HS1 Stations Review: Control Period 3

Final Decision

Moving Britain Ahead

October 2019

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Executive Summary

1 This document contains the Government's Representatives' Final Decision on the Control Period 3 (CP3) High Speed One (HS1) Stations periodic review, discharging their contractual obligation under the HS1 Station Leases. In addition to setting out the Government's Representative's rationale behind their decision, it also contains information on stakeholder comments received, and the Government's Representatives' views on these responses, which have, alongside the benchmarking analysis, informed the Final Decision.

2 In this Final Decision the Government's Representatives set out the basis for the:

a) Approval of the Life Cycle Reports (LCRs), subject to the inclusion of an efficiency overlay in the calculation of the Long Term Charge (LTC).

b) Inclusion of an efficiency overlay of 2.0% per annum to incentivise a reduction in costs across CP3 (2020 to 2025), made up of 0.6% frontier shift (technological advances making efficiencies) and 1.4% catch up from CP1 and CP2.

c) Calculation of the Long Term Charge (LTC) for CP3, which also includes a 2.0% efficiency overlay on the CP3 cost estimates for CP4 (2025 to 2030) and an efficiency overlay of 0.6% (frontier shift) on the CP3 cost estimates for CP5 onwards (2030 to 2040) in the model. These will be subject to review during the CP4 stations review.

d) Retaining the annuity model that takes a 40-year look ahead and pay ahead.

e) Actions to progress with HS1 Ltd in relation to asset stewardship and other technical changes to the LCRs to be implemented ahead of CP4, in recognition that further work must be completed in the short term by HS1 Ltd to improve its asset monitoring and intelligence.

3 The LCRs proposed by HS1 Ltd produced an LTC of £11.7m pa. Through the application of the efficiency overlay, the LTC is reduced by 26% to c.£8.8m pa. This compares to the forecast of c.£9m pa at CP2, which means an increase of 35% from CP2 charges £6.5m pa. These charges are levied by HS1 Ltd on the train operators that use the HS1 stations.

Summary of LCR Approval Requirements

4 The HS1 Station Leases require HS1 Ltd to produce LCRs for each of the four HS1 Stations in advance of each of HS1 Ltd's five-year control periods. The LCRs set out the renewal and replacement works due to be carried out at the four HS1 Stations, in this case for CP3.

5 These works are funded via a Long-Term Charge (LTC) that is levied by HS1 Ltd on the train operators using the HS1 Stations. The LCRs are used to produce a Life Cycle Cost (LCC) model for each station which form the key input to the LTC financial model. The LTC is set through the calculation of an annuity to smooth the profile of payments over the Life Cycle Period (in this case over a period of 40 years).

6 The HS1 Station Leases[1] set out the information which must be contained within the LCRs for them to be considered ‘complete’, and as such, capable of being approved by the Government’s Representatives.

7 The HS1 Station Leases also set out the criteria which, if, in the reasonable opinion of the Government’s Representatives, were not present in the LCRs, would give the Government’s Representatives the discretion (but not obligation) under paragraph 5.4 of schedule 10 of the Station Lease and clause 5.4 of the Ashford Lease to reject the LCRs. The presence of one or more of the prescribed deficiencies, are the only grounds on which, under the HS1 Station Leases, the Government’s Representatives may reject the LCRs.

Overview of rationale

8 Whilst there are no material areas for concern in respect of non-compliance with the requirements set out in paragraph 5.2 of the HS1 Station Leases (See Annex A), the Government’s Representatives are aware there is a disconnect between the stated Asset Management Strategies and actual asset knowledge, monitoring and intelligence in the information presented by HS1 Ltd.

9 In order to address this concern, and with a view to holding costs at the level expected of a prudent land owner responsible for the structural integrity and maintenance of the HS1 Stations behaving with due efficiency and economy, whilst ensuring that the Life Cycle Purpose (see Annex A Glossary of terms) is achieved, the Government’s Representatives have applied two key levers; (a) the inclusion of the efficiency overlays and (b) the retention of the 40-year look-ahead and pay-ahead annuity used in CP1 and CP2..

10 Through the control period review process, the current most appropriate level of risk to be applied is reviewed every five years, with baseline costs also being updated. A stronger efficiency target is intended to ensure HS1 Ltd focus on the implementation of programmes to improve their asset knowledge and ongoing monitoring processes, complementing the implementation of the ISO 55000 policies, procedures and processes (see paragraph 3.43 below) that HS1 Ltd intends to implement during CP3. This will enable measurement against the target, but also incentivise the use of innovation to drive more efficient future costs.

11 This Final Decision also contains information on the close-out of this periodic review, including its implementation, a future lessons learned exercise and the ongoing monitoring of the decision for CP3.

DEPARTMENT FOR TRANSPORT

OCTOBER 2019

[1] The HS1 Station Leases are: 1. the Station Lease which covers London St Pancras Station, Stratford Station and Ebbsfleet Station; and 2. the Ashford International Lease, which for historic reasons is covered by a separate lease. The substantive provisions regarding the Government’s Representatives’ approval of the LCRs are identical. Therefore, for ease of reference, cross references in this decision to the HS1 Station Leases refer to the numbering in the main Stations Lease.

1. Introduction

1.1. This chapter sets out background information on HS1 Ltd and on the stations periodic review process, including the contractual basis for conducting periodic reviews. It also sets out information on the role of the Government's Representatives, purpose of this document, and the exclusions from this periodic review.

Background and contextual information

1.2. HS1 Ltd holds a concession, contracted until 2040, to operate and maintain the HS1 network between St Pancras International and the Channel Tunnel and to operate four stations (St Pancras International, Stratford International, Ebbsfleet International and Ashford International) along the HS1 route.

