⁶¹ That is, whether applying the AK factor in the way it did was the right thing to do.

- (b) The RAB Adjustment that the CAA provided in its 2021 RAB Adjustment Decision and subsequently upheld in its Final Decision was designed to address forward-looking issues concerned with financeability and incentives to maintain appropriate investment and service quality levels. While the CAA clearly did consider how to treat the exogenous volume-related losses as part of its RAB Adjustment decisions, our view, given our observation above that the design of the AK factor increases HAL's losses further, is that the RAB adjustment cannot be viewed as having addressed the backward-looking issues concerned with the identification of and correction for the over-recovery of revenues in 2020 and 2021.

10.88 Our assessment of the specific issues related to development capex, business rates and passenger mix adjustments is set out in paragraphs 10.89 to 10.116 below. That assessment also indicates that there were important and relevant considerations to which the CAA should have had regard, but it did not do so and did not subject those matters to due enquiry. In particular, in our view the CAA has failed to consider if there was an actual over-recovery of revenue of £258 million and there is a high chance this was not the case given the low passenger numbers during the pandemic. While we have identified a number of issues that we consider relevant to the assessment of the AK factor, we note that we received limited submissions on the detailed operation of these adjustments, and we have taken this into account in our approach to drawing conclusions in relation to this ground.

The development capex Dt adjustment

10.89 Our assessment of the development capex component of the AK factor adjustment considers the following:

- (a) The workings of the Dt adjustment term.
- (b) Other relevant factors

The workings of the Dt adjustment term

10.90 In paragraph 10.8 we describe the Dt term, which relates to an adjustment for under or over-recovery to reflect the actual level of development capex compared to the assumption underpinning the price cap set at Q6.

10.91 We consider there to be a clear rationale for the inclusion of this Dt term in the price control formula, as it provides a potential means of ensuring that HAL is not able to benefit from delays to, or reductions in the size of, its investments relative to what had been assumed when the price control was set. Conversely, as it is symmetrical, HAL would not be worse off from accelerating or increasing investment relative to what had been assumed, where that requirement was

identified as appropriate. Furthermore, we note that the value of the Dt term for 2020 and 2021 is not a matter in dispute: its total value across those two years is £132 million.¹³⁶² Our assessment is that – given that HAL’s price control had allowed for this level of financing costs associated with investment that it did not ultimately undertake – it is to be expected that some level of over-recovery would be identified in relation to 2020 and 2021 as having to be returned to users through a form of K factor adjustment. In line with this, we consider that it was not wrong for there to be some level of AK factor adjustment applied as part of the H7 price control in relation to development capex. It does not, however, follow that the CAA was not wrong to apply the adjustment in the way that it did.

10.92 During the course of this appeal, we issued a request for information (RFI) relating to the AK factor to the Parties which contained a model showing the workings of the Dt term to assist us in understanding the potential problems with the AK factor adjustment.¹³⁶³ Both the CAA and HAL confirmed the CMA model was correct. This model showed, in our view, that there were potentially problematic features of the mechanics of the Dt term. Specifically, the Dt term returns a fixed sum of money based on the difference between forecast capex and outturn capex. Whilst this appears logical, it does not take into account the actual revenue that HAL collected. This is relevant, especially during the pandemic when passenger volumes were very low and hence so was actual revenue. It is thus possible that there would not have been any over-recovery of actual revenue, or not as much over-recovery, that should be returned. It is not clear if the mechanism is deliberately designed to operate in this manner or if it is a feature of the mechanics that has only come to light because of the large variances in passenger numbers arising during the pandemic.¹³⁶⁴

10.93 Our assessment of the way in which the Dt term is taken into account in the Licence leads us to the view that – given the exceptional circumstances that prevailed in 2020 and 2021 – it resulted in the calculation of an unduly high level of over-recovery of revenue being identified as having taken place, and HAL being required to effectively return a significantly larger amount to users (through the AK factor adjustment) than it can reasonably be viewed as having over-recovered. This is because the development capex adjustment is intended to return the full ‘under-spend’ to users, regardless of the actual number of passengers which used the airport in 2020 and 2021 and therefore regardless of the actual related revenue that was earned (which is likely to have been significantly less than £132 million determined by the CAA in its Final Decision). Charges were set at the price

¹³⁶² [HAL NoA](#), paragraph 278

¹³⁶³ For example, CMA, RFI H7 D002, 26 July 2023.

¹³⁶⁴ The model in the RFI was used to assist in understanding any potential problems with the AK factor adjustment and it was not representative of the CMA’s views on how to recalculate the over-recovery for the purposes of relief.

control assuming (1) the capex would have been incurred and (2) volumes would approximate those in the forecast.

10.94 The above points can be illustrated as follows:

- (a) The price control assumption that capex financing costs would be at a level that was higher than turned out to be needed would have meant that the maximum per passenger yield that HAL would have been expected to be allowed to earn – and on the basis of which HAL would have set its charges – was set at too high a level (other things being equal).
- (b) The size of this impact on the estimated maximum per passenger yield would have been dependent on the forecast number of passengers that was assumed when setting the control. For example, for 2020 HAL has identified that it did not incur around £40 million of its financing costs allowance as related to capex because it did not spend the level of capex by comparison with what was assumed at the price control (ie this is the Dt figure for 2020).¹³⁶⁵ If passenger numbers had been assumed to be 80 million (which is broadly in line with the forecast HAL used when setting its charges for 2020), then this would imply that the maximum per passenger yield was assumed to be around £0.50 higher than would have been the case if the level of capex undertaken in 2020 had been accurately forecast.
- (c) The revenue benefit that HAL would receive – and the overall size of the over-payment made by users – as a result of this higher assumed maximum yield per passenger, would depend on the actual level of passenger numbers in the relevant year. If passenger numbers had been 80 million – ie in line with the forecast assumed in (b) above – then HAL’s revenue benefit for 2020 would have been £40 million (ie equal to Dt; where £40 million = 80 million pax * £0.50). However, actual passenger numbers in 2020 were much lower than this because of the pandemic, and were around 22 million.¹³⁶⁶ This implies that HAL’s revenue in 2020 would have been around £11 million higher as a result of the provision that had been made for financing costs associated with capex it did not undertake as forecast (ie £11 million = 22 million pax * £0.50). Table 10.1 below summarises this example.

¹³⁶⁵ King 1, paragraph 179

¹³⁶⁶ HAL, Response to RFI H7 D001, 29 June 2023.

Table 10.1: HAL’s net financial position as a result of the over-recovery of revenue that its price control allowed for in relation to capex financing costs: illustration of the impact of different outturn passenger numbers in 2020

	<i>Estimate of HAL’s over-recovery,</i>
Forecast passenger numbers in line with those taken into account in the price control (c80m)	£40 million
Actual passenger numbers in 2020 (c22m)	£11 million
Implied excess over-recovery from Dt term in 2020 (actual over-recovery of revenue being less than Dt term calculates from price control assumptions)	£29 million

Source: CMA analysis

- (d) Because the capex financing cost adjustment (Dt) takes no account of differences between forecast and actual volumes, it can result in an identified level of over-recovery (under the price control formula) that differs markedly from the size of the revenue impact that HAL can be expected to have received (given actual passenger numbers). For 2020, the implied over-recovery (of £40 million) is more than two and a half times higher than the implied revenue benefit to HAL (around £11 million). In short, the formula would recover from HAL around £29 million of assumed revenue that in reality never materialised. This example suggests that a more appropriate amount to be recovered from HAL in relation to 2020 is neither the amount being claimed by HAL in its submission (zero) nor the amount the CAA has assumed is correct (£40 million). The submissions made to us have not identified the correct adjustment needed.¹³⁶⁷
- (e) This shows that the way in which the Dt term is incorporated into HAL’s price control can do much more than unwind the effects of capex having been forecast at too high a level: it can make HAL materially worse off and users (overall) materially better off than would have been the case had capex been forecast accurately.

10.95 Our assessment, accordingly, shows that the application of the AK factor adjustment in accordance with the Final Decision increases HAL’s losses in relation to development capex financing costs in 2020 and 2021 given the much lower levels of passenger numbers in those years as a result of the pandemic.

Other relevant factors

10.96 In assessing the CAA’s decision to allow for the outcome described in subparagraph 10.13 above to be implemented through the introduction of the AK factor, we have also considered the extent to which there may be countervailing

¹³⁶⁷ While in response to our Provisional Decision HAL submitted certain figures to us, they have not enabled us to identify the correct adjustment in a way that we can confidently and fairly rely upon. That is a matter for the CAA to determine following an appropriate process.

factors which could be understood as having an off-setting effect. We note that the Dt provisions are structured in a symmetric way such that HAL could be materially worse or better off, depending on whether the number of passengers is lower or higher than had been assumed when the price control was set.

- 10.97 Accordingly, as highlighted in paragraph 10.94(e) above, HAL can be made materially worse off than would have been the case had capex been forecast accurately when the actual number of passengers is lower than had been assumed. The opposite also holds, in that HAL can be made materially better off if the actual number of passengers is higher than had been assumed.
- 10.98 However, in our view the possibility that HAL might have been made better off under the Dt arrangements (through the subsequent application of a K (or AK) factor adjustment) cannot reasonably be regarded as off-setting the extent to which HAL would be made worse off as a result of those arrangements in 2020 and 2021, given the scale of the fall in passenger numbers that resulted in the context of the pandemic (in a context where HAL typically operates at close to full capacity such that the scope for higher than expected volumes is relatively limited).
- 10.99 The CAA's assessment of the allocation of exogenous asymmetric volume risk under the price control arrangements was considered in detail in relation to Ground A. In line with our comments in paragraph 10.84, we have not received evidence indicating that the CAA considered the appropriateness of the identified over-recovery associated with the Dt factor. On the contrary, we note the CAA's comments at the Ground D hearing that it did not spend a long time thinking about the application of the correction factor (see paragraph 10.83).
- 10.100 It appears there were legitimate reasons during the pandemic for HAL to reduce its capex programme. We have not seen evidence that HAL was gaming the regulatory framework for financing capex. Hence, it would, in our view, have been reasonable (and necessary) for the CAA to consider this issue further without, in the exceptional circumstances that applied, being too concerned that this risked incentivising inappropriate behaviour.
- 10.101 In the light of the above, our conclusion is that the CAA did not consider sufficiently the working of the Dt term given the exceptional circumstances of the pandemic. The CAA should have considered whether the operation of the standard K factor formula continued to be appropriate because of the effect of very low passenger numbers on capex underspend, which is to calculate an over-recovery adjustment that far exceeds actual revenue recovery.

The adjustment for over-recovery of business rates

10.102 As set out in paragraph 10.9 HAL's charge control includes an adjustment term (BRt) in the formula which establishes its maximum allowed yield per passenger in year t, where BRt is equal to 80 per cent of the financial benefit that HAL has secured compared to the allowance for business rates that was provided for in its price control. Our assessment of the business rates component of the AK factor adjustment considers the following:

- (a) The workings of the BRt adjustment term.
- (b) Other relevant factors, including in particular the relevance of the sharing arrangements that were applied to the business rates allowance.

The workings of the BRt adjustment term

10.103 The BRt term included in the formula for the maximum allowed yield per passenger in year t is similar to the Dt capex term. The amount of over-recovery is fixed in absolute terms and was determined to be £75.3 million in total for 2020 and 2021.

10.104 Given that the BRt formula has the same characteristics that were identified above in relation to the Dt term, including that it takes no account of the effects of differences between forecast and actual passenger numbers, it can also result in HAL being required to return a significantly larger amount to users compared to a scenario when outturn passenger volumes were much closer to those forecast.

10.105 One difference between capex and business rates adjustment is that the amounts to be returned to users in relation to business rates were identifiable and known following the 2017 rates revaluation and these amounts were independent of actual passenger volumes during Q6 and iH7. While the capex adjustment is also designed to return fixed amounts of under- or over-spends, the actual capex spending is more uncertain and is likely to have some relationship with passenger volumes.

10.106 Nevertheless, while it is clear that HAL has indeed benefitted from paying lower business rates than assumed at the Q6 settlement, as with the capex spending it is not evident that HAL has over-recovered revenue in respect of the business rates allocation in 2020 and 2021 to the extent that the purely mechanistic application of the BRt¹³⁶⁸ determined. In our view, this is a factor relevant to the overall assessment of whether to apply the AK factor in the manner the CAA did, but this was not taken into account by it in reaching its Final Decision. This can be illustrated by a consideration of the following points which take account of other

¹³⁶⁸ That is, again, as it would have applied absent the exceptional events of the pandemic and their effect on passenger volumes and revenues.

relevant factors – including the sharing arrangements related to business rates – and provide an indication of the effect of calculating the scale of the correction to be applied through the AK factor in a mechanistic way, as it would be calculated absent the effects of the pandemic.

Other relevant factors

The relevance of the sharing arrangements for business rates

- 10.107 As with our assessment of the capex-related component of the AK factor adjustment above, we have considered the extent to which there may be countervailing factors which could be understood as having an off-setting effect to the implications of the workings of the BRt in 2020 and 2021 (described in paragraph 10.9). We note first that if passenger numbers had been in line with those taken into account in the setting of charges for 2020 and 2021, then HAL would have benefitted significantly from the business rate sharing arrangement. The effect of the BRt arrangements for 2020 is illustrated in Table 10.2 below by showing HAL's net financial position stemming from the over-recovery of revenue that its price control allowed for in relation to business rates.
- 10.108 The table focuses on the fact that the price control which applied in 2020 (and 2021) included an allowance for business rates which exceeded the level of business rates that HAL was required to pay. HAL identified the total amount of relevant over-recovery in relation to business rates as equal to around £43 million in 2020. If passenger numbers had been assumed to be 80 million (which is broadly in line with the forecast HAL used when setting its charges for 2020), the maximum per passenger yield would be around £0.50 higher than it would have been had an over-recovery not been allowed in relation to business rates. The first row of the table shows how the 80:20 sharing arrangements would have applied had the number of passengers been in line with that taken into account at the price control when 2020 charges were set: around £35 million of over-recovery would have been identified by BRt and returned to users (where relevant through a K factor adjustment); HAL would have retained the remaining £9 million as a form of out-performance benefit.

Table 10.2: HAL’s net financial position as a result of the over-recovery of revenue that its price control allowed for in relation to business rates: illustration of the impact of different outturn passenger numbers in 2020

	<i>Estimate of HAL’s over-recovery, before sharing, based on the per passenger allowance related to Business Rates</i>	<i>Identified over-recovery within the price control (after application of 80/20 sharing): BRt</i>	<i>Estimate of HAL’s net financial position as a result of over-recovery allowed for in the price control in relation to business rates</i>
Passenger numbers in line with those taken into account in the price control (c80m)	£43 million	£35 million	£9 million
Actual passenger numbers in 2020 (c22m)	£9 million	£35 million	(£25 million)

Source: CMA analysis

10.109 The second row estimates the implications on HAL of the much lower than forecast passenger numbers in 2020 in the context of the pandemic. Given much lower passenger numbers, the increment to HAL’s maximum yield per passenger of around £0.50, as a result of the price control having allowed for over-recovery in relation to business rates, would only be expected to have provided HAL with around £9 million of additional revenue. However, as was highlighted above, the structure of the BRt adjustment is such that the price control continues to identify the level of over-recovery (to be returned to users) as £35 million. Given that, the net effect of the over-recovery that allowed for in the price control in relation to business rates was in 2020 – given passenger numbers in that year – a loss of around £25 million. In our view, the illustration shown in Table 10.2 highlights a number of points that are relevant to the assessment of HAL’s submissions in relation to business rates under this ground. In particular:

- (a) HAL can be identified as having over-recovered revenue to some extent as a result of the business rates arrangements, notwithstanding there being exceptionally low passenger numbers. User charges were higher as a result of the level of over-recovery on business rates than had been factored into the price control.
- (b) Under what would have been the much more likely circumstances that passenger numbers were broadly similar to those that had been taken into account when the price cap for 2020 was set, HAL would have benefitted significantly from the business rate arrangements (as shown in the table, it would have retained around £9 million).

10.110 Again, however, whilst HAL may have benefitted to a certain degree in relation to the inclusion of the over-allowance for business rates in the interim price caps set for 2020 and 2021, our view is that the CAA had not sufficiently considered whether HAL did in fact over-recover to the extent that the purely mechanistic application of the AK factor formula identified. Given the exceptional circumstances of the COVID-19 pandemic and the resulting significant fall in passenger numbers, in our view the CAA should have at least considered whether

the figures derived from the application of the AK factor were appropriate and properly calibrated.

The adjustment for over-recovery of passenger mix charges

10.111 HAL's NoA did not elaborate on the detail of this component and the CAA did not discuss this in detail in the Final Decision. We established through an RFI¹³⁶⁹ that the approximate values of over- and under-recovery were: an over-recovery of £47 million for ATMs because flights operated with low passenger loads; an over-recovery of £20 million for prolonged aircraft parking; and an under-recovery of £16 million for departing passengers with more short-haul flights departing during the pandemic period relative to the normal levels of long-haul flights. The overall net position was an over-recovery of £51 million.

10.112 We note that the scope for this form of over-recovery arises because HAL's price control defines a maximum yield per passenger that it is not allowed to exceed, but HAL earns its revenues through a range of different charges. HAL consults each year on how it intends to set the levels of those charges in a way that is consistent with its maximum yield per passenger requirement.¹³⁷⁰ It determines the levels of those charges based on assumptions concerning the composition of forecast traffic levels and the amounts it expects to be able to earn from charges not linked to passenger numbers (including parking fees). Under- or over-recovery relative to the maximum yield requirement, ie the price cap, can arise when outturn values differ from those assumptions.

10.113 In its Response, the CAA said that:

the importance of ensuring that over- and under-recoveries arising from HAL's failure to calibrate airport charges in such a way as to be consistent with the Mt price cap has always been at the heart of the reasons for having a correction factor.¹³⁷¹

10.114 However, the CAA's evidence has not shown that it had a reliable basis for treating the differences between HAL's actual yield per passenger in 2020 and 2021, and the amounts allowed under its price control in those years, as having arisen because of a 'failure' on the part of HAL in terms of the way it set its charges. We agree with the CAA that the fact of 2020 and 2021 being exceptional COVID-19 impacted years – in that passenger numbers turned out to be significantly lower than forecast – does not in itself provide a reason for departing from the approach that would otherwise have been expected to apply in relation to identified under- or over-recovery. However, in line with our comments regarding

¹³⁶⁹ HAL, Response to CMA RFI H7 D001, 29 June 2023.

¹³⁷⁰ For example, CAA, Exhibit RT2, Exhibit to the second witness statement of Robert Toal., Heathrow Airport, Airport Charges for 2020, Consultation Document, September 2019, pages 790-846. (Public version, see: [Heathrow Airport Limited](#))

¹³⁷¹ [CAA Response](#), paragraph 251.3.

the Dt and BRt terms (see paragraphs 10.89 to 10.101 and 10.102 to 10.110), our view is that under those circumstances the CAA should have considered whether the operation of the standard K factor formula, in the form the CAA ultimately decided to impose it, continued to be appropriate.

- 10.115 In particular, HAL's submissions regarding airlines' decisions to fly planes with fewer passengers on board are relevant in this context. In our view, the submissions reflect a point that merited further attention by the CAA in deciding how the AK factor should apply. That is, the highly unusual circumstances that arose in the pandemic should have raised questions over whether the standard workings of the per-passenger yield price control provided an appropriate basis for determining over-recovery related to the passenger mix, and for this matter to have required closer consideration.
- 10.116 We note in this connection that, with low numbers of passengers on board, the application of fixed or minimum charges that would – in more normal conditions – be considered appropriate can automatically imply over-recovery (because the per passenger revenue associated with those fixed/minimum charges is higher than it would have been had the expected level of utilisation occurred). In our view, in the unusual context of the COVID-19 pandemic, the scope for this kind of effect to have arisen should have attracted further assessment and due consideration by the CAA, as it represented a clear risk that the correction factor arrangements might generate perverse outcomes. The CAA did not do this.

Determination of the overall statutory question

- 10.117 In the light of our detailed review and assessment of the Parties' submissions and supporting evidence, and as set out above, we determine that the CAA did not err in law or in the exercise of a discretion in deciding that an AK factor should apply at all. It was not wrong to apply any AK factor in the light of the losses HAL made in 2020 and 2021. We confirm the Final Decision to that extent.
- 10.118 However, we also determine that the Final Decision was wrong because it was wrong in law, and because the CAA made an error in the exercise of a discretion, in applying the AK factor mechanism in respect of 2020 and 2021 in the way that it did to account for:
- (a) an underspend on capex in 2020 and 2021;
 - (b) an over recovery caused by HAL's business rates out-turning at levels lower than the Q6 allowance; and
 - (c) an over-recovery in per passenger charges in 2020 and 2021 as a result of the airlines operating flights at Heathrow with fewer numbers of passengers than before the COVID-19 pandemic.