1.3. The Concession Agreement sets out the terms of the agreement between HS1 Ltd and the Secretary of State for Transport (SoS), who owns the HS1 railway network freehold, including the four stations named above.

1.4. The HS1 Station Leases, separate documents to the Concession Agreement, set out the terms of the agreement between HS1 Ltd and the SoS in respect of the four HS1 Stations, including the rights and obligations of both parties in respect to the HS1 Stations.

1.5. The HS1 Station Leases requires HS1 Ltd to produce Life Cycle Reports (LCRs) (including any revisions to the Asset Management Strategies (AMS)) for each of the four HS1 Stations in advance of each of HS1 Ltd's five-year control periods. The LCRs set out the renewal and replacement works due to be carried out at the four HS1 Stations and are funded via a Long-Term Charge (LTC) that is levied by HS1 Ltd on the train operators using the stations.

1.6. The information the HS1 Station Leases state that each LCR must contain is set out in Annex B to this document. As part of meeting these content requirements, HS1 Ltd must also achieve the Life Cycle Purpose (see paragraph 1.14 below and Annex A Glossary) for each station.

1.7. The train operators who use the HS1 Stations, who pay the LTC levied by HS1 Ltd and therefore are directly impacted by this review are London & South Eastern Railway Ltd (LSER), Eurostar International Ltd (EIL) and East Midlands Railway Ltd (EMR – previously East Midlands Trains Ltd). The other stakeholder included in the stations review was Transport for London (TfL).

Role of the Department and the Government's Representatives

1.8. Under the terms of the HS1 Station Leases, the Department is required to approve the LCRs and AMSs for each of HS1 Ltd's five-year control periods. Under the HS1 Station Leases, the SoS may appoint a Government's Representative, defined as "such person(s), firm(s) or company(ies) that the Secretary of State may appoint to be his representative(s) or any substitute as may be appointed from time to time pursuant to clause 4.1 (Government's Representative)[2] of the Concession Agreement."[3] (See Annex [A3] of this document, which sets out paragraph 1.1 (definitions) of Schedule 10 of the HS1 Station Leases).

1.9. The HS1 Stations review for CP3 has been undertaken by the SoS's appointed Government's Representatives (GRs) for the HS1 concession.

1.10. The Secretary of State has appointed four government officials to carry out the role of Government's Representatives. They have been granted delegated authority to perform the functions of the Government's Representatives and have been supported by external technical advisors GHD. GHD have conducted technical and benchmarking analysis and following detailed reviews of the information provided and submitted by HS1 Ltd, produced a number of reports providing advice to the Government's Representatives.

Purpose of this document and Scope of the Review

1.11. Pursuant to paragraph 5.3 of Schedule 10 of the HS1 Station Leases, this document constitutes the Final Decision of the Government's Representatives on the CP3 review of the four railway stations on the HS1 network which form part of the HS1 Concession.

1.12. The scope of the review includes the decisions on:

i. whether there are any deficiencies within the LCRs that give the Government's Representatives the discretion under the HS1 Station Leases to reject the LCRs and, if so, whether the deficiencies are sufficiently serious that they cannot be addressed by amendments to the LCRs and should result in a decision to reject the LCRs; and

ii. whether the Government's Representatives approve the LCRs, (with or without amendments) or reject the LCRs.

1.13. The consideration of any deficiencies includes whether HS1 Ltd is behaving with due efficiency and economy, and whether the LCRs will allow HS1 Ltd to comply with the Life Cycle Purpose, including any modification to the LTC that is permitted.

1.14. The Life Cycle Purpose (paragraph 2.1 to Schedule 10 of the HS1 Station Leases) is defined as "to ensure that each Station shall be in good and substantial repair and condition during the whole of the Life Cycle Period". The Life Cycle Period is defined in the HS1 Station Leases as "the period of fifty (50)

[2] Which relates to the Government's Representative

[3] https://highspeed1.co.uk/media/5k5oyaem/supplement-to-concession-agreement-december-2017-2.pdf

years commencing on 1 April 2011" (Schedule 10 of the HS1 Station Leases, definitions).

1.15. Chapter 4 of this document sets out in detail the requirements for the approval of the LCRs by the Government's Representatives, with Chapters 5, 6 and 7 setting out the Final Decision on the annuity charge for the LTC, the inclusion of an efficiency overlay and the impact on the LTC respectively.

1.16. This document also includes information on the end to end process for the CP3 stations review, including information on the next steps following this decision, which is set out in Chapter 8.

1.17. For further information about this document please direct any queries to:

Sam.hart@dft.gov.uk and Stuart.Nicholls@dft.gov.uk in their capacity as Government's Representatives.

1.18. Alternatively, you may send any request in hard copy to:

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Exclusions from this periodic review

1.19. This review does not cover the track or 'route' aspect of the HS1 network. The route itself is subject to periodic review by the Office of Rail and Road (ORR) on the same five-yearly basis, as set out in the Concession Agreement.

1.20. However, the Government's Representatives have engaged with the ORR to understand the ORR's approach to the HS1 route review.

1.21. This review does not cover HS1 Ltd's other income streams from its stations portfolio, including income from retail, advertising or car parks at stations. These income streams are unregulated, and not within scope of the periodic review. Chapter 7 sets out wider considerations raised by Stakeholders during this review, where the issue of contributions to the LTC from retail outlets at St Pancras International station is dealt with in more detail.

1.22. Similarly, HS1 Ltd (rather than the Government's Representatives or the Department) is responsible under the Railways (Access, Management and Licensing of Railway Undertakings) Regulations 2016 (the "Rail Regulations") for setting the station access charges that are levied on train operators. HS1 Ltd must set these charges in accordance with the charging framework in Schedule 4 of the Concession Agreement, the specific charging rules governing the determination of charges that are established by HS1 Ltd under the Rail Regulations, and the principles and exceptions relating to access charging set out in Schedule 3 of the Rail Regulations.

1.23. This review also does not cover Qualifying Expenditure ("QX"). QX is the expenditure associated with the costs and expenses reasonably incurred by HS1

Ltd through providing and procuring amenities and services (note this means services specific to stations; not train services) at its stations, including the operation of the station itself.

2. History

Previous decisions

2.1. There was no formal control period review for CP1 (2010 to 2015) as HS1 Ltd inherited the assets for operation, and a level of LTC derived from time-based estimates of renewal frequencies based on manufacturer expectations. At that point with the majority of the assets being brand new there was very limited asset history of maintenance or renewal to form an alternative view.

2.2. The first full review was held for CP2 (2015 to 2020). It is widely recognised and accepted that CP1 and CP2 charges were insufficient, with not enough money being collected to cover the estimated cost of future renewals. Therefore, it was acknowledged at CP2 that there would need to be a step change increase in charges at CP3 and CP4.

2.3. At CP2, the Government's Representatives discussed with HS1 Ltd the feasibility of taking an approach to the Life Cycle Period that is consistent with the approach required by the Concession Agreement in respect of periodic reviews for the route element of the HS1 network. This would mean that, instead of a fixed end date of 1 April 2061, HS1 Ltd would adopt a rolling 40-year view in terms of achieving the Life Cycle Purpose. In practice, this means that, at each periodic review for the HS1 Stations for the duration of the concession, HS1 Ltd will act as if it is retaining the concession for a further 40 years. HS1 Ltd and the Government's Representatives believe that this approach presents the best option for ensuring asset stewardship of the HS1 Stations and achieving the Life Cycle Purpose.

2.4. This position was agreed in principle at CP2, to implement the change requires a formal variation to the Concession Agreement and HS1 Station Leases. However, it was not progressed at that time as HS1 Ltd were preparing for and then going through a sale process with their shareholders changing. It was agreed not to amend the key contracts whilst the sale was being prepared and on-going. Once the shareholder sale process was completed, the CP3 review process had commenced and it was agreed to implement this action on completion of CP3.

2.5. Whilst this option has not been formally introduced for CP3, the 40-year look ahead is concurrent with the 50-year asset stewardship through to 2061 for CP3. In addition, the Government's Representatives have interpreted the requirement that each Station should be "in good and substantial repair and condition during the whole of the Life Cycle Period" in line with this (i.e. a rolling 40-year view will be used to assess the "good and substantial repair and condition" requirement). The Government's Representatives have concluded that the intention to move to a 40-year rolling asset stewardship and LTC model remains appropriate, and will be formalised ahead of CP4. This is discussed later in respect of the calculation of the LTC.

2.6. When HS1 Ltd presented their final PR14 submission for the CP2 LTC it was challenged by stakeholders and the Government's Representatives, leading to the introduction of the efficiency overlay 0.6% in CP2.

Process for undertaking the CP3 review

2.7. In January 2018 the SoS set out his approach to the HS1 Stations Review for CP3[4]. The SoS's approach to the periodic review is to approve (with or without amendments) or reject the Life Cycle Reports proposed by HS1 Ltd.

2.8. HS1 Ltd started work on the CP3 stations and route review in late 2017 with a detailed planning phase which continued into early 2018, and was followed by a series of quarterly workshops with all stakeholders all throughout 2018 and into early 2019.

2.9. From the beginning, HS1 Ltd set out a progressive assurance approach to engage with Government's Representatives, the ORR (for route) and HS1 stakeholders. Throughout this process HS1 Ltd collated the feedback received from stakeholders, including the Government's Representatives, and updated the documentation accordingly, in advance of its formal consultation and submission.

2.10. The Government's Representatives worked with its technical advisers, GHD, to produce an interim review on the LCRs, prior to HS1 Ltd's formal consultation. The Government's Representatives received this interim review (Familiarisation Report) from GHD in December 2018. The scope of the review, and its findings, are set out in section 2.19 of the Draft Decision[5] .

2.11. HS1 Ltd consulted on their draft five-year Asset Management Strategy (5YAMS) and LTC for CP3 at the end of February 2019. GHD reviewed this draft and produced their Second Report (Review Phase), including an initial view of compliance against the requirements of the LCRs as set out by the HS1 Station Leases. The scope and key findings from this Review Phase are found in paragraph 2.50 of the Draft Decision[6], and the published GHD reports available on the website.

2.12. The Government's Representatives and GHD held discussions with HS1 Ltd about control actions to ensure full compliance, prior to submission to the Government's Representatives for approval on 31 May 2019. HS1 Ltd agreed that a number of its obligations, which were assessed as being not met, or partially met, could be addressed through the provision of supplemental information and evidence, but this would not be included in the final 5YAMS submission, but provided separately by 26 June 2019 (the "Supplemental Evidence"). The Government's Representatives welcomed HS1 Ltd's commitment to ensuring compliance in all of its obligations under the HS1 Station Leases, and accepted consideration of this Supplemental Evidence during the consultation period.

2.13. HS1 Ltd subsequently submitted their final stations 5YAMS and LTC for CP3 in May 2019, having responded to the feedback from stakeholders, including the Government Representatives and GHD. The Government's Representatives,

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[4] https://www.gov.uk/government/publications/dfts-approach-to-the-hs1-stations-2019-periodic-review
[5] https://www.gov.uk/government/consultations/hs1-stations-review-control-period-3-draft-decision
[6] https://www.gov.uk/government/consultations/hs1-stations-review-control-period-3-draft-decision

assisted by the GHD and legal advisors, subsequently undertook the review, in accordance with the process set out by the HS1 Station Leases[7].