- 10.119 The CAA did not have regard to relevant considerations and did not meet its duty of enquiry. It assumed that, rather than properly considered whether, the AK factor should apply in the way it decided. The CAA was not in a position rationally to conclude that it should apply in that way. It also thereby made an error in the exercise of a discretion, deciding to impose the AK factor in the way that it did without taking account of relevant factors and where a clearly superior alternative – considering those factors and deciding on that basis the appropriate extent to impose the AK factor in line with its statutory duties – was open to it.
- 10.120 Specifically, the CAA was wrong because it did not give due consideration to whether, in the exceptional circumstances that applied as a result of the pandemic, HAL did actually over-recover revenues to the extent a standard application of the correction factor would imply and that it was appropriate to provide for the recovery of those amounts. Passenger numbers in 2020 and 2021, during the COVID-19 pandemic, were so different to forecast levels, and the application of the standard correction factor calculation (to be applied through the AK factor) produced values that were so markedly higher than those resulting from K factor adjustments calculated in previous years, that the CAA was wrong not to have carried out a detailed assessment as to whether it was appropriate, given the exceptional circumstances, to determine the scale of the correction be applied through the AK factor in a purely mechanistic way. The CAA was wrong not to have considered whether it was more appropriate to calibrate each component of the AK factor adjustment more closely to HAL's actual over-recovery of relevant revenues during the years 2020 and 2021.
- 10.121 Accordingly, we allow the appeal insofar as it comprises the matters in paragraphs 10.118 to 10.120.

11. Ground E: Capex incentives

Introduction

11.1 This chapter sets out our determination in relation to the ground of appeal regarding the CAA's decision to introduce for H7 a modified capital expenditure (**capex**) incentives regime.

Background

11.2 HAL operates a 'Gateway' process through which prospective capex projects progress from Gateway 0, where the need for investment is identified, to Gateway 8, where retrospective review of the delivered investment takes place.¹³⁷² Gateway 3 (**G3**) is the stage at which a project transitions from 'Development' (ie the early stage where it is still subject to review) to 'Core' (ie projects which have a greater degree of certainty around their scope and costs).¹³⁷³

11.3 Under the Q6 framework, HAL was required to have agreed a project budget with airlines to allow each project to pass G3.¹³⁷⁴ In addition, 'key projects' (identified by reference to criteria related to size and/or strategic importance) were subject to 'triggers' which could result in defined penalties for late delivery (there were 11 completed trigger projects in Q6).¹³⁷⁵ The CAA set an overall capex envelope for Q6 based on the level of capex HAL had demonstrated was needed in its capex plan.¹³⁷⁶ Alongside this, the Q6 framework included ex-post CAA review of HAL's actual capex in order to establish whether capex had been inefficiently incurred and should not be added to HAL's opening RAB for the next regulatory period.¹³⁷⁷

Final Decision

11.4 The Final Decision introduced a new ex-ante capex incentives framework for H7 that can be summarised as follows:¹³⁷⁸

- (a) An incentive rate of +/-25 per cent to be applied to any under/overspend against a project's budget agreed at G3.
- (b) A requirement for HAL to have agreed delivery obligations (**DOs**) with airlines for each project at G3, that should include a project's expected output(s),

¹³⁷² [HAL NoA](#), paragraph 301.

¹³⁷³ [HAL NoA](#), paragraph 302.

¹³⁷⁴ [HAL NoA](#), paragraph 303.

¹³⁷⁵ [HAL NoA](#), paragraphs 303 and 317.

¹³⁷⁶ Bobocica 1 paragraph 4.10.

¹³⁷⁷ Bobocica 1 paragraph 4.7.

¹³⁷⁸ Economic regulation of Heathrow Airport: H7 Final Decision', CAP2524, March 2023 (see: [Final and Initial Proposals for H7 price control | Civil Aviation Authority \(caa.co.uk\)](#) (**Final Decision**), Section 2, paragraph 7.25.

quality requirements and timing, elements that may be adapted to reflect the characteristics of a particular project.

- (c) Each DO to have a weighting to determine what proportion of baseline capex is associated with performance against it, and SMART indicators¹³⁷⁹ should be established to determine whether or not each DO has been met, and the level of adjustment to baseline capex associated with non-delivery.

11.5 Alongside the Final Decision, the CAA published a consultation document on draft guidance on capital expenditure governance under the new capex incentives framework that included consideration of how disagreements between HAL and airlines should be addressed.¹³⁸⁰

Grounds of appeal

11.6 HAL appealed the Final Decision on the grounds that the CAA was wrong in law, or that the CAA made an error in the exercise of a discretion in relation to the capex incentives regime introduced by the CAA for H7.

11.7 In our view, HAL's arguments that the Final Decision is wrong in law can be grouped under six headings:¹³⁸¹

- (a) The design of the CAA's capex incentives framework is contrary to the CAA's statutory duty to promote economy and efficiency;
- (b) The design of the CAA's capex incentives regime fails to take account of the interests of users of air transport - contrary to the CAA's primary duty - by inappropriately prioritising the commercial interests of airlines;
- (c) The Final Decision for capex incentives is unnecessary – the Q6 arrangements are working well and the CAA had no proper basis to introduce the intrusive new requirements relating to DOs;
- (d) The Final Decision is not targeted or proportionate and applies a blanket policy across all capex which bears no correlation to the benefits to users of air transport;
- (e) The CAA's novel capex incentive framework is not transparent or accountable; and

¹³⁷⁹ 'SMART' Indicators: Specific Measurable Achievable Relevant and Time-bound indicators.

¹³⁸⁰ [Final Decision](#), paragraph 7.30 and [Draft guidance on capital expenditure governance](#), CAP2524G, March 2023, paragraph 4.2.

¹³⁸¹ [HAL NoA](#), section starting at paragraph 308.

- (f) The Final Decision is not consistent with regulatory best practice – the CAA fails to take account of relevant comparators and fails to consider consistency within its own price control decision.

11.8 HAL further submitted that the CAA had erred in its exercise of discretion in relation to inefficiency compared with the existing framework for Q6 and owing to its prioritisation of the commercial interests of airlines above the interests of users of air transport at Heathrow.¹³⁸²

Issues to determine

Overall statutory question for determination

11.9 We are required to determine whether the Final Decision was wrong because it was wrong in law in relation to capex incentives, or whether it was wrong because the CAA made an error in the exercise of a discretion in relation to those incentives.

Subsidiary questions for determination

11.10 The subsidiary questions for our assessment, in order to determine the overall statutory question as to whether the Final Decision was wrong in law, are:

- (a) did the CAA err by failing to carry out its functions in a manner which it considered would further the interests of users of air transport services regarding the range, availability, continuity, cost and quality of airport operation services, by prioritising airlines' commercial interests?¹³⁸³
- (b) Did the CAA err, in performing its primary duty, by failing to have regard to the need to promote economy and efficiency on the part of HAL in its provision of airport operation services at Heathrow?
- (c) Did the CAA err, in performing its primary duty, by failing to have regard to the principle that regulatory activities should be targeted only at cases where action is needed?
- (d) Did the CAA err, in performing its primary duty, by failing to have regard to the principle that regulatory activities should be carried out in a way which is proportionate?

¹³⁸² [HAL NoA](#), paragraphs 292-293. See also [HAL NoA](#), paragraphs 368-369.

¹³⁸³ This relates to the CAA's general duty as set out in [section 1\(1\)](#) of the Act. Under [section 1\(3\)](#) of the Act, the CAA is required to have regard to certain matters when carrying out its general or 'primary' duties that are set out in [sections 1\(1\)-\(2\)](#) of the Act. Sub-paragraph (b) of paragraph 11.10 relates to [section 1\(3\)\(c\)](#) of the Act and [sub-paragraphs \(c\)-\(f\)](#) of the same paragraph relate to the Better Regulation Principles in [section 1\(4\)](#) of the Act.

- (e) Did the CAA err, in performing its primary duty, by failing to have regard to the principle that regulatory activities should be carried out in a way which is transparent and accountable?
- (f) Did the CAA err, in performing its primary duty, by failing to have regard to the principle that regulatory activities should be carried out in a way which is consistent?

11.11 The subsidiary questions for our assessment, to determine the overall statutory question as to whether the Final Decision was wrong because the CAA made an error in the exercise of a discretion, are whether the CAA erred in introducing a requirement to agree DOs on all G3 projects on the basis that it:

- (a) would be inefficient compared with the existing Q6 framework; and/or
- (b) prioritised the commercial interests of airlines over the interest of users of air transport services.

Summary of our approach and determination

11.12 We have considered HAL's contentions that the Final Decision was wrong because it was wrong in law, or because the CAA made an error in the exercise of a discretion in relation to capex incentives. The former includes an assessment of whether the CAA misdirected itself to or otherwise failed to comply with a variety of its statutory duties. The latter includes an assessment of whether the CAA made an error in the exercise of a discretion because it made a choice in circumstances where a clearly superior alternative was available to it, based on the alleged superior efficiency of the existing Q6 framework or the new framework's alleged prioritisation of the commercial interests of airlines over users of air transport services. This assessment has been carried out in line with the legal framework described in chapter 3.

11.13 Following an in-depth review and assessment of the Parties' submissions and supporting evidence, and on the basis of the considerations set out in further detail below, we determine that the Final Decision was not wrong in law and that the CAA did not make an error in the exercise of a discretion in relation to capex incentives.

Our assessment

11.14 We begin by providing an overview of the Parties' submissions. Under each of the six headings set out in paragraph 11.7 we then summarise the relevant submissions put forward by HAL in relation to errors of law and, where applicable, errors in the exercise of a discretion. We also summarise the submissions advanced in response by the CAA, and the submissions from the interveners on

this ground (BA and Delta – together the **Airline Interveners**). For each heading, we then set out our assessment of those submissions before presenting our determination on the relevant subsidiary question(s) for determination. Finally, after having assessed submissions under all of the six headings, we set out our determination on the overall statutory question.

Overview of Parties' submissions

- 11.15 HAL submitted that the H7 capex incentives framework is contrary to the CAA's primary statutory duty – its design is fundamentally flawed as it will not result in an efficient or economic capex incentive regime which operates in the interests of users of air transport. HAL further submitted that in introducing the H7 capex incentives framework, the CAA had failed in its statutory duty to have regard to the Better Regulation Principles¹³⁸⁴ as the framework was not necessary, proportionate or targeted, transparent or accountable, nor was it consistent with relevant regulatory precedent.¹³⁸⁵
- 11.16 HAL submitted that, as a result, the Final Decision was wrong in law as the CAA had failed to take into account its statutory duties, in particular: its primary duty to further the interests of users of air transport services; its duty to promote efficiency and economy; and its duty to have regard to each of the Better Regulation Principles. HAL further submitted that, as a result, the CAA had erred in its exercise of discretion since it had made a decision which will create inefficiency compared with the existing framework for Q6 and prioritised the commercial interests of airlines above the interests of users of air transport at Heathrow.¹³⁸⁶
- 11.17 HAL also made representations in response to our Provisional Determination. In summary, it submitted that we had:
- (a) incorrectly interpreted the CAA's statutory duty to have regard to certain matters (and wrongly provisionally determined that it had had such regard);
 - (b) accepted at face value the CAA's arguments about the justification for the framework, over-stated the flexibility provided by the framework and made irrational findings; and
 - (c) not given it a chance to respond to our interpretation of the CAA's statutory duties.¹³⁸⁷

¹³⁸⁴ As set out in [section 1\(4\)](#) of the Act, those principles are that (a) regulatory activities should be carried out in a way which is transparent, accountable, proportionate and consistent, and (b) regulatory activities should be targeted only at cases in which action is needed.

¹³⁸⁵ [HAL NoA](#), paragraphs 290-291.

¹³⁸⁶ [HAL NoA](#), paragraphs 292-293.

¹³⁸⁷ HAL, response to PD, paragraphs 202-245. We include further assessment of HAL's response to our Provisional Determination elsewhere in this chapter.

- 11.18 At a high level, the CAA submitted that none of the arguments raised by HAL in its NoA and previously aired to the CAA had come close to showing that the Final Decision was wrong, rather than an exercise of regulatory judgement with which HAL disagrees.¹³⁸⁸ The CAA submitted that it had had regard to the Better Regulation Principles, and in doing so, had reached a conclusion that HAL did not like – and that this did not show the CAA to have acted unlawfully or erred.¹³⁸⁹
- 11.19 At a similarly high level, the Airline Interveners submitted that they supported the CAA’s assessment of the need for change and expected the new capex incentives regime to be a proportionate, flexible and effective means of ensuring that capex is effectively and efficiently made. They further submitted that HAL was incorrect to state that airlines would be incentivised to act contrary to the interests or airport users.¹³⁹⁰ The Airline Interveners submitted that the CAA had expressly directed itself to the need to have regard to the Better Regulation Principles in the Final Decision and went on to explain how it had regard to those principles in that decision.¹³⁹¹ They further submitted that an obligation to have ‘due’ regard was not a duty to achieve a particular result, but rather to have the ‘regard’ to the specified matters ‘that is appropriate in all the circumstances’.¹³⁹²

Inefficiency of the H7 regime compared with the existing Q6 framework

HAL’s submissions

- 11.20 HAL submitted that the CAA had failed to recognise HAL’s existing Q6 incentives to deliver projects efficiently. According to HAL, the Q6 arrangements already involved extensive engagement with customers, airlines and an independent expert; and contained extensive protections to ensure efficient delivery of capital projects, in particular considerable scrutiny of HAL capex, including incentives from Trigger Definition Sheets (**TDS**) and ex-post efficiency reviews. HAL further submitted that the Q6 framework was designed to let HAL work with airlines to deliver capital programmes in a flexible and timely way. According to HAL, capital projects that were successfully delivered in Q6 included the new Terminal 2, a new baggage system for Terminal 3 and new transfers security infrastructure for Terminals 3 and 5 (to name just a few examples).¹³⁹³
- 11.21 HAL submitted that the success of the Q6 framework was demonstrated by: a series of independent reviews that have consistently confirmed efficiency of HAL’s capex; the fact that there had been very limited issues of dispute escalated to the joint steering board in Q6 and only two projects escalated to the CAA in that time

¹³⁸⁸ [CAA, Response to applications for permission to appeal](#) (CAA Response), 31 May 2023, paragraph 264.

¹³⁸⁹ [CAA Response](#), paragraph 283.

¹³⁹⁰ [BA NoI](#) paragraph 5.1.3; [Delta NoI](#) paragraph 5.3.

¹³⁹¹ [BA NoI](#) paragraph 5.5.1; [Delta NoI](#) paragraph 5.24.

¹³⁹² [BA NoI](#) paragraph 5.5.2; [Delta NoI](#) paragraph 5.25.

¹³⁹³ [HAL NoA](#), paragraphs 310 and 311.

(including the interim period); and construction industry recognition. HAL further submitted that the report by Steer¹³⁹⁴ had reviewed the CAA consultation documents and had concluded that the current capex model was the best fit for Heathrow. According to HAL, this showed that it had effectively kept capex costs under control, and cost control was supported by an independent auditor providing visibility of key project development to stakeholders. HAL submitted that there was constructive engagement/close involvement between airlines and HAL – the governance process had run itself with minimal CAA intervention in relation to decision-making; and the process allowed for the necessary agility in light of the dynamism of the aviation industry.¹³⁹⁵

11.22 HAL further submitted that the CAA decided to amend the regime in spite of evidence showing the Q6 framework was working effectively. According to HAL, the CAA's justifications were flawed:

- (a) In terms of stronger budget/timing incentives, HAL submitted that the CAA and independent reviewers had confirmed Heathrow had been operating efficiently under the Q6 framework and the current regime provided well-designed and rigorous budget and timing incentives that were well-suited to Heathrow.
- (b) In terms of any suggestion that it was unclear to airlines whether benefits/outputs from projects had been delivered, HAL submitted that airlines already had access under the Q6 framework to extensive information about Heathrow's capex projects. Information was provided to them via a Development Information Portal, regular monthly meetings and stakeholder groups, the current certification gateway process and independent review of projects.
- (c) In terms of suggestions that the passing of time and asymmetry of information can make ex-post reviews challenging, HAL submitted that, under the Q6 framework, the CAA had access to detailed information about capex projects throughout the relevant regulatory period (eg from numerous Independent Fund Surveyor (**IFS**) reports on real time project monitoring and monthly stakeholder governance meetings).
- (d) Finally, in terms of suggestions that the strength of HAL's existing incentives became weaker over the course of the regulatory period, HAL submitted that ex-post efficiency reviews and ongoing monitoring by airlines/IFS under the Q6 framework provided strong incentives for HAL to act efficiently throughout the regulatory period regardless of when a project starts and ends. This factor could be relevant to the introduction of 25% sharing rate but did not

¹³⁹⁴ HAL, Steer: *Heathrow airport – Assessment of CAA-consulted ex-ante capital allowance process*, December 2019, submitted to CAA with HAL's IBP submission

¹³⁹⁵ [HAL NoA](#), paragraphs 311 and 312.

provide a basis for the complex and intrusive DO requirement in the H7 framework.¹³⁹⁶

- 11.23 HAL submitted that the design of the H7 framework would impose unworkable complexity in respect of at least 400 projects during H7 and result in significant increases in time and resources. According to HAL, the new DO requirements essentially amounted to a detailed contract between HAL and airlines for every project passing through G3, requiring formal renegotiation for any adjustments as the project progressed. HAL submitted that the new DO requirements went much further than the previous Q6 ‘trigger’ regime – there were new requirements on quality, weightings and additional regulatory importance of scope. According to HAL, the requirements applied to all projects regardless of size or significance and they required agreement with airlines on ex-post detailed reconciliation for each project. HAL further submitted that the average time spent agreeing TDS was eight months in Q6. TDS were only needed for the largest/most important projects and were focused on timing and required considerably less detailed levels of agreement than DOs which extended to scope and quality, as well as weightings and SMART indicators. HAL predicted that the new framework would result in an approximately 90 times increased workload and an increase of c.25% in terms of time required to reach an investment decision on an individual project. HAL estimated c.80 new recruits would be needed to add to an existing team of 260 due to the new regime.¹³⁹⁷
- 11.24 HAL further submitted that the H7 regime introduced inefficiency by failing to recognise the way complex capex projects were managed in practice at Heathrow. HAL said that the blunt ‘one size fits all’ approach did not take into account the variety and complexity of projects at Heathrow. It submitted that variable supply and demand meant HAL needed flexibility to alter supply levels within a short space of time – which was different to other regulated industries. HAL further submitted that a high level of responsiveness was needed as much of its capex project work took place with a lack of certainty as to when work could be executed. According to HAL, projects were executed in a live operational environment and disruption to passengers had to be minimised. HAL also submitted that projects undertaken by it during H7 will take place in a particularly unpredictable environment due to the evolving impact of the recovery from the COVID-19 pandemic and evolving statutory requirements and environmental and planning consents. According to HAL, the H7 DOs resulted in a loss of flexibility – this limited HAL’s ability to be responsive to developments, and disincentivised it from taking courses of action that did not align with DO outputs even if more efficient or better value options were available.¹³⁹⁸

¹³⁹⁶ [HAL NoA](#), paragraph 313.

¹³⁹⁷ [HAL NoA](#), paragraphs 315-322.

¹³⁹⁸ [HAL NoA](#), paragraph 323.

- 11.25 HAL also submitted that the new regime did not account for natural evolution or refinement of the scope of projects and did not consider HAL's incentives in this context, unlike the Q6 regime. According to HAL, the new regime lacked the agility of Q6 and would be detrimental to HAL's efficient running and delivery of capex projects. HAL submitted that the H7 framework would only be workable if the exact costs of capex projects were known in advance, the scope of the project was unlikely to change and there was little scope for disagreement with airlines over content of DOs – but these features were absent from the vast majority of capex projects at Heathrow.¹³⁹⁹
- 11.26 HAL further submitted that the CAA's statement in its Final Proposals that HAL should undertake 'necessary optioneering and planning during the development stage of projects to a sufficient quality to derive a P50 cost estimate for G3' did not address HAL's concerns. HAL said that it was 'hamstrung' by significant risks that projects would not satisfy detailed DO requirements on scope, quality and timing agreed at G3. It submitted that this meant it would be disinclined to proceed with projects until airline agreement was achieved on detailed DO parameters at G3 – it would be too risky to procure work beforehand. If the scope of work changed during projects, HAL would be further delayed due to the requirement to renegotiate with airlines each time potential changes were needed.¹⁴⁰⁰
- 11.27 HAL additionally said that its contractors kept quotations open for around one month on average (and this was trending downwards) and that this was not compatible with the H7 DO requirements. According to HAL, requiring quotations to stay open longer will result in a premium on quoted prices.¹⁴⁰¹
- 11.28 HAL alleged that the new regime was therefore incompatible and inconsistent with the way that projects were managed and procured at Heathrow and will lead to delays, higher costs and inefficiency. According to HAL, there will likely be a compounding effect/'domino effect' across projects as one delays another.¹⁴⁰²
- 11.29 HAL also submitted that the DO regime did not promote efficient incentives. According to HAL, the H7 capex regime would incentivise airlines to be inflexible during the process of agreeing the DOs and to negotiate strongly for DOs that were in their short-term commercial interests, even if they did not produce a better outcome for consumers. HAL submitted that a failure to meet stringent requirements would maximise likelihood of disallowed capex, reducing airport charges in future. HAL further submitted that the H7 regime incentivised it to be more risk-averse and encouraged it to focus on delivering exactly what was set out in DOs – which created a risk of achieving worse outcome for users of air transport. Flexibility was unnecessarily restricted and this stifled innovation. HAL

¹³⁹⁹ [HAL NoA](#), paragraphs 325 and 326.