2.14. The LCRs submitted by HS1 Ltd proposed to increase the aggregate LTC from £6.5m per annum for CP2 to £11.7m per annum for CP3. This is primarily due to an expected increase in the volumes of renewal activities. For example, an increased frequency of lift and escalator renewal work, suggested by train operators to meet their reliability and performance requirements, reduce reactive maintenance costs and, ultimately, meet passenger experience expectations.

2.15. In July 2019, the Government's Representatives consulted on its draft conclusions for the periodic review of station access charges for the four HS1 Stations. This Draft Decision set out the background to the periodic review, including the contractual basis for the review, the roles and obligations of the relevant organisations, the process followed to date and the findings of ongoing reviews of the charging proposals made by HS1 Ltd.

2.16. Given inherently short timescales in the days between submission of HS1 Ltd's Supplemental Evidence (26 June 2019) and the publication of the Government's Representatives' Draft Decision (1 July 2019), it was not possible for the Government's Representatives and GHD to consider fully the Supplemental Evidence provided by HS1 Ltd.

2.17. Prior to launching this consultation, train operators expressed concern at the significant rise in charges. Whilst GHD had some reservations in the methodology used by HS1 Ltd to estimate costs, based on their expert industry experience the costs fall within expected ranges and are considered sufficiently robust. However, GHD also noted the lack of a cost efficiency plan, where a plan would be expected, as part of a review submission, and GHD challenged the evidence provided by HS1 Ltd on how far cost savings in CP2 had been driven by efficiencies implemented directly by HS1 Ltd.

2.18. Following publication of the Draft Decision, a workshop was held with all HS1 Station stakeholders on 24 July 2019 (the "Stakeholder Workshop") followed by bilateral meetings[8] with directly impacted stakeholders to seek views on the draft decisions and questions posed by the consultation. The Supplemental Evidence was incorporated into the findings shared at the Stakeholder Workshop.

2.19. Bilateral meetings were held during the consultation period with HS1 Ltd, London and South Eastern Railway Ltd (LSER), East Midlands Railway Ltd (EMR), and Eurostar International Ltd (EIL) to listen further to the views of individual stakeholders following the workshop.

2.20. Formal responses to the consultation on the Draft Decision were received from HS1 Ltd, LSER., Transport for London (TfL) and EIL. EMR did not make a formal submission but did confirm that their views had not altered from the feedback presented at their bilateral meeting. A summary of the consultation responses is set out in Annex C.

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[7] These are the Station Lease which covers St Pancras International, Ebbsfleet International and Stratford International and the Ashford International Lease, which for historic reasons is contained within a separate lease. The substantive provisions regarding the Government's Representatives' approval of the LCRs are identical. Therefore, for ease of reference, only references to the main Stations Lease.

[8] Bilateral meetings were held with EIL, EMR, LSER and HS1 Ltd

2.21. Following stakeholder feedback from the Stakeholder Workshop GHD were asked by the Government's Representatives to review further evidence of comparable efficiency targets set in other regulated industries.

2.22. The Government's Representatives subsequently wrote to all stakeholders on 29 August 2019 notifying them that the decision phase would be extended to allow for proper consideration of their feedback and further efficiency benchmarking evidence.

2.23. An additional consultation ("Targeted Consultation") was issued by the Government's Representatives on 13 September 2019 setting out the rationale for reassessing their views from the Draft Decision. In response to feedback that additional time may be required to consider the amended views of the Government's Representatives, it was agreed to extend the Targeted Consultation deadline from 24 September to 2 October 2019.

2.24. The Government's Representatives considered the views received from HS1 Ltd, LSER and EIL to the Targeted Consultation, and incorporated consideration of these views into the proposed Final Decision before holding a Consensus Meeting on 7 October 2019 to agree the Final Decision. A summary of the Targeted Consultation responses is set out in Annex D.

2.25. The conclusions confirmed by the Government's Representatives at their Consensus Meeting are those presented in this Final Decision published on 16 October 2019.

2.26. It is recognised that the process to determine the UK's exit from the European Union has caused additional pressures for all stakeholders throughout the review to date. The Government's Representatives are grateful for parties' participation and engagement considering these pressures.

2.27. HS1 Ltd have engaged with stakeholders and the Government's Representatives Technical Advisors GHD, and the hard work, dedication and feedback opportunities presented by HS1 Ltd are not questioned. Notwithstanding this, the Government's Representatives maintain that there is room for improvement in the depth of information provided earlier in the process and the Government's Representatives will engage all stakeholders to identify lessons to be learned at the end of the review.

2.28. The Draft Decision included questions posed to stakeholders on the Government's Representatives suggested approach based on the evidence provided and provided challenges to the LCRs which in turn produced reductions in the level of LTC.

3. Detailed LCR Approval Review Decisions

3.1. This chapter sets out a detailed consideration of how the Final Decision was reached. It describes how the Government's Representatives arrived at the decision to approve the LCRs (with amendments); based on the submission and information provided by HS1 Ltd, feedback from stakeholders and the technical analysis and advice provided by GHD. It goes on to describe how this impacts the calculation of the annuity for the Long Term Charge and why an efficiency overlay has been introduced.

Approval of the LCRs

3.2. The HS1 Station Leases set out the grounds at paragraph 5.4 of schedule 10[9] on which approval of the LCRs can be withheld if, in the reasonable opinion of the GRs, certain specified conditions have been met ("Discretionary Rejection Conditions"). Each of these conditions is discussed below:

Station Lease Paragraph 5.4.1: Further details or information should be included in the Report or provided in support of the Tenant's proposals

3.3. During the review phases of this process GHD requested further information from HS1 Ltd to clarify inputs to both the draft LCRs and information supporting HS1 Ltd's Final Submission (in February and May 2019 respectively). It is recognised that HS1 Ltd is still in the process of developing its asset management systems and as such, in the Government's Representatives opinion, there are limitations in the quality of information that HS1 Ltd included in the LCRs.