¹⁴⁰⁰ [HAL NoA](#), paragraphs 327 and 328.

¹⁴⁰¹ [HAL NoA](#), paragraphs 329-331.

¹⁴⁰² [HAL NoA](#), paragraph 333.

said that this meant that focus was incorrectly placed on outputs rather than outcomes. HAL submitted that it would likely be driven to break projects down into smaller projects, in order to carry out works earlier in the project life cycle and avoid discovering issues later when there was a possible penalty under the new regime. According to HAL, this was likely to increase bureaucratic burden and delay.¹⁴⁰³

CAA Response

- 11.30 The CAA submitted that the purpose of the requirements was to ensure that there were appropriate incentives in place for HAL to make capital investments efficiently. The CAA submitted that ex-ante incentives, where HAL shared a proportion of the benefits of delivering capex projects below a set budget and shared a proportion of the costs of any over-spend against that budget, was the best way to create such incentives. According to the CAA, this approach provided incentives for HAL to improve the efficiency of its capital spending such that users of air transport services should not end up paying for inefficiently incurred costs, that otherwise might be added to HAL's RAB.¹⁴⁰⁴
- 11.31 The CAA submitted that the capex incentive framework disclosed no breach of the duty to have regard to the need to promote economy and efficiency. According to the CAA, HAL has entirely mis-stated this duty. The CAA submitted that HAL's argument was based around the premise that the CAA had a direct obligation to promote economy and efficiency, when the CAA's obligation was in fact to further the interests of consumers, having regard to the need to promote economy and efficiency. The CAA submitted that this was a key distinction and none of HAL's submissions showed that the CAA had failed to have regard to this need. The CAA submitted that in any case it considered that its proposals would, in practice, promote economy and efficiency in the delivery of capital projects.¹⁴⁰⁵
- 11.32 The CAA also submitted that it was not disputed that HAL had incentives to deliver investment projects efficiently under the existing Q6 arrangements. However, the CAA said that its analysis of capital projects in Q6 identified several issues suggesting HAL's incentives to deliver efficiently were misaligned and relatively weak, particularly on more complex projects.¹⁴⁰⁶ The CAA submitted that while the CAA's Q6 capex review found that lower-value projects were generally delivered efficiently, airlines argued that all four of the sample of more complex projects that the CAA assessed were developed and/or delivered inefficiently.¹⁴⁰⁷ The CAA also stated that its analysis of that sample did not lead to it to conclude that these more complex projects had been developed or delivered efficiently (consistent with the

¹⁴⁰³ [HAL NoA](#), paragraphs 334-338.

¹⁴⁰⁴ [CAA Response](#), paragraph 257.

¹⁴⁰⁵ [CAA Response](#), paragraph 267.

¹⁴⁰⁶ [CAA Response](#), paragraph 268.

¹⁴⁰⁷ [CAA Response](#), paragraph 268.1.

precedent established previously by the CMA and used in the RP3 price review of NERL, the relevant test used at the Q6 ex-post review was whether spending was demonstrably inefficient and wasteful).¹⁴⁰⁸ According to the CAA, its analysis also showed that ex-post assessment of projects was often difficult due (in particular) to the passage of time, which made it difficult to identify, quantify and then attribute inefficiencies, as well as asymmetry of information - noting that HAL's information on project completion and post-hoc evaluation was particularly weak.¹⁴⁰⁹

- 11.33 The CAA submitted that against this background it was entitled to take the view that further incentives were required and that the fact of some 'success' under Q6 did not affect this. According to the CAA, even if it had some scepticism about purported Q6 'success', the important point was that the CAA had formed the view that HAL could do better – and the fact that HAL was already doing well was irrelevant to that point.¹⁴¹⁰
- 11.34 With regard to the Steer report (which the CAA pointed out was prepared before expansion of Heathrow was paused), the CAA submitted that the fact it disagreed with the CAA's eventual conclusion disclosed no error. According to the CAA, it is well within its margin of appreciation to prioritise a higher degree of clarity and certainty on project outputs and timescales instead of more emphasis on flexibility as suggested by the Steer report.¹⁴¹¹
- 11.35 The CAA submitted that, in any event, there was no explanation in HAL's appeal of how further incentivising efficiencies might be a breach of a duty to have regard to the need to promote efficiency. It said that such an explanation would not be possible.¹⁴¹²
- 11.36 In terms of 'unworkable complexity', the CAA submitted that this was mere disagreement by HAL with the framework and disclosed no error. The CAA submitted that its Final Decision was practical and proportionate. In support of this, the CAA said the following:
- (a) The CAA had sought to build on existing HAL-airline governance arrangements, and not introduce new decision points in the process. This was why the CAA had specified that DOs and baselines should be agreed at G3, the point at which HAL already needed to obtain airline agreement for the investment decision. The CAA considered that the existing discussions which took place leading up to and as part of the G3 investment decision can readily be extended to include the definition of DOs, and that, in fact, a stronger discipline around clearly defining (and recording) the scope, quality

¹⁴⁰⁸ [CAA Response](#), paragraph 268.2.

¹⁴⁰⁹ [CAA Response](#), paragraph 268.3.

¹⁴¹⁰ [CAA Response](#), paragraph 269.

¹⁴¹¹ [CAA Response](#), paragraph 270.

¹⁴¹² [CAA Response](#), paragraph 271.

and timescales for each project would make the G3 discussions more effective, rather than hindering them.

- (b) HAL was exaggerating the differences between the existing framework and the proposals for ex-ante incentives, in terms of the governance arrangements between HAL and airlines. Elements of what was delivered (output) and quality (to what standard) were typically covered as part of signing off triggers, albeit only in relation to a subset of projects. Therefore, the CAA did not agree with the comparison between triggers and DOs set out by HAL. The CAA submitted that in defining triggers, HAL necessarily had to engage with airlines on what would be delivered (both in terms of scope and quality), and these parameters were also recorded as part of the TDS, which formed the basis of the trigger. HAL had considerable scope to manage the process to ensure it was effective and efficient and did not unduly delay projects.
- (c) In terms of HAL's arguments around the additional complexity due to the need to agree weightings, for the purpose of streamlining the process of setting DOs, in the first instance the CAA expected weightings to be evenly allocated across DOs (as explained in the draft guidance on capital expenditure governance). As the parties gained experience with the new framework, the CAA expected HAL and airlines will be able to make the judgements necessary to assign broad weightings to the importance of different deliverables.
- (d) HAL had provided some information around the average time spent in Q6 drafting a TDS and argued that this was an indication of the level of effort that would need to be applied to each DOs in H7. On the basis of this information, HAL had extrapolated that the introduction of DOs would result in an increased workload, by comparison with the work involved in administering triggered Q6 projects, by approximately 90-times. However, the CAA submitted that this analysis was flawed. As triggers applied to the largest and most important projects (by HAL's own account), the CAA would expect the time taken to agree triggers in relation to these projects to be longer than for smaller and more routine projects. The CAA would therefore expect the time required to agree DOs for the majority of projects in HAL's portfolio to be much lower than the time needed to agree DOs for larger projects.
- (e) Further, the CAA noted that understanding what would be delivered was inherent to the proper assessment and planning of any project. Presenting this in a straightforward and transparent way to airlines should promote effective dialogue and strengthen both relationships and engagement. Overall, this should promote effective and efficient decision making, rather than hinder or obstruct the process as HAL appeared to be suggesting.

- (f) The CAA had also engaged extensively with HAL and airlines following the publication of the Final Proposals, to develop guidance for implementing the H7 ex-ante capex incentives framework in the most effective and proportionate way. To this end, the CAA established a programme of engagement with HAL and airlines (workshops) to work through some of the practical implementation issues associated with its proposals. The work the CAA had done with HAL and airlines (which has been taken forward by HAL and airlines on a bilateral basis since the publication of the Final Decision) to define standard information that should be provided at G3 (and before) in relation to each project would significantly streamline the process of agreeing budget baselines and DOs at G3, and overall improve the engagement between HAL and airlines as part of the capex governance process.¹⁴¹³

11.37 In terms of an alleged failure to have regard to how complex capex projects are managed in practice at Heathrow, the CAA submitted that it has had regard to this consideration but had drawn different conclusions in the exercise of its regulatory judgement than those HAL would have liked. The CAA submitted that its framework was designed to be sufficiently flexible to accommodate projects of varying size and complexity. According to the CAA, it was entitled to expect HAL to manage and plan its portfolio of projects in an efficient, transparent manner that recognised the need for flexibility around operational constraints and variable demand patterns – in common with other airport managers/owners and other infrastructure managers in the transport sector in particular. The CAA submitted that the framework recognised that the scope of projects may change after G3 approval, while providing enhanced certainty for all parties through the use of DOs.¹⁴¹⁴

11.38 In terms of any alleged unnecessary delay and uncertainty in the procurement of suppliers, the CAA submitted that the new framework would not introduce unnecessary delay. According to the CAA, relying on witness evidence, some of the flexibilities under the existing framework undermined the accountability HAL should have for the efficient delivery of capex projects. The CAA, relying on witness evidence, further explained that the new arrangements were consistent with an efficient contracting process, which should have a reasonable focus on project deliverables and efficient change control. The CAA noted that currently G3 was the approval gateway at which HAL committed with airlines to a firm price for a project – and that would not change in future. The CAA submitted that, similarly, the change control process (used when project scope or cost changes after G3) would be retained in the new framework.¹⁴¹⁵

¹⁴¹³ [CAA Response](#), paragraphs 272 and 273.

¹⁴¹⁴ [CAA Response](#), paragraph 274.

¹⁴¹⁵ [CAA Response](#), paragraph 274.

- 11.39 In terms of an alleged failure to promote efficient incentives, the CAA submitted that this claim was misguided and would in any event indicate no breach of the duty to have regard to the need to promote efficient investment.¹⁴¹⁶ The CAA submitted that there was no evidence that it was likely that the design of the ex-ante incentive framework would incentivise airlines to be inflexible during the process of agreeing DOs. According to the CAA, DOs should be objective measures of what a project was going to deliver, by when and to what standard, in accordance with its (so far draft) guidance on capital expenditure governance. The CAA submitted that in any event, it would act as ultimate arbiter in cases where HAL and airlines cannot agree a DO (or a baseline) at G3, which would ameliorate any alleged risk of airlines acting deliberately inflexibly.¹⁴¹⁷
- 11.40 In terms of arguments that the inclusion of knife-edge scope requirements incentivised HAL to be more risk-averse and encouraged it to focus on delivering exactly what was set out in the DOs, the CAA submitted that this was based on a misunderstanding of DOs being ‘knife-edge’ (ie either they are met or not met in full). According to the CAA, the framework does not specify knife-edge DOs by default, and the CAA explicitly explained this to HAL ahead of its submission of the Notice of Appeal (including at a meeting on 6 April 2023), and also stated this in the Final Proposals where the CAA said that when agreeing indicators to establish whether a DO had been met, these can include indicators for ‘partial’ delivery. According to the CAA, it had made clear at every stage that it was open to HAL and airlines agreeing DOs that suit the circumstances of each particular project, rather than seeking to set out a prescriptive approach for those DOs.¹⁴¹⁸
- 11.41 As to the arguments that the ex-ante capex incentives would drive HAL to break projects down into smaller projects, to seek to carry out more works earlier in the project life cycle in order to identify any issues (ie asbestos, or ground works issues), and therefore minimise its risk of overspend, the CAA submitted that there may be occasions where proceeding on the basis of smaller projects was an efficient and reasonable approach. However, according to the CAA, there was no evidence the ex-ante arrangements would create an undue incentive for HAL to behave in this way (and it cannot reasonably be assumed). The CAA submitted that, as part of good-practice project development, HAL should seek to identify and manage relevant risks (in a proportionate way), including when preparing cost estimates to be submitted for G3 approval. The CAA submitted that HAL’s G3 cost estimates should, in accordance with its own governance framework and protocols, be calculated on a P50 basis (ie a reasonable central estimate). According to the CAA, this approach should allow for the reasonable management

¹⁴¹⁶ [CAA Response](#), paragraph 275.

¹⁴¹⁷ [CAA Response](#), paragraph 275.1

¹⁴¹⁸ [CAA Response](#), paragraph 275.2

of uncertainty, as over its portfolio of projects it would be able to manage risk and should not expect to make windfall losses or gains.¹⁴¹⁹

- 11.42 The CAA further submitted that HAL's argument that the risk associated with the typical distribution of cost estimates for capex projects was asymmetric is irrelevant. According to the CAA, the Final Decision explained that the capex baseline to be applied for projects under the H7 framework should reflect an agreed reasonable central estimate of costs. The CAA submitted that while it is true that the distribution of cost estimates for many capex projects was typically asymmetric, the baseline for each project should be specifically developed to aim to ensure that HAL's risk exposure represented a 'fair bet'. According to the CAA, HAL was responsible for ensuring that its cost estimates contained a reasonable allowance for risk when proposing a baseline, and for managing delivery of projects to ensure that project costs were (as far as practicable) controlled. The CAA submitted that if HAL believed that a particular project was likely to have a higher-than-average risk of relatively high-cost over-runs, then it should propose additional allowances for that exposure, consistent with good practice.¹⁴²⁰

Interveners' submissions

- 11.43 The Airline Interveners submitted that the 'independent reviewers' referred to by HAL were not tasked with confirming the efficiency of capex during Q6, nor were they in a position to do so. According to the Airline Interveners, the independent reviewers demonstrated that the majority of projects were delivered within budget and within schedule and that this was not an assessment of efficiency. They submitted that the Steer report referred to by HAL, for example, complimented HAL's controls on costs and finances, but this did not equate to efficiency or value for money. They submitted that it did not address (nor did it have the metrics to address), for example, whether quality compromises were made or projects were de-scoped (and therefore provided reduced consumer benefits) so as to bring them within budget. They also submitted that it would not determine, or even consider, whether the projects were themselves 'gold plated' (ie unnecessarily went beyond what was required to deliver the desired consumer benefits).¹⁴²¹
- 11.44 The Airline Interveners submitted that the absence of disputes during Q6 was also not a metric of efficiency. They also said that this fact does not support the assertion later made by HAL that airlines had in the past adopted, or are likely to adopt, an obstructive and adversarial approach to the delivery of capital projects. They further submitted that industry recognition in respect of certain Q6 projects was not evidence of efficiency. According to the Airline Interveners, a project may well be innovative and at the same time provide poor value for money by reference

¹⁴¹⁹ [CAA Response](#), paragraph 275.3.

¹⁴²⁰ [CAA Response](#), paragraph 285.2.

¹⁴²¹ [BA Nol](#), paragraph 5.2.4; [Delta Nol](#), paragraph 5.7.

to the consumer benefits it delivers. They also submitted that the considerations taken into account by an awarding body in respect of a particular project and the conclusions it reaches cannot be said to extend to all of HAL's other capex projects.¹⁴²²

- 11.45 The Airline Interveners also submitted that it was demonstrably not the case that the existing regime was working successfully, efficiently, and in the interests of users of air transport, and supported the CAA's assessment of the need for change.¹⁴²³ They said that the ex-post review of projects, often many years after the G3 decision, was difficult and time consuming. They said that it involved proving that spend was inefficient rather than assessing whether it was efficient by reference to transparent DOs. They submitted that an ex-post review many years after a project is initiated often meant that many of those with the institutional memory necessary to contribute to a review may have moved onto other employment.¹⁴²⁴
- 11.46 The Airline Interveners additionally submitted that the existing regime was inefficient and ineffective. They said that it was extremely challenging to conduct a meaningful review of the efficiency of a project as matters stood because of the passage of time and asymmetry of information between the regulated company and regulator. According to the Airline Interveners, there were examples of this difficulty emerging in practice.¹⁴²⁵ They also submitted that difficulties arose at the front end of the process, noting that throughout Q7, and with reference to a particular example, HAL had failed to provide the airlines with sufficient details of its capital plans for the airlines to conduct a meaningful ex-ante assessment of the potential for projects to achieve value for money.¹⁴²⁶
- 11.47 The Airline Interveners said that that it was simply good project and programme management for HAL to set DOs for every project around cost, scope and schedule. By contrast, they submitted that their experience was that the Q6 regime simply led to inefficiency, with HAL assuming no meaningful risk for poor delivery performance.¹⁴²⁷
- 11.48 The Airline Interveners submitted that they did not understand how HAL had formed the review that its workload would be increased by approximately 90 times under the new regime. They submitted that HAL ought already to be undertaking the same tasks which it would be required to undertake in the H7 process. They submitted that the Q6 process required airlines' approval at G3 stage and the key feature of the H7 changes was a requirement clearly to articulate at that stage the

¹⁴²² [BA Nol](#), paragraph 5.2.4; [Delta Nol](#), paragraph 5.7.

¹⁴²³ [BA Nol](#), paragraph 5.2.1; [Delta Nol](#), paragraph 5.4.

¹⁴²⁴ [BA Nol](#), paragraph 5.2.2; [Delta Nol](#), paragraph 5.5.

¹⁴²⁵ [BA Nol](#), paragraph 5.2.2; [Delta Nol](#), paragraph 5.5.

¹⁴²⁶ [BA Nol](#), paragraph 5.2.2; [Delta Nol](#), paragraph 5.5.

¹⁴²⁷ [BA Nol](#), paragraph 5.2.3; [Delta Nol](#), paragraph 5.6.

output, quality and timing of the capital investment being approved. BA and Delta submitted that this was information that any competent project manager should be able to produce.¹⁴²⁸ They further submitted that, under the H7 process, HAL would be incentivised to share key information on a timely basis to enable the agreement of meaningful DOs which it would, in turn, be incentivised to meet, which was not currently the case and led to entirely avoidable delays in reaching agreement.¹⁴²⁹

- 11.49 The Airline Interveners further submitted that they were confident that the system designed by the CAA was sufficiently flexible to address the variety and complexity of projects undertaken by HAL. They submitted that the CAA had been well aware of the range of projects when it was developing its proposals and it was clearly not the case that each project would involve the same level of resourcing and administration irrespective of size or scope. They also submitted that flexibility was provided by the change control process which would remain in place, recognising that changes in circumstances may justify changes to projects. According to the Airline Interveners, past experience demonstrated that airlines approached such requests in a pragmatic and constructive manner and this sort of process remained available to HAL and the airlines under the CAA's new capex governance framework.¹⁴³⁰
- 11.50 The Airline Interveners submitted that if the airlines and HAL reached an impasse, airlines did not have a right to exercise a veto or frustrate a project which HAL considered was in the interests of users. They submitted that this was because explicit provision was made for the CAA to act as arbiter in the event that HAL and airlines could not reach agreement.¹⁴³¹
- 11.51 The Airline Interveners also said that HAL would be incentivised to do proper scoping and surveying work at the initial stages of projects to identify issues of the type referred to by HAL before significant costs were incurred. They submitted that this was a feature, rather than a flaw, in the new capex processes.¹⁴³²

Our assessment

- 11.52 At the outset, and in light of HAL's response to our Provisional Determination, we note the following points that are relevant both to this part of our assessment of capex incentives and to other areas of this chapter:
- (a) In response to our Provisional Determination, HAL submitted that our analysis of the CAA's compliance with its statutory duties was flawed. According to HAL, we failed to recognise that a duty to have regard to certain

¹⁴²⁸ [BA Nol](#), paragraph 5.3.4; [Delta Nol](#), paragraph 5.12.

¹⁴²⁹ [BA Nol](#), paragraph 5.3.5; [Delta Nol](#), paragraph 5.13.

¹⁴³⁰ [BA Nol](#), paragraph 5.3.7; [Delta Nol](#), paragraph 5.15.

¹⁴³¹ [BA Nol](#), paragraph 5.4.7; [Delta Nol](#), paragraph 5.22.

¹⁴³² [BA Nol](#), paragraph 5.3.6; [Delta Nol](#), paragraph 5.14.

matters requires meaningful engagement with the statutory criteria. HAL cited a variety of case law in support of its contentions that a rigorous approach is required: a mere 'box-ticking' exercise is not sufficient, the assessment is not a binary one, duties should be integral to the decision-making process,¹⁴³³ and that referring to the mere use of mantra, or to the fact that the CAA simply turned its mind to certain matters, rather than reviewing the substance of a decision and its reasoning, is not capable of showing that a statutory duty has been performed.¹⁴³⁴

- (b) We agree in principle with the points raised by HAL in terms of the meaning of a duty to have regard to certain matters.¹⁴³⁵ That is, while it is a duty of process rather than outcome, we agree that the obligation is one that requires the CAA properly and conscientiously to take certain matters into account in making its decisions.
- (c) Our assessment below is a review of the evidence relevant to each of HAL's pleadings (where they relate to a duty to have regard to a particular matter). We consider whether the CAA: has carried out a conscious directing of the mind to the obligations entailed by its statutory duties;¹⁴³⁶ did not merely carry out a 'box-ticking exercise'; considered its obligations with vigour and an open-mind;¹⁴³⁷ and had a proper and conscious focus on the statutory criteria as part of its decision-making.¹⁴³⁸
- (d) Consistent with the case law, we have not sought to assess the weight given by the CAA to particular statutory matters compared with other statutory and non-statutory matters when considering whether the CAA had regard to a particular matter.¹⁴³⁹ While the CAA is required to have regard to certain statutory factors, once it has met that obligation it is clearly entitled to exercise substantial discretion, judgement and assessment in deciding how these statutory factors should be weighted, both between each other and in the context of a variety of other non-statutory factors it will inevitably have to consider when taking decisions.¹⁴⁴⁰ Provided we assess, in the round based on the body of evidence before us, that the relevant statutory matter was properly and conscientiously taken into account by the CAA, and weighed in

¹⁴³³ HAL Response to PD, paragraph 214.

¹⁴³⁴ HAL Response to PD, paragraphs 215-216.

¹⁴³⁵ However, we note in this context that much of HAL's evidence related to the concept of 'due regard' (mainly in the context of the public sector equality duty), when the relevant duties under the Act are expressed simply in terms of 'having regard'. We do not consider it necessary to conclude on any difference between having 'due' regard and having regard as we are satisfied that the Final Decision was not wrong in law on either standard in relation to capex incentives.

¹⁴³⁶ See R (Meany) v Harlow District Council [2009] EWHC559 (Admin), paragraph 74.

¹⁴³⁷ See R (Domb) v Hammersmith and Fulham LBC [2009] EWCA Civ 941, paragraph 52.

¹⁴³⁸ See R (Hurley and Moore) v Secretary of State for Business Innovation & Skills [2012] EWHC 201 (Admin), paragraph 78.

¹⁴³⁹ See R (Hurley and Moore) v Secretary of State for Business Innovation & Skills [2012] EWHC 201 (Admin), paragraphs 77-78 and R (Baker) v Secretary of State for Communities and Local Government [2008] EWCA Civ 141, paragraph 34.

¹⁴⁴⁰ See R (Pharmaceutical Services Negotiating Committee) v Secretary of State for Health [2017] EWHC 1147 (Admin), paragraph 81.

the balance, it will have complied with its obligations under the relevant part of the Act.¹⁴⁴¹

- (e) HAL also submitted that the CMA had failed to engage with the contents of Appendix G to the Final Proposals (in which the CAA assesses the compatibility of its H7 capex framework with its statutory duties).¹⁴⁴² HAL provided several examples, both of our treatment of Appendix G and its contents, to support its contentions about the CAA's statutory duties relating to matters such as proportionality, accountability and consistency.¹⁴⁴³ HAL submitted that, on proper analysis, it is clear that Appendix G is unsatisfactory, superficial and, at times, incomprehensible – and therefore cannot and should not be used as a model for how statutory duties are complied with by the CAA.¹⁴⁴⁴
- (f) We observe that Appendix G to the Final Proposals is only one piece of evidence we have considered when assessing whether the Final Decision was wrong as HAL alleged. The omission from Appendix G or from any other part of the Final Decision of any particular point considered relevant by HAL is not necessarily indicative that the CAA failed to have regard to a particular statutory matter.¹⁴⁴⁵
- (g) We have assessed the CAA's consideration of relevant statutory matters in light of the arguments advanced by HAL and the overall body of evidence we have seen. Even if Appendix G was somehow deficient, this would not on its own show a breach of the CAA's statutory duties where the CAA demonstrated its compliance in other parts of the Final Decision (and even without a dedicated formal assessment).¹⁴⁴⁶
- (h) In light of the above, and as we go on to explain, we do not find HAL's submissions about our interpretation of the CAA's statutory duties, its performance of them, or our treatment of Appendix G to be persuasive.

11.53 Having made the above observations (which are applied further below), we have organised our assessment of HAL's arguments relating to the alleged inefficiency of the H7 capex incentive regime by reference to the following matters it put forward:

¹⁴⁴¹ This formulation was adopted in *R (British Gas Limited) v The Gas and Electricity Markets Authority* [2019] EWHC 3048 (Admin), paragraph 14.

¹⁴⁴² HAL Response to PD, paragraph 203.

¹⁴⁴³ HAL Response to PD, paragraphs 213 and 217.

¹⁴⁴⁴ HAL Response to PD, paragraph 220.

¹⁴⁴⁵ See *R (on the application of Hurley and Moore) v Secretary of State for Business Innovation & Skills* [2012] EWHC 201 (Admin), paragraph 87.

¹⁴⁴⁶ See *R (on the application of Hurley and Moore) v Secretary of State for Business Innovation & Skills* [2012] EWHC 201 (Admin), paragraphs 73-74; *R (on the application of Sheakh) v London Borough of Lambeth* [2021] EWHC 1745 (Admin), paragraph 148.

- (a) HAL's existing Q6 incentives to deliver projects efficiently;
- (b) the scope for cost increases, delays and unworkable complexity under the H7 framework;
- (c) compatibility of the H7 framework with how complex capex projects are managed in practice; and
- (d) the H7 framework and the promotion of efficient incentives.

11.54 We note, as an overarching point, that we are not persuaded that HAL has presented compelling evidence to support the idea that the CAA failed to have regard to the statutory matter under discussion in this section (the need to promote economy and efficiency on the part of HAL). In this context, we note that much of the evidence presented by HAL instead appears to go to the question of whether a particular result was achieved, rather than whether the CAA had the required regard to the statutory matter.

11.55 We further note that in Appendix G to the Final Proposals, the CAA considered the need to promote economy and efficiency by HAL. For instance, at Table G.2 to Appendix G, the CAA expressly assessed why, in its view, the benefits of the H7 framework would outweigh potential risks and would overall promote greater economy and efficiency on HAL's part.

11.56 We observe that this assessment covered HAL's incentives under the new framework, the benefits and risks of the new approach, and submissions from stakeholders and HAL. While Appendix G is not in and of itself determinative of the issue, it lends support, in our judgement, to the idea that the CAA had regard to the need to promote economy and efficiency by HAL in its provision of airport operation services at Heathrow.¹⁴⁴⁷

11.57 We have also considered the further matters set out below which go to the regard the CAA had to such matters, as well as to our assessment of the alleged error of discretion.

HAL's existing Q6 incentives to deliver projects efficiently

11.58 In our view, the evidence does not demonstrate that the CAA failed to recognise or properly consider the desirable features of the Q6 regime when deciding that a new, ex-ante capex incentives framework should be introduced for H7, or that the

¹⁴⁴⁷ We further note that the Initial Proposals contained a similar Appendix H detailing the CAA's assessment of the compliance of its proposals with its statutory duties. We do not repeat our reference to Appendix H of the Initial Proposals each time we refer to Appendix G to the Final Proposals in this chapter. We also note in this context that the Final Decision on capex incentives frames its assessment in the following terms at paragraph 7.1: 'In considering how best to further consumers' interests in relation to the capital expenditure (capex) undertaken at Heathrow Airport, we are required to have regard to the need to promote economy and efficiency on the part of HAL. Ensuring that we have appropriate incentives for HAL to make capital investments efficiently is a core means by which we seek to achieve this.'

CAA was wrong to conclude that improvements could be made to the existing Q6 regime. As such, the matters put forward by HAL in this area do not in our view support the idea that the CAA failed to have regard to the need to promote economy and efficiency by HAL or that the CAA made an error in the exercise of a discretion. In addition to the matters set out in Appendix G to the Final Proposals as described above, we also take account of the following:

- (a) The CAA consulted extensively on the introduction of new capex incentive arrangements. While its proposals were initially developed in the context of capacity expansion at Heathrow, we note that the CAA first consulted on moving away from the Q6 framework of ex-post efficiency reviews (to an ex-ante framework) in June 2017.¹⁴⁴⁸ We note also that in its June 2020 Consultation the CAA set out its view that while expansion had been paused (meaning much less capex would be needed in H7 than had previously been anticipated), the challenges facing the whole aviation sector reinforced the importance of efficient spending and ensuring value for money.¹⁴⁴⁹ In that consultation, the CAA set out its view that a new incentive framework should build on the approach to core and development capex and governance used for Q6, but – where appropriate – reduce significantly or eliminate the need for ex-post efficiency reviews by the CAA.¹⁴⁵⁰
- (b) The H7 arrangements build on and incorporate aspects of the Q6 regime, including by requiring DOs to be agreed with airlines at G3, the point at which – under the Q6 regime – HAL was already required to reach an agreement with airlines on the capex budget for each project.¹⁴⁵¹ We consider the CAA to have recognised that there were desirable features of the Q6 regime and to have taken this into account in its policy development process.
- (c) The CAA’s analysis identified that undertaking ex-post efficiency reviews was challenging, including because of the passing of time since the projects under review had been completed, and the inevitable asymmetry of information between the regulated company and regulator.¹⁴⁵² We were not persuaded by HAL’s submission that the CAA’s view with respect to these challenges was unjustified because of the broad evidence base it has access to throughout a price control period.¹⁴⁵³ Information asymmetry is a central feature of economic regulation, and we consider that it is to be expected that this would impact on the effectiveness with which ex-post reviews could be undertaken and act as source of incentives to improve efficiency.

¹⁴⁴⁸ Bobocica 1, paragraph 3.3.

¹⁴⁴⁹ Bobocica 1, paragraph 3.10.

¹⁴⁵⁰ [Economic regulation of Heathrow: policy update and consultation \(caa.co.uk\)](https://www.caa.co.uk/CAP1940) CAP1940, 23 June 2020, (See: www.caa.co.uk/CAP1940), (CAA June 2020 Consultation), paragraph 3.6.

¹⁴⁵¹ We note, for example, [CAA Response](#), paragraph 272.1.

¹⁴⁵² [Final Decision](#), paragraph 7.22.

¹⁴⁵³ Maxwell 1, paragraph 6.2.3.

- (d) The CAA's identification of limitations with the Q6 regime had appropriate regard to the outcome of efficiency studies of HAL's Q6 capex programme, including the findings of the Arcadis study.¹⁴⁵⁴ We do not consider the independent reviews pointed to by HAL provide a reliable basis for concluding that the efficiency of HAL's Q6 capex (ie those parts of it which had not been explicitly identified as inefficient) had been 'confirmed'.¹⁴⁵⁵ We agree with the CAA that the identification of specific amounts of capex as 'inefficient' in an ex-post efficiency review does not mean that the remaining capex had been incurred with the same level of efficiency that might be reasonably expected from an airport subject to strong competitive pressure.¹⁴⁵⁶
- (e) While we note HAL's submissions on the information that airlines are already provided with on whether benefits/outputs from projects have been delivered,¹⁴⁵⁷ the submissions we received from airlines were strongly supportive of the CAA's assessment of the limitations of the Q6 regime and of the scope for improvement.¹⁴⁵⁸

The scope for cost increases, delays and unworkable complexity under the H7 framework.

11.59 In our view, the evidence also does not show that the CAA failed to recognise or properly consider the potential for the new capex incentives arrangements to generate cost increases, delays or unworkable complexity. HAL's submissions identified a range of risks in terms of the potential impact of the new capex arrangements on costs, timing and complexity, but the CAA's approach took those risks into account in a range of ways and sought to mitigate them. We do not consider HAL's contentions to demonstrate that the CAA's approach – through its design and implementation actions – should be regarded as having taken insufficient account of, or provide an insufficient response to, those risks. As such, the matters put forward by HAL in this area do not in our view support the idea that the CAA failed to have regard to the need to promote economy and efficiency by HAL or that the CAA made an error in the exercise of a discretion. In addition to the matters set out in Appendix G to the Final Proposals as described above, we also take account of the following:

- (a) We consider the new H7 framework to generate some additional challenges for HAL and airlines in seeking to agree DOs for all projects, and that this would be expected to have some resource implications and could potentially affect some project timelines. However, the CAA's evidence highlighted ways

¹⁴⁵⁴ For example, as set out in section 5 of Clyne 1.

¹⁴⁵⁵ [HAL NoA](#), paragraph 311.1.

¹⁴⁵⁶ Bobocica 1, paragraph 3.13.

¹⁴⁵⁷ [HAL NoA](#), paragraph 313.2.

¹⁴⁵⁸ [BA Nol](#), paragraph 5.2.1 and 5.2.2; [Delta Nol](#), paragraphs 5.4 and 5.5.

in which it had taken account of the potential for such impacts in the design and implementation of the new arrangements, including by leaving it open to HAL and airlines to agree DOs that suit the circumstances of each particular project. In particular:

- (i) While the Final Decision required DOs to be agreed with airlines for all projects passing through G3, it explicitly identified that they may be adapted to reflect the characteristics of a particular project.¹⁴⁵⁹
 - (ii) In its Final Proposals, the CAA had noted that DOs could be agreed for tranches of projects where they could be sensibly grouped together such that their performance could be assessed against higher-level and more strategic delivery obligations.¹⁴⁶⁰ We note that the list of 'Standard questions/information provision' provided in the appendix to the consultation on draft guidance on capital expenditure governance that the CAA published alongside the Final Decision included whether a project is part of a larger tranche.¹⁴⁶¹
 - (iii) The CAA developed a work programme in relation to the implementation of the H7 framework to facilitate workshops between HAL and the airlines, including on how processes could be streamlined to avoid a significant increase in workload for HAL or airlines. This has included work on the development of pre-agreed (between HAL and airlines) standard questions and indicative answer templates in relation to DOs,¹⁴⁶² and specific attention being given to processes related to lower value projects.¹⁴⁶³
- (b) In its response to our Provisional Determination, HAL submitted that there was no proper basis to find that the decision that the CAA actually took contained the flexibility on which the reasoning in the Provisional Determination had relied.¹⁴⁶⁴ In support of this, HAL pointed to Appendix F of the CAA's Final Proposals as having stated that each project must have its own DOs which specified its expected outputs, quality and timing, and levels of adjustments that would be made to the capex baseline if these DOs were not met. It submitted that this was an example of another part of the CAA's documentation that was odds with the scope for flexibility that we relied upon in the Provisional Determination.¹⁴⁶⁵ However, we consider this CAA statement to be consistent with the description of the Final Decision set out in paragraph 11.4 above. As such, we do not find HAL's submission on this

¹⁴⁵⁹ [Final Decision](#), paragraph 7.25.

¹⁴⁶⁰ [Final Proposals](#), section 2, paragraph 7.108.

¹⁴⁶¹ [Draft guidance on capital expenditure governance](#), CAP2524G, March 2023, page 23.

¹⁴⁶² Bobocica 1, paragraphs 5.10-5.19.

¹⁴⁶³ Bobocica 1, paragraphs 6.8-6.13.

¹⁴⁶⁴ HAL Response to PD, paragraph 232.

¹⁴⁶⁵ HAL Response to PD, paragraph 231.

point to be persuasive. We find that the CAA did provide in the Final Proposals and Final Decision for appropriate flexibility in the operation of the DO regime (as set out in (a) above).¹⁴⁶⁶

- (c) We consider that HAL's submissions concerning the potential implications of the new arrangements in terms of costs, delays and complexity do not provide a reliable estimate or view of the expected impacts.
- (i) We are not persuaded that HAL's submissions had taken appropriate account of the significance of the flexibility or scope for streamlining referred to in (a) above.
- (ii) We do not consider that HAL's submissions provide a reliable basis for estimating likely workload impacts. We note that HAL's estimate that it would require 80 new recruits as a result of the new capex arrangements assumed that the average workload associated with agreeing DOs for every H7 project would be equal to 2.5 times the average workload associated with trigger projects in Q6.¹⁴⁶⁷ However, in Q6 triggers were only applied to 'key projects' which met one of a defined set of criteria related to scope and complexity, impact, strategic importance, and capital value (greater than £20 million), and there were only 19 out of 668 investment decisions had been subject to 'triggers'.¹⁴⁶⁸ Even if this calculation could be used to support the finding of an error, we consider that using workload levels associated with the largest and most complex projects in Q6 in this way would not be expected to generate a reliable estimate of the average requirement across all projects in H7.

Compatibility of the H7 framework with how complex capex projects are managed in practice

11.60 In our view, the evidence does not show that that the CAA failed to recognise or properly consider the way in which complex capex projects are managed in practice at Heathrow or that these arrangements should be regarded as incompatible with efficient management of complex projects. As such, the matters put forward by HAL in this area do not in our view support the idea that the CAA failed to have regard to the need to promote economy and efficiency by HAL or that the CAA made an error in the exercise of a discretion. In addition to the

¹⁴⁶⁶ Insofar as HAL also raised a concern over CAA comments at the hearing regarding potential forms of DO flexibility that had not been referred to in CAA documents (HAL Response to PD, paragraphs 228-229), we comment on those potential forms of flexibility in paragraph 11.61.

¹⁴⁶⁷ Maxwell 1, Table 6.

¹⁴⁶⁸ Maxwell 1, paragraph 4.22.

matters set out in Appendix G to the Final Proposals as described above, we also take account of the following:

- (a) We consider HAL's characterisation of the H7 capex regime as a blunt 'one size fits all' approach to give insufficient attention to the flexibility that is provided for. While the regime applies the same requirement – for HAL to agree DOs with airlines – to all projects, as was noted in paragraph 11.59, the Final Decision explicitly identified that DOs may be adapted to reflect the characteristics of a particular project,¹⁴⁶⁹ and the CAA said it had made clear that it was open to HAL and airlines to agree DOs that suit the circumstances of each project.¹⁴⁷⁰ Given this, we consider the arrangements to provide considerable flexibility in terms of the development of DOs, subject to HAL being able to secure agreement with airlines (concerns in relation to which are considered in paragraph 11.76).
- (b) There was already a requirement for HAL to agree a capex budget for each project at G3 under the Q6 arrangements.¹⁴⁷¹ The new arrangements, therefore, do not require a cost budget to be agreed to any earlier than was the case in Q6, including for the more complex capex projects that progressed in that period. Also, we note that in Q6 for 'key projects' – the criteria for determining which included 'scope and complexity' and 'strategic importance' – a TDS which set out details of the project's overall business case, objectives, achievement criteria, and agreed parameters and assumptions would be prepared for agreement with airlines at G3.¹⁴⁷²
- (c) The H7 regime provides less flexibility to HAL in that, once agreed, HAL would be committed to the relevant DOs (as considered below, subject to agreed changes). However, we consider this form of reduction in flexibility to be an intended effect of the new arrangements, and to be central to the new ex-ante incentives the CAA introduced.¹⁴⁷³ Notably, DOs guard against the risk under those incentive arrangements that capex underspend results from reductions in scope or quality, or delays to delivery.¹⁴⁷⁴
- (d) There is an existing change control process from Q6 that will be retained for H7 and can be used when project scope or cost changes after G3.¹⁴⁷⁵
- (e) We agree with the CAA that understanding what a project will deliver is inherent to the proper assessment and planning of any project, and that it is entitled to expect HAL to manage and plan its portfolio of projects in an

¹⁴⁶⁹ [Final Decision](#), paragraph 7.25.

¹⁴⁷⁰ [CAA Response](#), paragraph 275.2.

¹⁴⁷¹ [HAL NoA](#), paragraph 303.

¹⁴⁷² Maxwell 1, paragraphs 4.18-4.26.

¹⁴⁷³ Clyne 1, section 7.

¹⁴⁷⁴ See, for example, [Final Decision](#), paragraph 7.9.

¹⁴⁷⁵ CAA Response, paragraph 274.

efficient, transparent manner that recognises the need for flexibility around operational constraints and variable demand patterns.¹⁴⁷⁶ We note that, under the new arrangements, it would be open to HAL to take account of the need for flexibility as part of the process through which it scopes and specifies its projects and agrees DOs, and – where necessary – through the change control process referred to in (d).

The H7 framework and the promotion of efficient incentives

11.61 In our view, the evidence does not demonstrate that the CAA failed to recognise or properly consider the promotion of efficient incentives in its decision to introduce new capex incentive arrangements. As such, HAL’s submissions in this area do not in our view support the idea that the CAA failed to have regard to the need to promote economy and efficiency by HAL or that the CAA made an error in the exercise of a discretion. In addition to the matters set out in Appendix G to the Final Proposals as described above, we also take account of the following:

- (a) We consider HAL’s submission that airlines would be incentivised to be inflexible during the process of agreeing DOs¹⁴⁷⁷ to lack adequate substantiation, and to contrast starkly with its submissions on the effectiveness of constructive engagement under the Q6 arrangements and the limited extent of disputes and need for escalation.¹⁴⁷⁸ Also, as considered further in paragraph 11.76, the CAA’s role as the ultimate arbiter of disputes between HAL and airlines provides a safeguard against the risk that HAL has pointed to. While we note the concerns HAL raised at the hearing over the length of time the CAA has taken to decide on those disputes that had been escalated to it,¹⁴⁷⁹ we consider that the CAA’s response that it is fully committed to resourcing itself appropriately to deal with disputes that may arise,¹⁴⁸⁰ and that – even when matters have been referred to it – it seeks to push the parties to agree something as it considers that would ultimately be likely to provide for a better outcome, appropriately addressed this matter.
- (b) We note in this regard that, in its response to our Provisional Determination, HAL submitted that there is currently no evidence to support the CAA’s statement that it is fully committed to resourcing itself appropriately to deal with disputes that may arise, that the CAA’s draft guidance on capex governance put forward no proposed process for handling disputes, and that it is critical that the CAA follows a clear, well-defined and predictable process which quickly and responsively considers the issues at hand and avoids the

¹⁴⁷⁶ CAA Response, paragraph 272.

¹⁴⁷⁷ [HAL NoA](#), paragraph 335.

¹⁴⁷⁸ [HAL NoA](#), paragraph 312.2.