3.4. A workshop was held with HS1 Ltd prior to its Final Submission to fully understand the proposals. Both at and following this workshop HS1 Ltd provided additional details and information to support GHD's review. This was reported to the Government's Representatives and used to inform the Draft Decision.

3.5. Following the Stakeholder Workshop on 24 July 2019, and in response to feedback received on the Draft Decision from stakeholders, additional efficiency benchmarking analysis was sought by the Government's Representatives through GHD, and the consideration period was extended to enable the Government's Representatives to take account of this supplemental information.

3.6. On balance, the Government's Representatives find the LCRs and related submissions from HS1 Ltd contain sufficient detail and information, and therefore

[9] And in paragraph 5.4 of the Ashford International Lease

approval should not be withheld in relation to paragraph 5.4.1 of the HS1 Station Leases.

3.7. The changes made by HS1 Ltd in response to GHD's phase 3 report, and the Supplemental Evidence submitted, satisfy the Government's Representatives that sufficient information is included to approve the LCRs, whilst recognising there is room for improvement as HS1 Ltd implement their revised asset management suite of documents in line with ISO 55000 (see paragraph 3.42 to 3.47 below).

3.8. Additionally, as noted by stakeholders at the workshop, the non-compliances to the HS1 Station Leases identified by GHD in their phase 3 report are minor in nature, therefore the Government's Representatives confirm this is not a reason to withhold the approval of the LCRs, as they relate to technical content requirements covered elsewhere in the requirements of the HS1 Station Leases, which do not reflect the information requirements of current best practice in asset management supported by ISO 55000. The Government's Representatives determined that further information for these aspects would not be necessary.

3.9. Although the Government's Representatives have concluded that the LCRs contain sufficient information for the purposes of this CP3 review, they recognise that improvements can be made to streamline and update the process to reflect HS1 Ltd's proposed changes to its asset management strategy. Therefore, in respect of preparation for CP4, the Government's Representatives recommend that an action plan be agreed with HS1 Ltd that will cover (as a minimum):

i. Any amendments required to the HS1 Station Leases and Asset Management Strategy to update them in line with the information requirements of current asset management best practice

ii. Production of a statement confirming the inputs and sources for the CP4 submission, based on the updated asset management system being used by HS1 Ltd that satisfies the requirements of the HS1 Station Leases and recognising it may be presented in a differing form to that set out for the current LCRs

iii. Tracked progress against the adoption of ISO 55000 principles and asset management and monitoring processes to inform the CP4 review; and

iv. Agreed recommendations resulting from the lessons learned exercise to be completed following the publication of this Final Decision (further details on this are set out in Chapter 8 Next Steps)

Station Lease Paragraph 5.4.2: If the report is implemented, it will not permit the Tenant to comply with its obligations under clauses 4.3.1 and 4.14[10] or the Life Cycle Purpose to be achieved

3.10. The Government's Representatives are satisfied, in particular having taken into account GHD's assessment, that the work bank proposed will deliver the Life Cycle Purpose and will permit HS1 Ltd to comply with its obligations under the relevant clauses of the HS1 Station Leases. These works when completed will ensure that the Stations will remain in good and substantial repair and condition. Also, an appropriate forward-looking annuity approach / planning assumption has been used, through retention of the 40-year annuity (see Chapter 4), to ensure that there is no deficit in funding that would prevent the Stations being maintained (See also Chapter 6 for the impact of the annuity and LTC on available funds).

3.11. The Government's Representatives are encouraged by HS1 Ltd proposals to improve asset monitoring, and are proposing an annual audit of HS1 Stations asset condition by an independent expert to provide additional ongoing assurance. This anticipates a similar approach taken by the Department for franchised train operators who have FRI leases (See Annex A Glossary).

3.12. Together these improvements will further satisfy the Life Cycle Purpose for future reviews.

Station Lease Paragraph 5.4.3: The Tenant's proposals regarding the deferral or permanent omission of any Life Cycle Works do not accurately reflect the condition of the Station or the remaining useful life of the Element of the Station

3.13. This lease provision is not applicable for the CP3 review as there are no deferrals or permanent omissions of any Life Cycle Works.

3.14. Therefore, based on the evidence assessed, the Government's Representatives are of the opinion HS1 Ltd's proposals do accurately reflect the condition of the Station or the remaining useful life of the Element of the Station.

3.15. However, there is a need for improved variance analysis, covering deferrals to future control periods, or works brought forward to the current control period, to provide an audit trail across control periods. The Government's Representatives will work with HS1 Ltd to agree what additional evidence and reporting is required to support future reviews, and that this is implemented as part of the existing reporting and monitoring arrangements.

[10] These references refer to the Stations Leases that covers the HS1 Stations with the exception of Ashford International. Clause 4.3.1 effectively states that the Station and Temple Mills Depot should be kept in good and substantial repair and condition and that the remainder of the premises should be maintained in accordance with HS1 Ltd's obligations contained in clause 7.1 of the Concession Agreement. Clause 4.14 states that at the determination of the term of the lease, the premises (including any buildings or structures) should be yielded up to the Secretary of State.

Station Lease Paragraph 5.4.4: The Forecast Life Cycle Works Costs for the next Review Period exceeds such amount as a prudent land owner responsible for the structural integrity and maintenance of the Station behaving with due efficiency and economy, may incur in carrying out the Life Cycle Works in the next Review Period provided that where the Tenant has subcontracted its obligations in respect of renewal and replacement of the Station to the Station Operator, the Tenant shall be deemed to have acted as a prudent land owner responsible for the structural integrity and maintenance of the Station behaving with due efficiency and economy where it has used reasonable endeavours to manage the Station Operator;

3.16. As noted above, the works bank of Forecast Life Cycle Works[11] outlined in the LCRs, in the Government's Representatives opinion, contain sufficient detail to enable the Life Cycle Purpose to be achieved. Therefore, in the Government's Representatives opinion, the Forecast Life Cycle Works are the works that a prudent land owner responsible for the structural integrity and maintenance of the Stations would complete. However, for the reasons set out below in this chapter, the Government's Representatives were not convinced that the budget for these works (i.e. the Forecast Life Cycle Works Costs) were at a level that a prudent land owner behaving with due efficiency and economy would incur.

3.17. Having reviewed the available evidence and having taken account of the advice of GHD, the Government's Representatives have found that the frequency and volumes of the renewals work banks are in the expected range. However, the Government's Representatives agree with GHD's finding in their review phase report that it is reasonable to expect an explicit efficiency plan to be evidenced as part of the submission, and concluded that given a high proportion cost inputs have not been reviewed fully since CP2 there is scope for costs to fall lower in the expected range, particularly if HS1 Ltd use reasonable endeavours to challenge NRHS and its supply chain further, as envisaged by paragraph 5.4.4. of the Station Leases.

3.18. As a result of GHD's phase 2 and phase 3 reports and feedback from stakeholders, the Government's Representatives have challenged the notion of whether HS1 Ltd have exhibited behaviours with sufficient efficiency and economy, including use of reasonable endeavours to manage NRHS.

3.19. Whilst the work bank frequencies, volumes and costs fall in the expected ranges the Government's Representatives consider that HS1 Ltd have been conservative in some areas. HS1 Ltd removed the efficiency overlay applied in CP2 and included additional risk and contingency to costs which are still primarily based on manufacturer warranty.

3.20. In the opinion of the Government's Representatives, HS1 Ltd would be able to extract further efficiencies, particularly as the monitoring of assets matures and becomes more evidenced based. The Government's Representatives support HS1 Ltd's proposed implementation of ISO 55000 to achieve this.

3.21. The Government's Representatives have decided that, these deficiencies should be addressed to avoid the Government's Representatives exercising their

[11] The estimates included in the LCRs of the cost of carrying out and completing the renewal and replacement works contemplated in the LCRs.

discretion under this condition to reject the LCRs. This is covered in more detail at Chapter 5, describing the introduction of an efficiency overlay.

3.22. The Government's Representatives recommend that the Operator Agreement between HS1 Ltd and NRHS is reviewed. HS1 Ltd recognise in its response to the Targeted Consultation they require additional levers to support delivery of efficient delivery plans through their appointed Station Operator.

3.23. The Government's Representatives conclude that, given as per 3.10 above, the work bank proposed will deliver the Life Cycle Purpose, and for the reasons set out in 5.18 to 5.22 with the inclusion on an appropriate efficiency overlay (see Chapter 5 below), the Life Cycle Works Costs do not exceed such amount as a prudent land owner behaving efficiently and economically could incur, there is no reason to withhold approval under paragraph 5.4.4.

Station Lease Paragraph 5.4.5: A Deferred Life Cycle Works Saving[12] that the tenant proposes should be distributed may be required for the carrying out of any Life Cycle Works to any Element of the Station up to the earlier of (i) the expiry of the two subsequent Review Periods and (ii) the expiry of the Term

3.24. There are no Deferred Life Cycle Works Savings that HS1 Ltd has proposed should be distributed in the next two subsequent review periods. Any savings for CP2 have been used to offset additional cost in CP2 against the agreed Life Cycle Works to avoid the need to increase the LTC during CP2. The paragraph is therefore not applicable to the approval of the LCRs for CP3.

3.25. There are quarterly reviews of the variance analysis and it is recommended that additional model runs are completed as part of the annual review of LTC calculation to give assurance on outturn versus forecast at the end of each complete year, and to informally check the impact of any variances on future forecasts. This will be for monitoring purposes only and not be used to trigger any formal review of the LTC (unless HS1 Ltd identify a relevant change of law or circumstance that would allow them to initiate the Interim Review process[13]).

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[12] These are the value of the works that were set out in the Asset Management Strategy that Government's Representatives agreed with HS1 Ltd could be deferred or omitted from the schedule of works set out in the approved LCRs

[13] The interim review process is set out in the HS1 Station Leases. In summary an interim review can only be triggered if there has been or is likely to be a relevant change specified in the lease such that: a) the amount of available life cycle funds for the relevant control period is or is likely to be insufficient to enable HS1 Ltd to carry out the Life Cycle Works; or b) carrying out the life cycle works in the current control period would not enable HS1 Ltd to comply with its obligations under the HS1 Station Leases and/or the Life Cycle Purpose and/or that NRHS would be unable to comply with its safety obligations for the HS1 Stations.

Station Lease Paragraph 5.4.6: In relation to the distribution of any Life Cycle Works Saving[14] proposed by the Tenant, the matters set out in paragraphs 7.3.1 or 7.3.2 apply

> ***7.3.1 the Tenant has not complied with the Life Cycle Report for the Station in respect of the Review Period following the Review Period in which Life Cycle Works Saving was achieved; or***
>
> ***7.3.2 the Available Life Cycle Funds for the Station for the next Review Period are insufficient to allow the Tenant to comply with its obligations under clauses 4.3.1 and 4.14 or the Life Cycle Purpose to be achieved.***

3.26. HS1 Ltd have not identified any Life Cycle Works Savings and therefore this condition is not applicable to the approval decision for CP3.