¹⁴⁷⁹ Transcript of Ground E Hearing, 24 July 2023, page 34, lines 21-25.

¹⁴⁸⁰ CAA Closing Statement, paragraph 95.

risk of unnecessary delay in the interests of consumers.¹⁴⁸¹ With respect to HAL's submissions regarding the process for resolving disputes, we note the emphasis the CAA puts on HAL and airlines developing processes through which disputes can be resolved without the need for CAA involvement, and that – as noted in paragraph 11.76 – the CAA's draft guidance on capital expenditure governance (published alongside the Final Decision) said that where HAL could demonstrate that it had complied with protocols that aligned with the guidance, and that independent consultant reports had not identified clear inefficiencies, then the CAA was likely to support HAL's approach.¹⁴⁸² We note HAL's submission that the CAA had not published its final guidance on capital expenditure governance,¹⁴⁸³ and we would expect the CAA to do so at the earliest opportunity. We agree that it is important that the CAA ensures that it is able to deal with disputes effectively, but do not consider HAL to have identified persuasive reasons why we should not expect that to be the case.

- (c) We were not persuaded by HAL's submissions that the new regime would result in inefficiencies by encouraging it to focus on delivering exactly what is set out in DOs, placing focus on outputs rather than outcomes, and/or break projects down into smaller projects.¹⁴⁸⁴ In line with our comments in paragraph 11.60, we would expect HAL to take into account the fact that it would be held to delivering agreed DOs (subject to agreed changes) when it scopes and specifies projects, and seeks to develop and agree DOs. We would expect HAL to take efficiency considerations into account as part of these processes and consider that the DO requirements allow for significant flexibility in terms of how that might be done. Also, as was noted in paragraph 11.60, there is an existing change control process from Q6 that will be retained for H7 and can be used when a project's scope or cost changes after G3.
- (d) We note HAL's submission that at the hearing on Ground E the CAA proposed a number of new options regarding the application of the DOs which are not found in any of its decision documents or related consultation (specifically: DOs being agreed in relation to outcomes; DOs potentially not being required where there is an overlap with the Output-Based Regulation regime; and DOs potentially having a 0% time weighting).¹⁴⁸⁵ However, we would observe that these CAA comments do not imply any change to the DO requirement that is specified in the Final Decision. Rather, they concern how the flexibility that is provided for in that requirement might potentially be used to address efficiency concerns of the kind that HAL has raised in its

¹⁴⁸¹ HAL Response to PD, paragraphs 237-239.

¹⁴⁸² [Draft guidance on capital expenditure governance](#), CAP2524G, March 2023, paragraph 4.4.

¹⁴⁸³ HAL Response to PD, paragraph 242.

¹⁴⁸⁴ [HAL NoA](#), paragraphs 336-338.

¹⁴⁸⁵ HAL Closing Statement paragraph 66.

submissions. The DO requirement in the Final Decision does not specifically require that DOs be linked to outputs (rather than outcomes) and does not exclude the determination of DOs in ways that took account of the Output-Based Regulation regime and/or relevant timing dependencies. We consider the CAA's comments at the hearing to be consistent with its emphasis on the benefits of requiring there to be agreement at G3 on what capex projects are intended to deliver, and when, for the agreed budget, while leaving the determination of the form that DOs should take in relation to any given project as a matter for HAL and airlines to determine by agreement.

- 11.62 We therefore see no basis to find that the CAA failed to have regard to the need to promote economy and efficiency by HAL. Nor do we see that any alternative approach proposed by HAL on capex incentives is clearly superior to that adopted by the CAA. In our view, the conclusions reached by the CAA appear to be a proper exercise of its regulatory judgement, falling squarely within its margin of appreciation and disclosing no error in the exercise of a discretion.
- 11.63 Accordingly, we determine that the Final Decision was not wrong in law because the CAA erred, in performing its primary duties, by not having regard to the need to promote economy and efficiency on the part of HAL in its provision of airport operation services at Heathrow. We also determine that the CAA did not make an error in the exercise of a discretion on the basis that the H7 capex incentives regime will be inefficient compared with the existing Q6 framework.

CAA prioritising commercial interests of airlines over the interest of users of air transport services

HAL's submissions

- 11.64 HAL submitted that the requirement to secure airlines' agreement of DOs prioritises their commercial interests above the interests of users of air transport services. According to HAL, the CAA's primary duty under the Act is to further the interests of users of air transport services, not to ensure that the interest of airline operators is prioritised above all other stakeholders. HAL submitted that the H7 framework effectively outsources the CAA's role to further users' interests to the airline community. According to HAL, the CAA has failed to have regard properly to the fact that airlines' interests are not a proxy for users' interests and those interests may conflict. HAL submitted that it does not object to airlines playing a role in the approval of capex projects but the level of control and micromanagement for airlines in the H7 regime is not in accordance with the CAA's primary duty. HAL said the CAA did not sufficiently take into account that airlines are commercial entities with their own commercial interests. HAL submitted that the Final Decision does not engage with this issue or explain why

the CAA thought it appropriate to give this intrusive power of control over granular aspects of all capital projects to airlines.¹⁴⁸⁶

- 11.65 HAL further submitted that the expanded role of airlines is likely to result in behaviour that is not aligned with interest of users of air transport. HAL said that this contention is based on the Q6 experience of airline engagement. According to HAL, there were numerous examples in practice where airlines have sought to prioritise their own needs, or disproportionately focused on issues which had little to no bearing on promoting the interests of users of air transport in discussions relating to capital projects. HAL submitted that there were limitations to the airlines' consultation role and that airlines were not always best placed to act as experts in relation to necessary airport investment due to: their lack of particular expertise for routine capex projects unrelated to delivery of airline services; the role of airlines' own strategic interests arising from inter-airline competition; and instances where airlines were acting as competitors to HAL and had conflicts of interest.¹⁴⁸⁷
- 11.66 HAL also submitted that due to Heathrow's Licence requirements it is required to operate in an economical and efficient manner and seek that reasonable demands of users and air transport services are met. According to HAL, airlines are not subject to such a duty and can prioritise their own commercial interests. HAL further submitted that regulatory design incentivises inflexibility from airlines. According to HAL, the CAA's design of DOs may incentivise airlines to be inflexible and negotiate requirements that are in their short-term commercial interests, even if this does not necessarily benefit consumers. HAL submitted that the regime discourages airlines from renegotiating after G3 to maximise HAL's likelihood of incurring penalties, leading to reduced airport charges in future. HAL also submitted that the CAA itself has recognised that airlines would be in a position to prioritise their own commercial interests under the new regime for capex incentives.¹⁴⁸⁸
- 11.67 HAL additionally said that the H7 capex regime confers a disproportionate degree of control on airlines in areas where they have no special technical/commercial expertise. According to HAL, compared to Q6, airlines will have significantly expanded and detailed powers and effective veto over a range of granular DOs across all projects. HAL submitted that this includes non-aeronautical projects or commercial projects, covering additional factors such as project delivery and quality where airlines do not have relevant expertise. HAL further submitted that airlines have proposed that a panel of experts appointed on their behalf should assist them in a significantly expanded role, and this has been proposed by CAA

¹⁴⁸⁶ [HAL NoA](#), paragraphs 340-341.

¹⁴⁸⁷ [HAL NoA](#), paragraph 342.

¹⁴⁸⁸ [HAL NoA](#), paragraph 342.

as part of draft guidance. According to HAL, this is recognition that airlines do not always have the right expertise to comment on these kind of capex projects.¹⁴⁸⁹

CAA Response

- 11.68 The CAA submitted that the requirement to secure the agreement of the airlines for DOs did not inappropriately prioritise the commercial interests of airlines. According to the CAA, while DOs would need to be agreed for each project under the H7 framework (subject to any grouping of projects), airlines already had a role in agreeing the budget for each project, at G3, and this had overall been working well in Q6/iH7, including by HAL's own admission.¹⁴⁹⁰ The CAA further submitted that it was not possible to reasonably agree a budget for a project without understanding what it is intended to deliver, to what standard and by when. As such, the CAA submitted that the H7 ex-ante framework put in place a framework (and the need to record what is agreed) around a process that already existed, which provided HAL and airlines the flexibility to evolve the capital portfolio to meet the needs of users of air transport services (rather than having a fixed baseline set at the start of the period).¹⁴⁹¹
- 11.69 The CAA submitted that for projects that were more complex, or more costly, or which had a greater impact on airline operations (either during construction or post-delivery), it considered that there was likely to be benefit from a more robust and holistic review where this provided airlines with assurance around the process followed by HAL to reach the solution chosen, and the impact of the option on costs. According to the CAA, since the publication of its draft guidance on capital expenditure governance alongside the Final Decision, HAL and airlines had been working together to agree a trial scope for an independent assurance provider. The CAA expected this to further streamline the process of reaching agreement on baselines and DOs at G3, given airlines will have more confidence in the information provided by HAL and the solution chosen.¹⁴⁹²
- 11.70 The CAA submitted that, overall, the H7 ex-ante capex incentives framework was designed to promote efficiency of HAL's capex, and to ensure that only efficient capex enters the RAB. According to the CAA, the H7 ex-ante capex incentives framework seeks to incentivise HAL to be more efficient in how it delivered its capex portfolio during the period, which was ultimately in the interest of consumers because it meant that they did not pay for inefficiently incurred costs. The CAA submitted that HAL had provided no concrete or convincing example of airlines failing to act as effective proxies for consumers, or where they have systematically sought to prioritise their own commercial interests in agreeing what capex projects

¹⁴⁸⁹ [HAL NoA](#), paragraphs 344-346.

¹⁴⁹⁰ [CAA Response](#), paragraph 277.

¹⁴⁹¹ [CAA Response](#), paragraph 278.

¹⁴⁹² [CAA Response](#), paragraph 279.

should proceed. The CAA further submitted that in any case it will act as ultimate arbiter in cases where HAL and airlines cannot agree a DO (or a baseline) at G3, which will ameliorate any (alleged) risk of airlines acting inappropriately.¹⁴⁹³

- 11.71 In terms of airlines' relevant expertise, the CAA submitted that airlines were currently required to give approval for G3 budgets in relation to all projects, not just ones where they have expertise. The CAA submitted that the move towards more standard information provision, coupled with more systematic and transparent recording in relation to DOs, will facilitate a more streamlined process of airlines giving their approval than is currently in place. According to the CAA, in any event, for projects where airlines do not themselves have expertise, and which are more complex, costly, or which have a greater impact on airline operations, the CAA anticipates a role for an independent assurance provider.¹⁴⁹⁴
- 11.72 The CAA submitted that there was therefore no merit in HAL's argument that the CAA had failed to advance the interests of consumers by imposing the capex incentives framework. Further, according to the CAA, the approach that it had adopted was broadly consistent with the approach used in other regulated sectors, including energy and water, and there was no evidence that such approaches were inconsistent with the interests of consumers.¹⁴⁹⁵

Interveners' submissions

- 11.73 The Airline Interveners submitted that it was incorrect that airlines would in some way be incentivised to act contrary to the interests of airport users. They submitted that airlines had the direct relationship with consumers and bore the brunt of failings in delivery at all stages of their experience in using Heathrow, and the resulting negative consumer sentiment. They submitted that it was for these reasons that the CAA had rightly recognised that airlines could help to promote efficient and timely investment in the interests of consumers and that this was an important part of the policy rationale underlying the reforms introduced by the Act.¹⁴⁹⁶ They submitted that the purpose of the capex incentives regime was to ensure that expenditure was incurred efficiently, and in this respect airlines' and consumers' interests were aligned. In that context, they submitted that it was plainly sensible that HAL was incentivised to develop projects that had clear ambitions and delivery objectives from inception, firm and measurable objectives set by G3, and produced positive cost/benefit outputs.¹⁴⁹⁷
- 11.74 The Airline Interveners also submitted that HAL was wrong to make any suggestion that the requirement to share information and reach agreement at an

¹⁴⁹³ [CAA Response](#), paragraph 280.

¹⁴⁹⁴ [CAA Response](#), paragraph 281.

¹⁴⁹⁵ [CAA Response](#), paragraph 282.

¹⁴⁹⁶ [BA Nol](#), paragraph 5.4.1; [Delta Nol](#), paragraph 5.16.

¹⁴⁹⁷ [BA Nol](#), paragraph 5.4.2; [Delta Nol](#), paragraph 5.17.

early stage was problematic. They submitted that the status quo required agreement between HAL and airlines at the G3 stage unless HAL decided to proceed 'at risk' outside the gateway process.¹⁴⁹⁸

11.75 The Airline Interveners submitted that HAL's assertion that airlines did not have the necessary knowledge or experience to contribute to the setting of delivery obligations was entirely misplaced. They submitted that this could be demonstrated by reference to the contribution which airlines had made to the quality of capex decision-making even under the more limited Q6 arrangements. The Airline Interveners cited several examples of this in practice during Q6. They submitted that: in one example the knowledge and experience of airlines helped to foresee adverse consequences for customers which HAL's decision-making, that had focused on infrastructure rather than operations, had not taken into account; in another example, the knowledge and experience of airlines extended beyond the capital projects which were directly related to airlines services; and in another example, the airlines' direct knowledge and experience was complemented in a number of areas through the input of subject matter experts into the capital expenditure process.¹⁴⁹⁹

Our assessment

11.76 In our view, the evidence does not demonstrate that the CAA prioritised the commercial interests of airlines over the interests of users of air transport services in its decision to introduce new capex incentive arrangements for H7:

- (a) The Q6 arrangements had already incorporated an extensive role for airlines in capex governance processes that included agreeing a capex budget for every project, and agreeing TDS for trigger projects, at G3.
- (b) We consider HAL's submissions that the new arrangements would be likely to result in airline behaviour that was not aligned with the interests of users of air transport¹⁵⁰⁰ to lack adequate substantiation, and – in line with our comments in paragraph 11.61 – to contrast starkly with its submissions on the effectiveness of constructive engagement under the Q6 arrangements, and the limited extent of disputes and need for escalation.
- (c) As was noted in paragraph 11.61 the CAA's role as ultimate arbiter in the case of a dispute between HAL and airlines provides a safeguard against the risk that material divergences between the interests of airlines and those of users of air transport services do arise. We would expect the extent to which the CAA role may need to be used to be affected, among other things, by understandings of how disputes would be likely to be settled, and note again

¹⁴⁹⁸ [BA Nol](#), paragraph 5.4.6; [Delta Nol](#), paragraph 5.21.

¹⁴⁹⁹ [BA Nol](#), paragraph 5.4.8; [Delta Nol](#), paragraph 5.23.

¹⁵⁰⁰ [HAL NoA](#), paragraph 342.

that the CAA's draft guidance on capital expenditure governance (published alongside the Final Decision) said that where HAL could demonstrate that it had complied with protocols that aligned with the guidance, and that independent consultant reports had not identified clear inefficiencies, then the CAA was likely to support HAL's approach.¹⁵⁰¹ The scope to use guidance in this way provides a further means to mitigate the risk of material divergences arising between the interests of airlines and those of users of air transport services.

- (d) While the H7 approach may provide scope for airline engagement in relation to some capex projects in which they have limited relevant expertise, the design of the arrangement provides flexibility in terms of how agreement on DOs might be reached under such circumstances. We note HAL's submission that a request from airlines that a panel of experts be appointed on their behalf could be viewed as a recognition that airlines do not always have the right expertise to comment on some capex projects.¹⁵⁰² However, we consider that this provides an illustration of the scope for the H7 arrangements to be applied in ways that provide for engagement that may be more appropriate to the relevant circumstances. We are not persuaded that HAL's submissions on this matter imply a failing in relation to the way in which the role of airlines in agreeing DOs has been provided for in the Final Decision.

11.77 We also take into account that in Appendix G to the Final Proposals the CAA set out an assessment of whether the (then) proposed capex incentive arrangements framework would comprise the carrying out of its functions 'in a manner which it considers will further the interests of users or air transport services regarding the range, availability, continuity, cost and quality of airport operation services.' The CAA concluded that it would do so.

11.78 We observe that this assessment was carried out by reference to matters to which, under section 1(3) of the Act, the CAA must have regard when performing its primary duty to further end-users' interests. In other words, it is by having regard to those matters that the CAA can perform its primary duty.

11.79 The relevant assessment is detailed and covers a variety of factors, including HAL's incentives and the risks and benefits the capex incentives framework is liable to generate, as well as points raised by stakeholders and HAL. We take account of those contents alongside other factors the CAA considered that relate to:

¹⁵⁰¹ [Draft guidance on capital expenditure governance](#), CAP2524G, March 2023, paragraph 4.4.

¹⁵⁰² [HAL NoA](#), paragraph 346.

- (a) economy and efficiency by HAL, as described in paragraphs 11.57 to 11.63 above; and
- (b) the Better Regulation Principles of necessity, proportionality, transparency and accountability, and consistency, as described in paragraphs 11.85, 11.95, 11.105 and 11.116 respectively.

11.80 On the basis of that overall assessment, our finding is that the Final Decision was not wrong in law because the CAA failed to carry out its functions in a manner which it considers will further the interests of users or air transport services regarding the range, availability, continuity, cost and quality of airport operation services by prioritising airlines' commercial interests.¹⁵⁰³ We also determine that the CAA did not make an error in the exercise of a discretion on the basis that it prioritised the commercial interests of airlines over the interest of users of air transport services.

H7 regime is unnecessary

HAL's submissions

- 11.81 HAL submitted that the justifications the CAA provided for the new regime were flawed. According to HAL, there was no evidence of inefficiency in the existing arrangements.¹⁵⁰⁴ HAL submitted that the CAA failed to carry out an evidence-based assessment to demonstrate need for change.¹⁵⁰⁵ According to HAL, the Final Decision failed to provide any substantive or quantifiable evidence that the current Q6 regime was not operating in the interests of users of air transport services.¹⁵⁰⁶
- 11.82 HAL further submitted that the H7 framework ran directly counter to the CAA's stated objective to propose clear, simple and symmetrical financial incentives which also retained flexibility. According to HAL, the Final Decision was therefore contrary to the CAA's duty to act in a way which was targeted only at cases in which action was needed.¹⁵⁰⁷

CAA Response

- 11.83 The CAA submitted that the HAL's argument that the framework was unnecessary was a reiteration of its complaint about the alleged complexity of the framework, and its view that the Q6 system worked well, which had no merit for the reasons

¹⁵⁰³ [Final Decision](#), Appendix G, paragraph G20.

¹⁵⁰⁴ [HAL NoA](#), paragraph 348.

¹⁵⁰⁵ [HAL NoA](#), paragraph 348.

¹⁵⁰⁶ [HAL NoA](#), paragraph 290.2.1.

¹⁵⁰⁷ [HAL NoA](#), paragraph 349.

the CAA had explained in response to those points. According to the CAA, the Final Decision fell squarely within the CAA's margin of appreciation.¹⁵⁰⁸

Interveners' submissions

11.84 The Airline Interveners submitted that the CAA's assessment of the necessity of change was clearly set out at paragraph 7.22 of the Final Decision.¹⁵⁰⁹

Our assessment

11.85 In our view, HAL has not shown that the CAA failed to have regard to the Better Regulation Principle of necessity when deciding: (i) that some form of ex-ante incentive framework should be introduced for H7; (ii) that DOs – of some form – should be required as part of the new ex-ante incentive framework for H7; nor (iii) on the form that such ex-ante incentives, and associated delivery obligation requirements, should take:

- (a) As explained in paragraph 11.52 above, we are assessing here whether the relevant statutory matter was properly and conscientiously taken into account by the CAA and weighed in the balance. Much of the evidence presented by HAL instead appears to go to the question of whether a particular result was achieved, rather than whether the CAA had regard to the relevant Better Regulation Principle.
- (b) In the light of its assessment of the Q6 arrangements, and (as was noted in paragraph 11.58) on the basis of extensive consultation, the CAA concluded that an ex-ante incentive framework should be introduced for H7 as it was considered to provide a stronger incentive (than the Q6 arrangements) to undertake capex efficiently. As was noted in paragraph 11.58, in its June 2020 Consultation the CAA set out its view that while capacity expansion plans had been paused, the challenges facing the whole aviation sector reinforced the importance of efficient spending and ensuring value for money. We were not persuaded that HAL's submissions – which focused primarily on the characteristics of the Q6 arrangements and on concerns related to the DO requirements within the new ex-ante arrangements – supported the ground of appeal it advanced.
- (c) As set out in paragraph 11.58, the evidence does not demonstrate that the CAA failed to recognise or properly consider the desirable features of the Q6 capex regime, when deciding that a new, ex-ante capex incentives framework should be introduced for H7, or that the CAA was wrong to conclude that improvements could be made to the existing Q6 regime. Our

¹⁵⁰⁸ [CAA Response](#), paragraph 284.

¹⁵⁰⁹ [BA Nol](#), paragraph 5.5.3; [Delta Nol](#), paragraph 5.26.

view on this point lends further support to the conclusion that the CAA did have regard to whether or not the new capex regime for H7 was necessary.

- (d) The CAA consulted on its view that DOs formed an essential part of the ex-ante incentive arrangements it was proposing, to ensure that the capex baseline reflected the scope quality and timing of the infrastructure that is to be delivered.¹⁵¹⁰ As part of that consultation, the CAA identified the risk that HAL may delay delivery, or scale back on the scope and quality expected, and that without DOs may benefit unduly from retaining a share of underspend, or minimising its level of overspend relative to capex incentive baselines.¹⁵¹¹
- (e) In Appendix G to the Final Proposals, the CAA considered the Better Regulation Principle of necessity. At paragraphs G7 to G14 of that Appendix, the CAA set out in detail its rationale for intervention. This covers matters such as the issues with the Q6 framework based on the CAA's analysis and feedback from stakeholders, and the inherent difficulties with ex-post reviews. It also describes the process of consultation through which the CAA tested these issues with stakeholders, as well as summarising its reasons for choosing the H7 framework. We consider that this assessment together with the matters in (b) – (d) above, in particular, reflect the regard the CAA had to the need to introduce the capex incentives regime and that such considerations were part of its decision-making process.

11.86 Accordingly, we determine that the Final Decision was not wrong in law because the CAA erred, in performing its primary duties, by failing to have regard to the principle that regulatory activities should be targeted only at cases where action is needed.

H7 regime decision not proportionate

HAL's submissions

11.87 HAL submitted that the Final Decision failed to establish that the new and unprecedented level of intervention by airlines in the granular detail of capital projects was required or proportionate to any detriment to users from the current regime. According to HAL, the CAA also failed to establish that there were any demonstrable benefits from the new regime.¹⁵¹² HAL further submitted that the new regime introduced a blanket 'one size fits all' approach to all capital projects regardless of size, financial value or importance, introducing disproportionate complexity.¹⁵¹³ HAL submitted that it predicted that the new regime will require

¹⁵¹⁰ For example, [Final Proposals](#), section 2, paragraph 7.100.

¹⁵¹¹ For example, [Final Proposals](#), section 2, paragraph 7.100.

¹⁵¹² [HAL NoA](#), paragraph 290.2.2.

¹⁵¹³ [HAL NoA](#), paragraph 290.2.2.

c.80 new recruits to provide necessary resourcing and result in considerable delays.¹⁵¹⁴

- 11.88 HAL also submitted that the Final Decision was not targeted or proportionate and applied a blanket policy across all capex which bears no correlation to the benefits to users of air transport.¹⁵¹⁵ According to HAL, the introduction of DOs was not proportionate to the objective the CAA was seeking to achieve. HAL submitted that the CAA's stated interpretation of the Better Regulation Principles was that regulators should intervene only when necessary, and remedies should be appropriate to the risk posed and costs identified and minimised. According to HAL, the risk the CAA was trying to address was unevidenced and the DO-based framework was widespread, untargeted and extremely costly – contrary to the meaning of proportionality. HAL further submitted that the CAA had provided no compelling evidence why the new framework was proportionate nor any substantive or quantifiable evidence of how the new regime would benefit users of air transport and failed to carry out a regulatory impact assessment. According to HAL, the CAA's justification for the regime was that information required to set a DO is already contained in project information and should not be more burdensome for HAL. HAL already provided airlines with significant amounts of information under the Q6 regime but the CAA had not engaged with HAL's main concern around the extensive level of detailed agreement now required (which was also likely to result in more information requests from airlines than under Q6).¹⁵¹⁶
- 11.89 HAL further submitted that it had maintained its position that the Q6 regime was clearly superior throughout the H7 consultation. To be constructive, HAL sought alternatives and amendments to the H7 proposals to make them more proportionate and alleviate HAL's concerns (such as HAL's May 2022 proposals including a £25 million threshold to reduce the overly wide range of projects subject to DOs). The idea of a financial threshold was supported by the fact the vast majority of overspend in Q6 had been in projects over £50 million – high value projects were likely to be ones that merited the most scrutiny. The CAA failed to engage with any of HAL's proposals or to trial different options.¹⁵¹⁷ Regarding the May 2022 proposal, HAL submitted that the CAA did not consider this on its merits as, in the paragraphs of the Final Proposals cited by the CAA, the CAA focused only on criticising the scope obligations (and its justification for a timing element in DOs), but did not consider the proposed financial threshold.¹⁵¹⁸ According to HAL, neither did these paragraphs set out the CAA's view on why it was proportionate to apply DOs to all projects irrespective of size or importance. HAL submitted that

¹⁵¹⁴ [HAL NoA](#), paragraph 290.1.2.

¹⁵¹⁵ [HAL NoA](#), paragraph 350.

¹⁵¹⁶ [HAL NoA](#), paragraphs 350-352.

¹⁵¹⁷ [HAL NoA](#), paragraphs 353-355.

¹⁵¹⁸ This was a submission HAL re-iterated in its response to the Provisional Determination that the CAA did not err in the regard it had to the principle of proportionality.

this was a critical omission which went to the heart of HAL's concern with the new regime, especially since the CAA itself noted in its Response that 'the CAA's Q6 capex review found that lower-value projects were generally delivered efficiently'.¹⁵¹⁹

- 11.90 HAL also submitted that the H7 framework did not result in a 'fair bet' for HAL – further supporting the conclusion that the Final Decision was disproportionate. According to HAL, the CAA's analysis of whether the H7 framework was a 'fair bet' only discussed the symmetric ex-ante cost sharing mechanism and did not consider DOs. DOs were by nature 'penalty only' and incentivised Heathrow to perform within specified limits, with no scope to outperform. HAL submitted that contrary to the claims of the CAA, distribution risk was not symmetrical. According to HAL, it is only possible to deliver a project up to a maximum of 100% below budget, but it can go multiple times over budget. HAL further submitted that the framework was therefore skewed towards penalties. HAL submitted that it was plausible that it could receive duplicative penalties from DOs as well as under the (mostly penalty-only) Output-Based Regulation regime. According to HAL, under the Output-Based Regulation regime, HAL incurred penalties if it did not meet certain quality or timing targets. HAL submitted that it may be penalised twice where these overlap with obligations under a DO.¹⁵²⁰

CAA Response

- 11.91 As in relation to the regulatory principle relating to necessity, the CAA submitted that HAL's argument that the framework was not targeted or proportionate was a reiteration of its complaint about the alleged complexity of the framework, and its view that the Q6 system worked well, which had no merit for the reasons the CAA explained in response to those points. According to the CAA, the capex incentives regime in the Final Decision fell squarely within the CAA's margin of appreciation.¹⁵²¹
- 11.92 The CAA further submitted that it did engage with HAL's May 2022 proposal on its merits and disagreed with it for the reasons given in the Final Proposals.¹⁵²²
- 11.93 The CAA submitted that HAL's argument that the framework was not a 'fair bet' was a simple policy disagreement that disclosed no error.¹⁵²³ According to the CAA, HAL's argument that DOs were by nature 'penalty only' and that this implied that ex-ante capex incentives were not a fair bet was without merit. The CAA submitted that the purpose of DOs as part of the ex-ante capex incentives framework was to ensure that the baseline originally agreed in relation to each

¹⁵¹⁹ [HAL Reply to CAA Response](#), Annex A.

¹⁵²⁰ [HAL NoA](#), paragraphs 356-359.

¹⁵²¹ [CAA Response](#), paragraph 284.

¹⁵²² [CAA Response](#), paragraph 284.

¹⁵²³ [CAA Response](#), paragraph 285.

project can be adjusted to reflect what HAL had actually delivered, to incentivise HAL to deliver that to which it originally committed, and reduce the risk of HAL de-scoping elements of projects in order to avoid being penalised under the incentive (if it became apparent that actual costs will be higher than the baseline). The CAA submitted that HAL would incur no penalty under DOs if it delivered more output or quality or delivered a project early. The CAA submitted that if HAL would like to increase the level of output/scope, quality or deliver a project early and it expected that this would have cost implications, it was able to discuss and agree this with airlines as part of the change control process (used when project scope or cost changes after G3), which will be retained in the new framework. According to the CAA, HAL also had the potential for upside by delivering capex projects efficiently.¹⁵²⁴

Interveners' submissions

- 11.94 The Airline Interveners submitted that the CAA's approach represented a proportionate, flexible and effective means of ensuring that capex was effectively and efficiently used. They submitted that it would render the capex process transparent as it would be clearly visible to both airlines and the CAA what was going to be delivered for the budget allocated and for this to form the baseline for review of what was actually delivered, leading to the best possible outcome for consumers in terms of product delivered and value for money.¹⁵²⁵ They further submitted that HAL's complaints seemed to relate to any requirement to seek airline agreement in relation to capital projects, even though this was a feature of the Q6 gateway process and of any conceivable system for the effective control of capex. According to the Airline Interveners, there can be no principled objection to the requirement for DOs and the CAA had consulted, assessed the workability of the proposals and (rightly) concluded that they were both workable and the best means of ensuring that HAL was appropriately incentivised to effectively target capex.¹⁵²⁶

Our assessment

- 11.95 In our view, the evidence does not demonstrate that the CAA failed to have regard to the Better Regulation Principle of proportionality. We take these points into account:
- (a) Again, as explained in paragraph 11.52 above, we are assessing here whether the relevant statutory matter was properly and conscientiously taken into account by the CAA, and weighed in the balance (ie whether the CAA

¹⁵²⁴ [CAA Response](#), paragraph 285.1.

¹⁵²⁵ [BA Nol](#), paragraph 5.3.2; [Delta Nol](#), paragraph 5.10.

¹⁵²⁶ [BA Nol](#), paragraph 5.3.3; [Delta Nol](#), paragraph 5.11.

had the required regard). Much of the evidence presented by HAL instead appeared to go to the question of whether a particular result was achieved.

- (b) In Appendix G to the Final Proposals, the CAA considered the Better Regulation Principle of proportionality. In Table G.2 of the Appendix, the CAA considered how the proportionality of its approach could be ensured with regard to several factors such as the mechanics of the ex-ante approach, the scope of review obligations and the possibility of bundling certain projects together into tranches. While Appendix G is not in and of itself determinative of the point, it lends support to the idea that the CAA had regard to the relevant principle in this context (especially when considered with the following aspects of the CAA's approach which also show how concerns relating to proportionality informed its decision).
- (c) The CAA considered different ways in which an ex-ante incentive framework, and – within such a framework – delivery obligations, might be applied during its policy development process. We note that:
 - (i) The CAA considered an alternative proposal HAL had put forward in 2020 in its revised business plan, which included that ex-ante incentives would only apply to its asset replacement programme, and – in April 2021 – set out its assessment that the proposal did not meet all of the requirements that had been identified in its June 2020 Consultation, including because of concerns over the definitions of the separate capex programmes into which HAL had split its capex portfolio.¹⁵²⁷
 - (ii) With respect to the coverage of ex-ante capex incentives, the CAA set out its assessment that a partial application of incentives across the capex programme would likely lead to significant additional complexity and a potential risk of gaming through the allocation of expenditure to different categories, and said – in its Final Proposals – that it had seen no compelling evidence to suggest that a more limited application of incentives is required or would be desirable.¹⁵²⁸
 - (iii) The CAA had proposed that DOs be set at the capex category level, where a capex category had been defined in terms of a collection of projects with clearly defined outputs and similar risk and controllability characteristics.¹⁵²⁹ However, the CAA concluded that DOs should be required at the project level, because it considered that the delivery

¹⁵²⁷ Bobocica 1, paragraphs 3.18-3.21.

¹⁵²⁸ [Final Proposals](#), section 2, paragraph 7.92.

¹⁵²⁹ Bobocica 1, paragraph 3.27.

obligations HAL had proposed were not sufficiently well developed and SMART to be applied to each capex category.¹⁵³⁰

- (iv) As we observe in paragraph 11.60, HAL's characterisation of the H7 capex regime as a 'one size fits all' approach gives insufficient attention to the flexibility that is provided for within this regime. As we note there, while the Final Decision requires DOs to be agreed with airlines for all projects passing through G3, it also explicitly identifies that they may be adapted to reflect the characteristics of a particular project.¹⁵³¹ The CAA has also said that it had made clear that it is open to HAL and airlines to agree such DOs.¹⁵³²
- (d) With respect to HAL's submission that the CAA failed to engage with a set of proposals it provided to the CAA in May 2022, including the introduction of a financial threshold of £25 million which it submitted would avoid an overly wide range of projects being subject to DOs, we do not consider that doing so in the manner contended by HAL was required for the CAA to have had regard to the Better Regulation Principle under discussion, and that there were several justifications for the CAA not focusing on HAL's proposals in the Final Decision:¹⁵³³
 - (i) The CAA was considering what was the right approach to incentivise efficient capex. It considered there was a need, in light of shortcomings in the arrangements that applied in Q6, to create stronger incentives across projects.
 - (ii) As set out in paragraph 11.58, the CAA consulted extensively on the introduction of new capex incentive arrangements, and this included consideration of different ways in which an ex-ante incentive framework, and – within such a framework – delivery obligations, might be applied (as noted in paragraph 11.85).
 - (iii) We note that HAL identified its May 2022 proposals as having included a (£25 million) financial threshold proposal and a proposal that DOs be reformulated to remove the timing element and focus on output and standard of delivery (which HAL referred to as scope obligations).¹⁵³⁴ In its Reply, HAL recognised that the CAA had considered its proposal regarding scope obligations in its Final Proposals, but submitted that the CAA had not considered the proposed financial threshold.¹⁵³⁵ We note that the CAA appears to have not referred to HAL's financial

¹⁵³⁰ [Final Proposals](#), section 2, paragraphs 7.84 and 7.85.

¹⁵³¹ [Final Decision](#), paragraph 7.20.

¹⁵³² [CAA Response](#), paragraph 275.2.

¹⁵³³ [HAL NoA](#), paragraphs 353-355.

¹⁵³⁴ HAL Reply to CAA Response, Annex A.

¹⁵³⁵ HAL Reply to CAA Response, Annex A.

threshold proposal in its Final Proposals, and to have referred to but not commented on it in the Final Decision.¹⁵³⁶

(iv) However, we also note that:

(1) Only around 2.5 per cent of HAL's capex projects in Q6 (by volume) would have exceeded HAL's proposed £25 million threshold for DOs.¹⁵³⁷

(2) HAL's evidence showed that between 2014 and 2018 around 2.8 per cent of its projects (19 out of 668 investment decisions) had been subject to 'triggers'.¹⁵³⁸

That is, HAL's £25 million DO threshold proposal appears likely to have captured around the same proportion (by volume) of projects as were already captured by the Q6 trigger project arrangements. As was noted in paragraph 11.76, for these projects the Q6 arrangements already required that a TDS which set out details of the project's overall business case, objectives, achievement criteria, and agreed parameters and assumptions would be prepared for agreement with airlines at G3.¹⁵³⁹ In its response to the Provisional Determination, HAL challenged the relevance of this comparison and submitted that DOs under H7 were not equivalent to triggers under Q6 and that the need for a threshold was all the more critical in H7 given the risks associated with the new framework.¹⁵⁴⁰ However, we consider the comparison to be a relevant one and to highlight that HAL's £25 million threshold proposal would have been similar in effect – at least in relation to the proportion of projects that would be subject to some form of delivery commitments – to the Q6 arrangements. In this respect, we consider HAL's £25 million DO threshold proposal to be similar to its primary submission that the Q6 arrangements should be retained and which the CAA plainly considered (and, in our view not wrongly, judged did not provide sufficient capex incentives).

(v) When considering the appropriate coverage of its proposed capex incentives in its Final Proposals, the CAA presented its assessment that a partial application of incentives across the capex programme would lead to a potential risk of gaming through the allocation of expenditure to difference categories.¹⁵⁴¹ We consider this to be relevant to the consideration of HAL's financial threshold proposal as that proposal

¹⁵³⁶ [Final Decision](#), paragraph 7.20.

¹⁵³⁷ Transcript of Ground E Hearing, page 50, lines 2-7, [HAL NoA](#), Table 4, page 141.

¹⁵³⁸ Maxwell 1, paragraph 4.22.

¹⁵³⁹ Maxwell 1, paragraphs 4.18-4.26.

¹⁵⁴⁰ HAL Response to PD, paragraph 224(a).

¹⁵⁴¹ [Final Proposals](#), section 2, paragraph 7.92.

would result in two different categories of capex in relation to which materially different incentive frameworks would be applied. Our view is that an approach that applied financial incentives to the level of capex spent on all projects (as the H7 framework does under the 25 per cent cost sharing provisions) but required DOs to be agreed on and applied to only a small portion, and the largest, of those projects, could raise material circumvention risks. We were not persuaded by HAL's comments at the hearing on Ground E that it would not be in its interests to split projects up if such a threshold applied,¹⁵⁴² and note that in its NoA HAL had separately submitted that the H7 DO regime (ie in the absence of a £25 million threshold) would be likely '...to drive Heathrow to break projects down into smaller projects'.¹⁵⁴³ In its response to the Provisional Determination, HAL asserted that a strategic importance threshold would 'entirely resolve' any concerns related to circumvention risks.¹⁵⁴⁴ We do not consider HAL to have shown why the use of such a threshold would be expected to address relevant risks in an effective manner.

- (e) As set out in paragraph 11.58, the evidence does not show that the CAA failed to recognise or properly consider the potential for the new capex incentives arrangements to generate cost increases, delays or unworkable complexity. In our view, the CAA's evidence highlighted ways in which it had taken account of the potential for such impacts in the design and implementation of the new arrangements. This included a work programme in relation to the implementation of the H7 framework to facilitate workshops between HAL and the airlines, including on how processes could be streamlined to avoid a significant increase in workload for HAL or airlines.
- (f) We note HAL's submissions concerning the scope for the new framework not to result in a 'fair bet' and to result in 'double jeopardy' (because of the existence of DOs alongside the Output-Based Regulation regime). Even assuming this could demonstrate that the CAA failed to have regard to the relevant Better Regulation Principle, we do not consider the inclusion of penalty-only delivery obligations in relation to agreed capex allowances, in and of itself, implied the absence of a fair bet, and note that other regulators had drawn similar distinctions between mechanisms (within a broader incentive framework) intended to hold companies to account in relation to agreed delivery requirements and other mechanisms focused more directly on seeking to generate desirable incentives.¹⁵⁴⁵ DOs form part of an ex-ante incentive framework that provides scope for HAL to make gains and losses –

¹⁵⁴² Transcript of Ground E Hearing, page 45, lines 15-25.

¹⁵⁴³ [HAL NoA](#), paragraph 337.

¹⁵⁴⁴ HAL Response to PD, paragraph 224(b).

¹⁵⁴⁵ For example, the distinction Ofgem has drawn between Price Control Deliverables (PCDs) and other incentives (see eg [Ofgem, RIIO-2 Final Determinations – Core document](#), 8 December 2020, paragraph 4.3.

under the (25 per cent) cost sharing provisions – and (as set out in (c) above) provides considerable flexibility in terms of the development of DOs, subject to HAL being able to secure agreement with airlines. In line with our comments in paragraph 11.61, we would expect HAL to take the fact that it would be held to delivering agreed DOs (subject to agreed changes), and that it is subject to the Output-Based Regulation regime, into account when it scopes and specifies projects and seeks to develop and agree DOs.

11.96 We have also considered that, in its response to our Provisional Determination, HAL submitted that, on a proper application of the legal test, the CAA – on introducing such a burdensome and experimental new regulatory regime – could not properly satisfy its duty to have regard to proportionality in circumstances where it had not considered why the regime needed to apply to all projects in the same way or whether a sensible financial/strategic importance threshold would result in a more proportionate design.¹⁵⁴⁶ With respect to this contention specifically, and amplifying the matters addressed in the preceding paragraph:

- (a) As set out in paragraph 11.85, in the light of its assessment of the Q6 arrangements, and on the basis of extensive consultation, the CAA concluded that an ex-ante incentive framework should be introduced for H7 as it was considered to provide a stronger incentive (than the Q6 arrangements) to undertake capex efficiently.
- (b) As set out in paragraph 11.95, the CAA set out – in its Final Proposals – that it had seen no compelling evidence to suggest that a more limited application of incentives within HAL’s capex programme was required or would be desirable.
- (c) As set out in paragraph 11.95, in May 2022, HAL proposed the introduction of a financial threshold of £25 million which would have implied that DOs would only have been applied to around 2.5% of capex projects.
- (d) As was set out in paragraph 11.95, the CAA’s evidence highlighted ways in which it had taken account of the potential for cost increases, delays or unworkable complexity to arise in the design and implementation of the new arrangements.
- (e) In our view, this evidence is all consistent with the view that the CAA properly and conscientiously took into account the principle that regulatory activities should be carried out in a way which is proportionate and weighed it as a factor in the balance with other factors.

¹⁵⁴⁶ HAL Response to PD, paragraph 223.

- (f) The use of a financial/strategic importance threshold might have provided a different way of potentially seeking to address any proportionality concerns identified by the CAA. However, it would have done so by restricting the scope of application of the incentive and DO arrangements that the CAA was introducing. Having assessed (and rejected) the case for restricting the scope of the application of incentive and DO arrangements in the context of its proportionality assessment, in our view the CAA considered threshold options of the kind referred to by HAL at least indirectly. In any case, as set out above, our assessment of the overall body of evidence strongly supports the idea that the CAA had regard to the principle of proportionality. In that context, we are not persuaded that a failure to consider one specific element put forward by HAL in the context of the CAA's overall assessment would be determinative of whether the CAA had regard to the Better Regulation Principle of proportionality.

11.97 Accordingly, we determine that the Final Decision was not wrong in law because the CAA erred, in performing its primary duties, by failing to have regard to the principle that regulatory activities should be carried out in a way which is proportionate.