3.27. The Government's Representatives acknowledge that the CP2 stations portfolio has been managed through the agreed quarterly programme governance process, and that the CP2 outturn position is within the forecast budget.

Station Lease Paragraph 5.4.7: A modification to the LTC proposed by the Tenant is not required or is not permitted by paragraph 5.7[15]

3.28. If approved, the LCRs would lead to an increase in the LTC for the international stations. This means the condition in paragraph 5.4.7 should be considered before approving the LCRs.

3.29. The Government's Representatives are satisfied that this condition does not apply because the proposal to modify the LTC by HS1 Ltd would either be required or permitted under paragraph 5.7 (specifically, by paragraph 5.7.6).

3.30. This is because, as envisaged by paragraph 5.7.6, the Government's Representatives are satisfied that assumptions about costs or revenues which underlay the setting of the LTC for CP2 are now either materially inaccurate or have otherwise have changed in such a way that:

i. they would lead the Government's Representatives to arrive at materially different conclusions as to the appropriate level of the LTC; and

ii. if the LTC were not now modified it would have a material and adverse effect on the interests of HS1 Ltd and likely make it unduly difficult for HS1 Ltd to finance its activities in respect of the international stations.

[14] These are net savings from the previous control period, where HS1 Ltd has delivered a work under budget.
[15] For relevant text see Annex B

Station Lease Paragraph 5.4.8: The Tenant's proposals for any modifications of the Asset Management Strategy (including the Life Cycle Budget) do not accurately reflect its proposals in respect of any of the matters set out in the Life Cycle Report to which the Government's Representative has not withheld its approval.

3.31. HS1 Ltd did modify its Asset Management Strategy, moving from component level to asset category level analysis in the LCRs. In light of the GHD review phase report[16], HS1 Ltd amended its AMS and LCR to accurately reflect its' proposals in their Final Submission. HS1 Ltd are not proposing to modify the AMS further. The Government's Representatives have concluded that this proposal to amend the AMS is appropriate.

3.32. Whilst there is currently a disconnect between the AMS and how it impacts the LCRs, given the stated aspiration to adopt ISO 55000, the Government Representatives recommend that a review of the HS1 Station Leases and AMS is undertaken with HS1 Ltd to consider whether they need to be updated.

3.33. Additionally, the AMS suite of documents used by HS1 Ltd are in the process of modifying the AMS to reflect ISO 55000.

3.34. However, the move to adopt ISO 55000 suite of asset management strategies is supported by the Government's Representatives. It is recognised that there is a disconnect between the AMS and how it affects the LCRs, which will require alignment to ensure future submissions meet the requirements (as set out in Annex B3).

3.35. The Department intend to undertake a review of the HS1 Station Leases LCR requirements to align the new system, including flexibility for future AMS changes to ensure this does not inadvertently lead to a non-compliance in future submissions.

16 https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/819319/hs1-asset-management-station-periodic-review-determination-report.pdf.pdf

Station Lease Paragraph 5.4.9: The Adjustment Arrangements which the Tenant has implemented and/or proposes to implement as a consequence of the Tenant having made an Adjustment to the Available Life Cycle Funds in the current Review Period (or anticipated to be made prior to the end of the current Review Period), do not sufficiently mitigate the likelihood that:

a) the Life Cycle Budget will or is reasonably likely to be exceeded in respect of any Element of the Station;

b) there will be a shortfall in Available Life Cycle Funds required for the Life Cycle Works in respect of any Element of the Station in any Review Period or Overhang Period; or

c) there is, or may with the passage of time, be an event or events that may give rise to an Event of Default.

3.36. No Adjustment Arrangements[17] have been made to the Available Life Cycle Reports in the current Review Period (CP2) or anticipated to be made prior to the end of the CP2, and therefore this requirement is not applicable for consideration in the context of the CP3 review.

3.37. A Change Management process is in operation between HS1 Ltd and the Government's Representatives to agree Available Life Cycle Funds in the current review period, through the management of the HS1 Station escrow accounts.

3.38. These are reviewed at the quarterly meetings alongside any deferral or acceleration of works, and a projection of the impact on escrow balances to ensure sufficient funds remain to deliver the Life Cycle Works, or agree revised priorities.

3.39. HS1 Ltd retains its rights to make an Adjustment Arrangement, as allowed by the HS1 Station Leases, within the next Review Period (CP3), and the Government's Representatives will review any future proposals brought forward at that point.

3.40. HS1 Ltd similarly, retain the right in certain narrow circumstances set out in the HS1 Station Leases to request an Interim Review if subsequent evidence can be presented that materially changes the view of the Government's Representatives that the CP3 LTC as set is insufficient.

3.41. The expectation is that the improvements in asset monitoring and management strategies, with an explicit cost efficiency plan, will ensure that for future reviews the Life Cycle Works Costs submitted by HS1 Ltd will have a stronger evidence base and include assumptions on efficiency opportunities. Therefore, whilst the Government's Representatives have included a further 2.0% efficiency overlay for CP4, and a frontier shift efficiency of 0.6% from CP5 onwards for the purpose of the LTC calculation for CP3, these will be subject to review at subsequent control period reviews.

[17] Adjustment Arrangements essentially relate to funding HS1 Ltd intends to reallocate from the budget for the replacement and renewals of any particular station element which is overfunded to the budget for funding replacement and renewals of an element that is underfunded

Considerations

ISO 55000

3.42. The Government's Representatives support HS1 Ltd's proposed adoption of ISO 55000 as best practice in asset management, and believe this will lead to improvements in the risk management, finance, accounting and abilities of HS1 Ltd to act efficiently and economically using evidence based inputs for future reviews of the renewals programme.