H7 regime not transparent or accountable

HAL's submissions

- 11.98 HAL submitted that the CAA had described the transparency principle as regulators being open and keeping regulations simple and user friendly. According to HAL, the CAA had failed to keep the H7 framework open and simple in terms of substantive requirements, the process for its implementation, and how its requirements are drafted into HAL's Licence.¹⁵⁴⁷ HAL further submitted that the CAA failed to carry out any regulatory impact assessment despite HAL's consistent and repeated requests and failed to meaningfully engage with HAL's alternative proposals.¹⁵⁴⁸
- 11.99 HAL submitted that the H7 regime was first proposed around six years ago but it was still 'unfinished business' as certain elements were yet to be defined and were being finalised via draft guidance. According to HAL, there was a lack of clarity about how the reconciliation regime would work in practice, with only a limited example provided at the Final Proposals stage.¹⁵⁴⁹ HAL submitted that there was insufficient detail in the new licence condition on the intended operation of the new regime.¹⁵⁵⁰

¹⁵⁴⁷ [HAL NoA](#), paragraph 360.

¹⁵⁴⁸ [HAL NoA](#), paragraph 361.

¹⁵⁴⁹ [HAL NoA](#), paragraph 361.

¹⁵⁵⁰ [HAL NoA](#), paragraph 290.2.3.

11.100 HAL submitted that the CAA's draft guidance flagged the possible need for updates to the guidance if concerns arose that the regime imposed an excessive burden and cost on HAL and/or airlines, or that it unnecessarily contributed to delays. According to HAL, this did not give a proper answer to HAL's concerns, provided no guarantee as to possible future changes, and suggested underlying concern on the part of the CAA about the burdensome nature of the regime.¹⁵⁵¹

CAA Response

11.101 In terms of a regulatory impact assessment, the CAA submitted that this disclosed no error. According to the CAA, while it had not carried out a regulatory impact assessment, it did, alongside the Initial Proposals, carry out an assessment of the proposed H7 framework against its statutory duties. The CAA noted that HAL did not respond to this assessment.¹⁵⁵²

11.102 The CAA submitted that there was no lack of meaningful engagement with HAL's alternative proposals. The CAA submitted that in relation to the alternative proposal HAL submitted as part of its RBP, the CAA undertook a detailed assessment of this as part of an appendix to its April 2021 consultation. The CAA also submitted that it had considered the proposal submitted by HAL in May 2022 (as part of engagement on capex incentives) and responded to this in detail in its Final Proposals, particularly where HAL had raised new points or issues not previously raised in its responses to CAA consultations.¹⁵⁵³

11.103 The CAA submitted that HAL's arguments that the framework was 'unfinished' go nowhere. The CAA submitted that it had set out a significant amount of detail about the H7 ex-ante framework in the Final Proposals and the Final Decision, including all the key elements of the framework, what capex projects it will apply to, the need to specify DOs, and the incentive rate. According to the CAA, it was entirely normal (and indeed good practice) for regulators to then work with industry (in the CAA's case HAL and airlines), to implement proposals of this nature in the most appropriate and proportionate way.¹⁵⁵⁴

Interveners' submissions

11.104 The Airline Interveners submitted that the suggestion that the CAA had in some way failed to act in a non-transparent or unaccountable way could not withstand even the most cursory scrutiny. They submitted that the CAA had consulted over a six-year period, during which time HAL was able to place before the CAA any evidence, and make any representations, it wished. The Airline Interveners submitted that in both the CAA's Initial Proposals (at Appendix H) and Final

¹⁵⁵¹ [HAL NoA](#), paragraph 362.

¹⁵⁵² [CAA Response](#), paragraph 286.1.

¹⁵⁵³ [CAA Response](#), paragraph 286.2.

¹⁵⁵⁴ [CAA Response](#), paragraph 286.3.

Proposals (at Appendix G), the CAA explained how it had concluded that the capex incentives framework were appropriate having regard to its statutory duties under the Act.¹⁵⁵⁵ They further submitted that airlines had co-operated constructively and in good faith with the CAA's engagement with the airlines and HAL on the capex incentives framework and that the process would have been improved had HAL engaged with this process on a more constructive basis, rather than maintaining the reflexive opposition that it maintains in this appeal.¹⁵⁵⁶

Our assessment

11.105 In our view, the evidence does not show that the CAA failed to have regard to the Better Regulation Principles relating to transparency and accountability:

- (a) As with the other grounds, we are assessing here whether the CAA properly and conscientiously took relevant principles into account and weighed them in the balance when making its decision (see paragraph 11.52 above). As in other areas, much of the evidence presented by HAL instead appeared to go to the question of whether a particular result was achieved.
- (b) In Appendix G to the Final Proposals, the CAA considered the Better Regulation Principles under discussion in this section. In Table G.2 of the Appendix, the CAA considered whether the H7 regime would be transparent and accountable, with regard to several factors such as the nature of the ex-ante process, the possibility of updated governance provisions, improvements compared to the Q6 framework, the possibility of CMA review of the Final Decision, CAA openness to reviewing the size of the capex envelope if HAL submitted a request, and retaining certain elements that are important in terms of accountability. This assessment by the CAA is part, but not the entirety, of its regard to the relevant principles, and of our finding that the CAA had such regard as required by the Act.
- (c) With respect to HAL's submission that the CAA failed to keep the capex framework open and simple in line with own transparency principle,¹⁵⁵⁷ we note that the case for adopting more complex approaches will depend on the extent to which the additional complexity can be viewed as a necessary part of a proportionate means of delivering the relevant intended improvement. We have already set out above that the CAA did not fail to have regard to other Better Regulation Principles of necessity and proportionality, and do not consider that a mere assertion of complexity is in any way sufficient to show that the CAA failed to have regard to the principle that regulatory activities should be carried out in a way which is transparent and accountable.

¹⁵⁵⁵ [BA Nol](#), paragraph 5.5.3; [Delta Nol](#), paragraph 5.26.

¹⁵⁵⁶ [BA Nol](#), paragraph 5.4.4 and 5.4.5; [Delta Nol](#), paragraph 5.19 and 5.20.

¹⁵⁵⁷ [HAL NoA](#), paragraph 360.

- (d) With respect to HAL's submission that the CAA failed to carry out a regulatory impact assessment,¹⁵⁵⁸ assuming this would even be required to show that the CAA had regard to the relevant Better Regulation Principles (something we have not had to determine in the circumstances), we note that:
- (i) As set out in paragraph 11.58, the CAA consulted extensively on the introduction of new capex incentive arrangements, and this included consideration of different ways in which an ex-ante incentive framework, and – within such a framework – delivery obligations, might be applied.
 - (ii) The CAA published an assessment of its proposals against its statutory duties (including the Better Regulation Principles) as an appendix to its Initial Proposals document,¹⁵⁵⁹ and published an updated assessment as an appendix to its Final Proposals – which we have referred to at various points in this chapter.¹⁵⁶⁰
 - (iii) While we consider that the assessments referred to in (ii) may have benefitted from further attention being given to the potential for quantifying relevant costs and benefits, as set out in paragraph 11.59:
 - (1) the evidence does not show that the CAA failed to recognise or properly consider the potential for the new capex incentives arrangements to generate cost increases, delays or unworkable complexity; and
 - (2) the CAA's evidence highlighted ways in which it had taken account of the potential for such impacts in the design and implementation of the new arrangements, including through the consideration of alternative options.
- (e) We are not persuaded by HAL's submissions that the 'unfinished' nature of the framework implies that the CAA has had insufficient regard to transparency or accountability. We consider that the ongoing nature of the CAA's work in relation to the H7 capex incentives framework can be viewed as a function of its approach of requiring there to be agreement at G3 on what capex projects are intended to deliver, and when, for the agreed budget, while leaving the determination of the form that DOs should take in relation to any given project as a matter for HAL and airlines to determine by agreement. That approach means that the consequences of the new requirements will inevitably be dependent on the effectiveness of the processes through which HAL and airlines engage over time, and develop

¹⁵⁵⁸ [HAL NoA](#), paragraph 361.

¹⁵⁵⁹ [Initial Proposals](#), Appendix H.

¹⁵⁶⁰ [Final Proposals](#), Appendix G.

and refine approaches to determining, where relevant modifying, and reconciling against DOs. In line with paragraph 11.59, while HAL's submissions identified a range of risks in terms of the potential impact of the new capex arrangements, we do not consider HAL's evidence to have shown why the CAA should be regarded as having taken insufficient account of, or provided an insufficient response to, those risks. We note that the CAA's ongoing activities – and potential activities – can be understood as an important source of risk mitigation in this context, including:

- (i) Activities aimed at facilitating more effective engagement and agreement in relation to DOs (see paragraph 11.59).
- (ii) The CAA's role as ultimate arbiter within the governance process, and its use of guidance in relation to that role (see paragraph 11.76).

11.106 Accordingly, we determine that the Final Decision was not wrong in law because the CAA erred, in performing its primary duties, by failing to have regard to the principle that regulatory activities should be carried out in a way which is transparent and accountable.

H7 regime is inconsistent with regulatory precedent/other areas of the price control

HAL's submissions

11.107 HAL submitted that the Final Decision was inconsistent with relevant comparators. According to HAL, Dublin and Gatwick airports both have requirements to consult, not agree, with airlines on capex projects. HAL submitted that both maintained a far greater degree of flexibility in their framework to be responsive to developments on a capex project as it progresses.¹⁵⁶¹

11.108 HAL submitted that Dublin airport was the closest comparator to Heathrow – according to HAL, it was regulated with an almost identical application of the single-till approach. HAL submitted that the Irish regulator applied an incentive framework at Dublin where capex projects were either ex-ante or 'StageGate'. HAL explained that for ex-ante projects the regulator determines cost/scope at the outset of a price determination and airlines can express views but their approval was not required. HAL explained that the StageGate process was typically for large scale projects and/or projects without sufficient certainty on costs.¹⁵⁶²

11.109 According to HAL, StageGate was analogous to the existing Q6 gateway process. HAL explained that there was a requirement to consult with key stakeholders including airlines to finalise project cost/scope and the regulator was required to

¹⁵⁶¹ [HAL NoA](#), paragraph 363.

¹⁵⁶² [HAL NoA](#), paragraph 364.

make a determination at the project's outset with the support of an independent expert. HAL explained that the airport was required to consult with stakeholders through the StageGate process as the project evolved, with independent expert assessment of airport proposals. According to HAL, the airport had to consult but not agree with airlines on the cost/scope of projects as they evolved through the regulatory period. HAL explained that this allowed projects to proceed with significant certainty of the recoverability of costs, rather than determining cost/scope at the outset when projects are less developed.¹⁵⁶³

11.110 HAL further submitted that Gatwick airport was regulated under a licence-based commitments regime. HAL explained that this was very different to Heathrow and was far less intrusive and burdensome. HAL submitted that Gatwick shared annually with the Airlines Consultative Committee (**ACC**) a 5-year capex plan prior to publication of its Capital Investment Programme (**CIP**), and it met with the ACC to perform ex-post reviews of capex projects. According to HAL, the airport was required to consult airlines on the CIP but had no obligation to have full agreement from all airlines – regardless of the value/type of project. HAL explained that there was ex-post review of lower value projects and there was ex-ante review of projects above a threshold of £5 million – these were open to higher level of scrutiny by airlines. HAL submitted that Gatwick was only penalised if it did not meet its core service standards and that penalties were not overly prescriptive and there was no risk of duplicative penalties.¹⁵⁶⁴

11.111 HAL submitted that as a result the H7 regime was out of line with other comparable European examples including Amsterdam, Zurich and Rome. According to HAL, the regulatory burden introduced was out of line with best practice in other European comparators.¹⁵⁶⁵

11.112 HAL also said that the Final Decision was inconsistent with other areas of the price control. According to HAL, the CAA had not appropriately considered the potential for double jeopardy between the DO and Output-Based Regulation regimes. HAL submitted that the CAA had dismissed that concern out of hand even though it demonstrated a flaw in regulatory design. HAL also submitted that the CAA had claimed DOs represented consistent regulation but had failed to consider their internal inconsistency with other parts of the Final Decision. According to HAL, this was not in line with the CAA's statutory duty to be consistent.¹⁵⁶⁶

CAA Response

11.113 The CAA submitted that it was simply inaccurate to characterise the Final Decision as giving rise to a risk of 'double jeopardy'. According to the CAA, the Final

¹⁵⁶³ [HAL NoA](#), paragraph 364.

¹⁵⁶⁴ [HAL NoA](#), paragraph 365.

¹⁵⁶⁵ [HAL NoA](#), paragraph 366.

¹⁵⁶⁶ [HAL NoA](#), paragraph 367.

Proposals considered the existence of DOs alongside the Output-Based Regulation regime. The CAA submitted that the nature of the Output-Based Regulation framework meant that the outcomes and measures captured within it were of HAL's performance across the range of activities and services it undertakes (ie both operational and infrastructure provision), and often they reflected both in one measure (eg security queues). The CAA submitted that the focus of the Output-Based Regulation was HAL's service delivery, which had a primary focus on the operating efficiency of the business. According to the CAA, the role of DOs was not to penalise HAL in terms of its service delivery but to adjust the original capex baseline for a project to reflect what was actually delivered. The CAA submitted that HAL will only be penalised financially if its actual spend was higher than the adjusted baseline. According to the CAA, even if HAL ended up being penalised for a capex overspend (by not being allowed to add 25% of the overspend in relation to that project to its RAB) and through the Output-Based Regulation regime (because it did not deliver a part of the scope of a project which had an impact on its performance against an Output-Based Regulation metric), that was not 'double jeopardy'. In the CAA's view, that was an appropriate functioning of the regulatory framework as otherwise HAL would have no incentive to make up for shortcomings in its capex delivery by deploying different and potentially more costly operating arrangements and services.¹⁵⁶⁷

11.114 The CAA submitted that the allegation that the CAA had acted inconsistently with regulatory best practice on its own disclosed no error if what it had done fell within its margin of appreciation.¹⁵⁶⁸ The CAA submitted that in any event, HAL's citation of comparators provided no basis for the conclusory statement that what the CAA had done in this case – bearing in mind that Heathrow was 'sui generis'¹⁵⁶⁹ and had no direct comparators – was inconsistent with best practice. According to the CAA, at best it showed that different decisions had been taken in respect of different airports where different circumstances obtain. The CAA submitted that this falls a long way short of showing any error. Notwithstanding these points, the CAA submitted based on witness evidence that it was clear that a number of different airport regulators applied some form of ex-ante incentives on capital expenditure, and the CAA's introduction of ex-ante capex incentives was also consistent with regulatory precedent in the UK, for example Ofgem and Ofwat's approaches to regulating the energy and water sectors respectively.¹⁵⁷⁰

Interveners' submissions

11.115 The Airline Interveners submitted that the Better Regulation Principle did not – on any view – entail an obligation to adopt an identical approach to that taken by

¹⁵⁶⁷ [CAA Response](#), paragraph 285.3.

¹⁵⁶⁸ [CAA Response](#), paragraph 287.

¹⁵⁶⁹ *le unique*.

¹⁵⁷⁰ [CAA Response](#), paragraph 287.

other airports under different regulatory schemes and (in the case of Dublin Airport) a different regulator. They submitted that HAL did not address the manifold differences between the regulatory regimes at those airports. They submitted that Gatwick, for example, did not have a RAB, nor are charges set by reference to a RAB.¹⁵⁷¹

Our assessment

11.116 In our view, the evidence does not demonstrate that the CAA failed to have regard to the Better Regulation Principle relating to consistency:

- (a) As in other respects in this chapter, the question is whether the CAA took the regulatory principle relating to consistency properly and conscientiously into account, and weighed it in the balance (see paragraph 11.52 above), in making its decision. As in the other cases considered in this final determination, much of the evidence presented by HAL instead appears to go to the question of whether a particular result was achieved.
- (b) Again, in Appendix G to the Final Proposals the CAA considered the relevant principle. In Table G.2 of that appendix, the CAA assessed whether its approach would be consistent in relation to a number of factors such as retaining effective elements of Q6 where possible and the actions of other regulators. Again, that appendix is part of our assessment of the regard the CAA had to the principle.
- (c) Even assuming that the question of other airport comparators (both domestic and overseas) was relevant to the question of whether the CAA had regard to the relevant principle, given Heathrow's economic characteristics, and (associated with this) it being the only airport currently subject to CAA price control regulation, we consider it unsurprising that there would be differences between the approaches to regulating capex that CAA had adopted for Heathrow and those that were adopted (by the CAA, and – internationally – by other authorities) in relation to other airports. Different treatment of different airports in different circumstances does not, in our view, indicate a lack of regard to the principle of consistency.
- (d) We set out our assessment of HAL's submissions concerning the scope for the new framework not to result in a 'fair bet' and to result in 'double jeopardy' (because of the existence of DOs alongside the Output-Based Regulation regime) in paragraph 11.95. As set out in that paragraph, the evidence does not demonstrate that the CAA failed to recognise or properly consider the promotion of efficient incentives in its decision to introduce new capex incentive arrangements. We do not consider in any case that HAL has

¹⁵⁷¹ [BA Nol](#), paragraph 5.5.3; [Delta Nol](#), paragraph 5.26.

properly set out why these matters are relevant to the question of whether or not the CAA had regard to the Better Regulation Principle relating to consistency.

11.117 Accordingly, we determine that the Final Decision was not wrong in law because the CAA erred, in performing its primary duties, by failing to have regard to the principle that regulatory activities should be carried out in a way which is consistent.

Other matters

11.118 In its response to the Provisional Determination, HAL submitted that we had not given it the opportunity to comment on our interpretation of the CAA's statutory duties.¹⁵⁷² We disagree. We clearly set out our interpretation of those duties in the Provisional Determination. HAL submitted a response covering that interpretation, along with other points, which we have assessed in this chapter as set out above. That response was in addition to opportunities all the Parties had at various stages of the proceedings to make submissions about the meaning and effect of the relevant duties.

Determination of the overall statutory question

11.119 Our determination on the overall statutory question, given the above assessments, is that the Final Decision was not wrong in law, nor did the CAA make an error in the exercise of a discretion, in relation to capex incentives. HAL's appeal in relation to capex incentives is therefore dismissed and we confirm the Final Decision in that respect.

11.120 We note in this connection that HAL also suggested in its response to the Provisional Determination that, even if we uphold the overall H7 framework, we should remit certain matters back to the CAA to address flaws in the Final Decision and mitigate the consequential harms for HAL and its passengers, direct the CAA to consider timing amendments for implementation of the H7 regime, require the CAA to publish more information about the dispute resolution process, or require the CAA to consider timing amendments to current licence deadlines for implementation of the H7 framework.¹⁵⁷³ In circumstances where we have found no error on the grounds pleaded by HAL, we do not consider that we have the power to impose such requirements on the CAA, nor would it be appropriate to do so. Insofar as the capex incentives framework will involve the CAA taking further decisions, it is for it to do so taking account of relevant considerations and

¹⁵⁷² HAL Response to PD, paragraphs 218-219.

¹⁵⁷³ HAL Response to PD, paragraphs 208-210, 218-219, 232-233, 239 and 240-245.

evidence, and in accordance with its statutory duties. Such decisions may be reviewable in line with public law principles.

12. Determination of appeal from HAL

Introduction

12.1 This chapter sets out the grounds pleaded by HAL and provides our determination of HAL's appeal.

Grounds pleaded by HAL

12.2 As outlined in chapter 4, HAL appealed against the Final Decision on the following grounds:

- (a) ground 1, RAB adjustment;
- (b) ground 2, the cost of equity;
- (c) ground 3, the cost of debt;
- (d) ground 4, the AK factor; and
- (e) ground 5, capex incentives.

HAL ground 1: RAB adjustment

12.3 For the reasons given in chapter 5, our determination is to dismiss HAL's pleaded ground 1 concerning the RAB adjustment and confirm the Final Decision in that regard.

HAL ground 2: cost of equity

12.4 For the reasons given in chapter 6, our determination is to dismiss HAL's pleaded ground 2 concerning the cost of equity and confirm the Final Decision in that regard.

HAL ground 3: cost of debt

12.5 For the reasons given in chapter 7, our determination is to dismiss HAL's pleaded ground 3 concerning the cost of debt and confirm the Final Decision in that regard.

HAL ground 4: the AK factor

12.6 For the reasons given in chapter 10, we determine that the CAA was wrong in the manner of its application of the AK factor in 2020 and 2021, and allow HAL's appeal to that extent but otherwise confirm the Final Decision (as set out in more detail at paragraphs 10.117 to 10.121).

HAL ground 5: capex incentives

12.7 For the reasons given in chapter 11, our determination is to dismiss HAL's pleaded ground 5 concerning capex incentives and to confirm the Final Decision in that regard.

13. Determination of appeal from BA

Introduction

13.1 This chapter sets out the grounds pleaded by BA and provides our determination of the appeal.

Grounds pleaded by BA

13.2 As outlined in chapter 4, BA appealed against the Final Decision on the following grounds:

- (a) ground 1, passenger forecasting;
- (b) ground 2, the RAB adjustment; and
- (c) ground 3, the weighted average cost of capital (WACC).

BA ground 1: Passenger forecasting¹⁵⁷⁴

13.3 For the reasons given in chapter 9, our determination is:

- (a) to dismiss BA's pleaded ground 1 concerning passenger forecasting and confirm the Final Decision in this regard, save in respect of BA's allegation that the CAA's Final Decision was wrong because in Step 4 the CAA applied a Shock Factor of 0.87% and was wrong in law, in which limited part we allow BA's appeal (as set out in more detail at paragraphs 9.309 to 9.310); and
- (b) to dismiss the element of BA's pleaded ground 3 concerning the asymmetric risk allowance and confirm the Final Decision in this regard.

BA ground 2: the RAB Adjustment

13.4 For the reasons described in chapter 5, we determine that BA's appeal in relation to the RAB adjustment is dismissed and confirm the Final Decision in this regard.

BA ground 3: WACC

13.5 For the reasons set out in chapters 6, 7 and 8, we dismiss ground 3 of BA's appeal concerning the WACC and confirm the Final Decision in this regard, save that we determine that the CAA erred in applying an index-linked premium, as set out in its

¹⁵⁷⁴ We also addressed within ground 1 one aspect of BA's ground 3 (allowance for asymmetric risk).

Final Decision, to HAL's cost of debt and we allow BA's appeal to that extent (as set out in more detail at paragraphs 7.305 to 7.306).

14. Determination of appeal from Delta

Introduction

14.1 This chapter sets out the grounds pleaded by Delta and provides our determination of the appeal.

Grounds pleaded by Delta

14.2 As outlined in chapter 4, Delta appealed against the Final Decision on the following grounds:

- (a) ground 1, passenger forecast;
- (b) ground 2, the WACC; and
- (c) ground 3, the RAB adjustment.

Delta ground 1: Passenger forecast

14.3 For the reasons given in chapter 9, our determination is to dismiss Delta's pleaded ground 1 concerning the passenger forecast and confirm the Final Decision in this regard, save in respect of Delta's allegation that the CAA's Final Decision was wrong because in Step 4 the CAA applied a Shock Factor of 0.87% and was wrong in law, in which limited part we allow Delta's appeal (as set out in more detail at paragraphs 9.309 to 9.310).

Delta ground 2: the WACC

14.4 For the reasons set out in chapters 6, 7 and 8, we dismiss ground 2 of Delta's appeal concerning the WACC and confirm the Final Decision in this regard, save that we determine that the CAA erred in applying an index-linked premium, as set out in its Final Decision, to HAL's cost of debt and we allow Delta's appeal to that extent (as set out in more detail at paragraphs 7.305 to 7.306).

Delta ground 3: the RAB adjustment

14.5 For the reasons in chapter 5, we determine that Delta's appeal in relation to the RAB adjustment is dismissed and confirm the Final Decision in this regard.

15. Determination of appeal from VAA

Introduction

15.1 This chapter sets out the grounds pleaded by VAA and provides our determination of the appeal.

Grounds pleaded by VAA

15.2 As outlined in chapter 4, VAA appealed against the Final Decision on the following grounds:

- (a) ground 1, passenger forecast;
- (b) ground 2, the WACC; and
- (c) ground 3, the RAB adjustment.

VAA ground 1: Passenger forecast

15.3 For the reasons given in chapter 9, our determination is to dismiss VAA's pleaded ground 1 concerning the passenger forecast and confirm the Final Decision in this regard, save in respect of VAA's allegation that the CAA's Final Decision was wrong because in Step 4 the CAA applied a Shock Factor of 0.87% and was wrong in law, in which limited part we allow VAA's appeal (as set out in more detail at paragraphs 9.309 to 9.310).

VAA ground 2: the WACC

15.4 For the reasons set out in chapters 6, 7 and 8, we dismiss ground 2 of Delta's appeal concerning the WACC and confirm the Final Decision in this regard, save that we determine that the CAA erred in applying an index-linked premium, as set out in its Final Decision, to HAL's cost of debt and we allow Delta's appeal to that extent (as set out in more detail at paragraphs 7.305 to 7.306).

VAA ground 3: the RAB adjustment

15.5 For the reasons in chapter 5, we determine that VAA's appeal in relation to the RAB adjustment is dismissed and confirm the Final Decision in this regard.

16. Relief

Introduction

- 16.1 The CMA is required to issue its final determinations by 17 October 2023, including, where relevant, our requirements on the design and implementation of any associated remedies, together generally described by the Parties as ‘relief’. In this section we use both ‘relief’ and ‘remedies’ to describe decisions made by the CMA on the consequences for the CAA’s Final Decision of our determinations in these appeals.
- 16.2 As set out in detail in our assessments above, we have found the CAA’s decision to proceed with modifications of HAL’s Licence by means of its Final Decision to be wrong in three specific areas:
- (a) on one aspect of the Airlines’ appeals on Ground B: Cost of Capital (ie introducing an index linked premium);
 - (b) on one aspect of the Airlines’ appeals on Ground C: Passenger Forecasts/Forecasting (ie the 0.87% level of the Shock Factor); and
 - (c) on part of HAL’s appeal in Ground D: AK factor (ie the manner of CAA’s application of the AK factor in 2020 and 2021).
- 16.3 Where we allow an appeal to any extent in relation to a decision by the CAA to modify a licence condition, section 27(2) of the Act stipulates that we must do one or more of the following:
- (a) quash the decision appealed against;
 - (b) remit the matter that is the subject of the decision appealed against to the CAA for reconsideration and decision in accordance with this Chapter [of the Act] and any directions given by the CMA;
 - (c) substitute our own decision for that of the CAA.¹⁵⁷⁵
- 16.4 In coming to our decision on relief, we need to have regard to both our overriding objective of disposing of the appeals fairly and efficiently and at proportionate cost within the time limits prescribed by the Act, and also the CAA’s objectives and duties as set out in the Act. In that context, we have to consider the practical aspects associated with the timetable of an appeal. If we find an error in our final determinations, we will decide which of the approaches outlined in paragraph 16.3 above to apply depending on a number of considerations, including:

¹⁵⁷⁵ [Section 27](#) of the Act.

- (a) the feasibility of identifying and implementing an effective remedy within the timetable for these appeals;
- (b) the costs associated with remittal of the matter to the CAA, including any costs associated with further delay to the relevant aspects of the price control;
- (c) the existence of interlinkages between any remedy and other parts of the price control framework that are not subject to these appeals, which will affect the feasibility of a remedy to effectively address the error identified without wider consequences; and
- (d) the benefits of any further consultation on the issues subject to the remedy, including consultation with third parties.

16.5 We note that if we decide to remit any matters to the CAA, we can do so with directions, which can be specific to the form of the proposed remedy. Our assessment therefore includes two decisions:

- (a) whether the remedies process is able to identify an effective remedy that will address the errors found in these appeals; and
- (b) if so, whether the implementation of that remedy should be through remittal to the CAA (potentially with directions), in order that the CAA can implement the remedy, or through substitution of our decision for that of the CAA.

The approach to relief set out in our Provisional Determination

16.6 In our Provisional Determination we proposed to the Parties that we would quash and remit to the CAA for reconsideration all three of the matters identified at paragraph 16.2 above.

16.7 We explained that as a starting point we had provisionally concluded that it was not appropriate for the CMA to quash and substitute an alternative decision on the index linked premium, the level of the Shock Factor or the AK factor. This is for a number of reasons.

- (a) The errors found have largely resulted from a lack of robust and objective evidence and analysis and a failure by the CAA to properly consider what other information and evidence was required in order to support the CAA's decisions. It follows that the CMA has not been able to review and to consider evidence that the CAA should have collated but did not in order to arrive at its conclusions.
- (b) Whilst we have found that the CAA erred in failing to properly consider and evidence these decisions, we are mindful that, on remittal and proper

consideration of all relevant information and the exclusion of irrelevant information from its assessment, the CAA as the industry regulator has significantly more experience than the CMA to address its errors.

- (c) Although we have considered carefully whether and how any of the errors we have found with the Final Decision may impact other areas of the price control, we also recognise that there may be interlinkages with other elements of the price control and that the CAA is better placed to assess these.

16.8 We further explained that we considered this approach appropriate because in each case it would best achieve the remedy aims that we identified in relation to each ground. We set out below the aims we sought to achieve, and the position taken in the Provisional Determination.

Ground B Remedy Aim

16.9 In our Provisional Determination, and confirmed in this Final Determination, we concluded that the CAA erred in fact and law in introducing an index-linked premium of 15bps as part of its assessment of HAL's cost of debt. It made methodological errors, failed to take account of relevant considerations and reached a conclusion without a proper factual basis and foundation in the evidence such that its decision in this regard was irrational. We have found that this error was material for the reasons set out at paragraph 7.306.

16.10 We intended to remedy the Ground B error ensuring that the CAA:

- (a) applies an index-linked premium of 15bps to the cost of debt only if it has concluded on the basis of robust evidence that this level of index-linked premium is appropriate; or
- (b) applies a revised index-linked premium to the cost of debt at a level which the CAA has calculated on the basis of appropriate and robust evidence, with accompanying clear and supported analysis and reasoning; or
- (c) does not apply an index-linked premium to the cost of debt, if the CAA decides upon further consideration that the available evidence is insufficient to constitute robust evidence for the calculation of an appropriate level of indexed-linked premium; and
- (d) in any event makes such modifications to the relevant price control licence condition as are required so that it takes account of the CAA's otherwise correct level of the WACC subject to the corrected index-linked premium (which may be zero) applied to the cost of debt.

Ground C Remedy Aim

- 16.11 In our Provisional Determination, and confirmed in this Final Determination, we found that the CAA was wrong in law to select 0.87% as the level of the Shock Factor to be applied to the passenger forecast because it failed properly to validate whether HAL's calculations of that figure were correct and thus failed to take account of relevant considerations and evidence and made a decision without adequate foundation in the evidence. We have found that this error was material for the reasons set out at paragraph 9.305 above.
- 16.12 We intended to remedy the Ground C error ensuring that the CAA either:
- (a) applies a Shock Factor of 0.87% to the passenger forecast for 2023-2026 within the Final Decision only if it has first appropriately validated that level of Shock Factor; or
 - (b) applies a revised Shock Factor to the passenger forecast for 2023-2026 within the Final Decision at a level which the CAA has appropriately validated; and
 - (c) in either event, makes such modifications to the relevant price control licence condition as are required so that, for 2023-2026, it takes account of the CAA's otherwise correct passenger forecast¹⁵⁷⁶ subject to the corrected Shock Factor and sets the passenger charge accordingly.

Ground D Remedy Aim

- 16.13 In our Provisional Determination, and confirmed in this Final Determination, we found that the CAA did not err in law or in the exercise of a discretion in deciding that an AK factor should be applied to the years 2020 and 2021 and was not wrong to apply an AK factor in the light of the losses HAL made during that period. We confirm the Final Decision to that extent.
- 16.14 We did, however, find that the CAA erred in law and in the exercise of a discretion in applying the AK factor mechanism in respect of 2020 and 2021 in the way that it did to account for: an underspend on capex in 2020 and 2021; an over recovery caused by HAL's business rates out-turning at levels lower than the Q6 allowance; and an over-recovery in per passenger charges in 2020 and 2021 as a result of airlines operating flights at Heathrow with fewer numbers of passengers than before the COVID-19 pandemic.
- 16.15 We intended to remedy the Ground D error ensuring that the CAA:

¹⁵⁷⁶ That is, the unshocked forecast the CAA calculated in the Final Decision which we do not, as set out in this determination find to be wrong.

- (a) gives due consideration to whether, in the exceptional circumstances that applied as a result of the pandemic, HAL did actually over-recover revenues to the extent a standard application of the correction factor would imply and that it was appropriate to provide for the recovery of those amounts; and
- (b) makes such modifications to the relevant price control condition as are required to take account of any recalculation of the AK factor in light of (a).

Consequences of the proposed remittals

16.16 To the extent that the remittals would result in due course in a change to the overall price control, we explained in our Provisional Determination that we considered that any subsequent adjustment to the WACC and/or Shock Factor could be accommodated by the application of a form of ‘true-up’ mechanism that the CAA could apply.

Parties’ general submissions on relief

CAA’s submissions

16.17 The CAA welcomed the general approach regarding relief set out in our Provisional Determination and it agreed that the CMA should remit to it any matters where we decided it had erred.¹⁵⁷⁷

16.18 The CAA committed to considering such matters in a timely manner. In this context, the CAA drew the CMA’s attention to the fact that it is already considering a small number of issues that were inevitably held over from the CAA’s Final Decision with a view to concluding these matters in the first half of 2024.¹⁵⁷⁸

Airlines’ submissions

16.19 The Airlines did not make any general submissions on relief. The Airlines welcomed our proposed remedy in relation to Grounds B and D,¹⁵⁷⁹ and for Ground D stated that they wished to be involved in the CAA’s future consideration of the AK factor through its consultation in relation to Ground D (the AK factor).¹⁵⁸⁰ The Airlines did not make any specific submissions on relief for Ground C.

¹⁵⁷⁷ CAA, Response to PD, 22 September 2023, (CAA Response to PD), paragraph 39.

¹⁵⁷⁸ CAA Response to PD, paragraph 41.

¹⁵⁷⁹ Airlines, Response to PD, 22 September 2023, (Airlines Response to PD), paragraphs 3.5 – 3.9 and 5.1.

¹⁵⁸⁰ Airlines, Response to PD, paragraph 5.3.

HAL's submissions

16.20 HAL submitted that the relevant case law,¹⁵⁸¹ parliamentary intent,¹⁵⁸² the Overriding Objective,¹⁵⁸³ and a report of the Competition Commission pre-dating the Act¹⁵⁸⁴ made clear that regulatory appeals bodies should finalise the outcome of an appeal through substitution of their own decision wherever possible. HAL submitted that the CMA substituting our own decision for that of the CAA would benefit consumers as this would foster certainty regarding the regulatory framework within which HAL is operating. HAL noted that it was already 21 months into a 60-month regulatory settlement, which gave all the more reason to remedy the CAA's errors promptly.

Approach to implementation of relief

16.21 As set out in paragraph 16.6 above, in our Provisional Determination we proposed quashing and remitting to the CAA for redetermination all three of the errors which we had found. Neither the CAA nor the Airlines objected to this proposed approach. HAL did not object to our proposed approach in relation to Ground B. In relation to Grounds C and D HAL submitted that we should substitute our own decision for that of the CAA, rather than remitting to the CAA for reconsideration as we had proposed.

16.22 Our starting point is that we consider it appropriate to quash the CAA's erroneous decisions in this case, ie the errors should not be allowed to stand uncorrected. None of the parties opposed this. The question for us then to consider is whether substitution or remittal is the appropriate further step to ensure that the errors are corrected.

16.23 In principle, we agree with HAL that where the CMA considers that it can substitute its own decision for that of the CAA, that course will normally be preferable to remittal. This is because substitution is likely to correct the error more promptly than a remittal. However, the key question is whether substitution is appropriate. Whether substitution is appropriate will depend upon the relevant circumstances. In addition to the matters described in paragraph 16.4 above, those include:

- (a) whether the CMA has sufficient (admissible) evidence to enable it to form a view on the 'correct' answer to substitute for that of the CAA (ie whether or not further investigation would be necessary to resolve the matter);

¹⁵⁸¹ HAL, Response to PD, 22 September 2023 (**HAL Response to PD**), paragraphs 25 and 26.

¹⁵⁸² HAL referred to passages from Hansard in which the Civil Aviation Bill was discussed. HAL Response to PD, paragraph 31.

¹⁵⁸³ HAL Response to PD, paragraph 31.

¹⁵⁸⁴ HAL referred to passages from the CC's Final Report 'BAA airports market investigation' dated 19 March 2009 which commented upon the regulatory regime in place prior to the Act. HAL Response to PD, paragraph 32.

- (b) whether the CMA can fairly dispose of the matter within the statutory deadline for the appeal proceedings.

- 16.24 In relation to Ground B, we shall remit the decision to the CAA for reconsideration. This proposed course was not opposed by any of the Parties and in our view, the considerations in paragraph 16.23 are not met. Accordingly, we determine that an appropriate and proportionate means of achieving our Ground B Remedy Aim is to quash the CAA's decision to apply an index-linked premium to HAL's cost of debt as set out in the Final Decision and remit this matter to the CAA for reconsideration and decision pursuant to our powers under section 27(2)(a) and (b) of the Act.¹⁵⁸⁵ We refer to this as our **Ground B Remedy**. This remedy requires the CAA to review the matter and to determine on the basis of robust and objective evidence, analysis and reasoning, taking account of relevant considerations, whether, why and to what extent, if at all, an index-linked premium should be applied to HAL's cost of debt.
- 16.25 In relation to Ground C, HAL invited us to confirm the Shock Factor at 0.87% in our final determination rather than remit this matter to the CAA.¹⁵⁸⁶ For the reasons set out at paragraphs 9.303 and 9.304, we decline to do so and consider that the criteria set out in paragraph 16.23 are not met. We therefore determine that an appropriate and proportionate means of achieving our Ground C Remedy Aim is to quash the CAA's decision to apply a Shock Factor at the level of 0.87% to the otherwise correct passenger forecast in the forecast years 2023 to 2026 as set out in the Final Decision and remit this matter to the CAA for reconsideration and decision pursuant to our powers under section 27(2)(a) and (b) of the Act.¹⁵⁸⁷ We refer to this as our **Ground C Remedy**. This remedy may require a change to the maximum yield per passenger amounts allowed for in the Licence but we consider that this remedy would not entail the CAA having to conduct its passenger forecasting exercise afresh (ie to alter any of the other aspects of the otherwise correct unshocked forecast).
- 16.26 In relation to Ground D, HAL submitted that the CMA has sufficient material and data to make its own determination of the AK-factor and urged us to do so. HAL also suggested calculations for the development capex, business rates and passenger mix adjustments and suggested wording to replace the AK factor licence conditions.¹⁵⁸⁸ In accordance with HAL's calculations, it considered that the maximum AK factor returned by Heathrow should be £55.5 million. HAL submitted that this includes the pro-rated adjustments of £32.5 million for development capex, £19 million for business rates and a net £4 million for the passenger mix effects relating to prolonged aircraft parking and more short-haul flights in the

¹⁵⁸⁵ [Section 27](#) of the Act.

¹⁵⁸⁶ HAL Response to PD, paragraphs 82-84.

¹⁵⁸⁷ [Section 27](#) of the Act.

¹⁵⁸⁸ HAL Response to PD, paragraphs 44 to 46 and Annexes D1 and D2.

mix.¹⁵⁸⁹ In the alternative, HAL submitted that upon any remittal, the CMA should be as specific as possible in its directions.¹⁵⁹⁰

- 16.27 We do not agree with HAL's submission that we have sufficient material and data to make our own determination of the AK factor. As noted at paragraph 10.88, the Parties made only limited representations on the workings of the AK factor adjustment. While HAL submitted certain figures to us in response to our Provisional Determination, these figures have not enabled us to identify the correct adjustment in a way that we can confidently and fairly rely upon. That is a matter for the CAA to determine following an appropriate process.¹⁵⁹¹ Further, we consider that the CAA, as the expert industry regulator, would be better placed than us to give full and proper consideration to the application of the AK factor and to make any necessary changes to the licence conditions.
- 16.28 Accordingly, we determine that an appropriate and proportionate means of achieving our Ground D Remedy Aim is to quash the CAA's decision to apply the AK factor to the price control as set out in the CAA's Final Decision and remit this matter to the CAA for reconsideration and decision pursuant to our powers under section 27(2)(a) and (b) of the Act. We refer to this as our **Ground D Remedy**.
- 16.29 In its reconsideration of the application of the AK factor to the years 2020 and 2021, the CAA should have regard to its statutory duties and to the CMA's assessment of the CAA's approach in its original application of the AK factor to 2020 and 2021, as set out in detail in chapter 10. We consider the need for any further specificity in our directions to the CAA below.

Conduct of the remittals

- 16.30 We agree with the Parties that the remittals need to be completed in a timely manner, which will provide clarity for all stakeholders about charges for the remainder of the price control period. In particular, we strongly encourage the CAA to resolve these promptly, and this needs to be a high priority for the CAA to resolve upon receipt of this Final Determination.
- 16.31 The CAA should consult on its proposals relating to its reconsideration of the index linked-premium, level of the Shock Factor and the AK factor, and make such consequential amendments to HAL's licence as are necessary, within a reasonable timescale, which we require in any case to be sufficiently prompt that they can reasonably be taken into account by HAL when it consults during summer 2024 on the setting of charges for 2025 (as required under the ACR 2011).

¹⁵⁸⁹ HAL Response to PD, paragraph 48.

¹⁵⁹⁰ HAL Response to PD, paragraph 38.

¹⁵⁹¹ As noted in chapter 10, footnote 1141 to paragraph 10.94(d).

16.32 We have also considered HAL's submission in relation to Ground D that – should we remit the matter to the CAA – we should be as specific as possible in setting down directions for the CAA. We do not consider it appropriate to set down further directions beyond those contained in paragraph 16.29. This is for essentially the same reasons as set out in paragraph 16.7, namely because the CAA is better placed than us to decide how best to conduct the remittal process given its industry expertise and its deeper understanding of all the interlinkages across the price control. Moreover, the analysis set out in chapter 10 gives sufficient detail of our concerns to enable the CAA and relevant stakeholders to carry out the necessary remittal without the need for further detailed directions.