3.43. ISO 55000 describes how a business should set up a system for asset management. This is a key part of risk management, and helps to protect the business from losses due to equipment failure. Furthermore, it prevents unnecessary asset maintenance and replacement, driving efficiency as a core aim of the business. It is an international standard covering management of assets of any kind. Before it, a Publicly Available Specification was published by the British Standards Institution in 2004 for physical assets. The ISO 55000 series of Asset Management standards was launched in January 2014.Currently three standards have been published:

- ISO 55000:2014 Asset management – Overview, principles and terminology
- ISO 55001:2014 Asset management – Management Systems – Requirements
- ISO 55002:2018 Guidelines for the application of ISO 55001 (see below for 2018 update)

3.44. In 2017 two new projects were launched[18]:

- ISO/TS 55010: Guidance on alignment of asset management, finance and accounting
- ISO 55011: Guidance on the development of government asset management policy

3.45. In November 2018 a revised and expanded version ISO 55002:2018 was released[19]. General improvements include expanded detailed guidance for every clause of the ISO 55001 requirements document, and clarification of the contribution of each requirement to the four 'fundamentals' of asset management: Value, Alignment, Leadership and Assurance. It also describes how to apply the requirements of ISO 55001 to the key domains of asset management:

- The concept of "value" in asset management
- The scope of the Asset Management System
- The Strategic Asset Management Plan
- Asset management decision-making
- Risk management in the context of asset management
- Finance in asset management

[18] https://committee.iso.org/sites/tc251/home/news/content-left-area/news-and-updates/communique-on-the-4th-meeting--1.html
[19] https://committee.iso.org/sites/tc251/home/news/content-left-area/news-and-updates/iso-550022018-released.html

- Scalability of ISO 55001 to organizations of all sizes

3.46. Given the LCRs set out the current asset management strategies, there is a need to align the HS1 Station Leases requirements approach to the ISO 55000. The adoption of these systems and processes will improve the inputs to the LCRs, allowing for greater certainty in the plans, and the LCC's that are derived from them. With more robust LCC's the calculation of the LTC will itself be more evidenced based.

3.47. As described in this chapter, in considering the LCRs, whilst these are being approved, the Government's Representatives are clear that HS1 Ltd need to make further improvements to risk and contingency forecasting and further efficiency gains should be expected at future control period reviews.

Amendments to the LCRs

3.48. The Draft Decision stated the Government's Representatives were minded to approve the LCRs with certain specified amendments, supported by the detailed review described in the previous chapter.

3.49. Feedback to the consultation on the Draft Decision led to further consideration by the Government's Representatives, particularly given the strong views of all stakeholders that the approach to the annuity calculation for Stations should align with the ORR's emerging approach for the Route Review; and the request that further benchmarking analysis be conducted by the Government's Representatives and their technical advisers, GHD, to consider the proposed efficiency overlay in more depth.

3.50. Under the terms of the HS1 Station Leases[20], the Government's Representatives may only withhold approval of the LCRs if, in the reasonable opinion of the Government's Representatives, one of the circumstances specified in the HS1 Station Leases[21] applies. This provision gives the Government's Representatives the discretion, but not the obligation, to reject the LCRs (including any modifications to the AMS or LTC specified there in) if one of these conditions applies (the "Conditions"). For reference, the Conditions are set out at paragraph 5.4 of Annex B1.

3.51. The Government's Representatives consider that the approach to the annuity calculations of the LTC and insertion of the efficiency overlay, as set out in Chapter 5, is essential to assessing whether the conditions set out in paragraph 5.4.2 and 5.4.4 of Schedule 10 of the HS1 Station Leases have been met for the following reasons:

i. A prudent land owner behaving with due efficiency and economy would include an efficiency target when budgeting for future works; and

ii. The Life Cycle Purpose requires HS1 Ltd to take a long-term view of their assets.

3.52. Therefore, having taken account of the efficiency benchmarking analysis that is set out in detail in Chapter 5 and to support the case for a consistent approach to the annuity calculation for the LTC across stations and route, explained in detail at Chapter 4, the Government's Representatives have decided to:

[20] Paragraph 5.4 of the HS1 Stations Lease; and paragraph 5.4 of the Ashford International Lease
[21] Paragraph 5.4 of the HS1 Stations Lease; and paragraph 5.4 of the Ashford International Lease

i. Include an efficiency overlay of 2.0% per annum to incentivise a reduction in costs across CP3, made up of 0.6% frontier shift (technological advances making efficiencies) and 1.4% catch up.

ii. Include in the LTC model a 2.0% efficiency overlay for CP3 cost estimates for CP4 (0.6% frontier shift and 1.4% catch up), with the inclusion of an efficiency overlay of 0.6% (frontier shift) for CP3 cost estimates for CP5 onwards; and

iii. Retain 40-year look ahead and pay ahead.

3.53. This results in a revised LTC of c.£8.8million, representing a 35% increase in charges from current CP2 levels. This remains lower than the LTC forecast for CP3 of c.£9m, as estimated at CP2.

3.54. The Government's Representatives consider this approach strikes the appropriate balance and the need for a sustainable input into the escrow in the absence of strong underlying supporting data and models from HS1 Ltd. The decision requires HS1 Ltd to improve their forecasting and risk management to deliver efficiencies both within CP3 and when looking ahead, whilst ensuring there are sufficient funds available to deliver the renewals programme set out at this point.

3.55. The Government's Representatives also consider that these changes are the most appropriate way to confirm that the LCRs (if implemented) will allow HS1 Ltd to comply with the Life Cycle Purpose, whilst ensuring that forecasted works do not exceed the amounts "a prudent land owner responsible for the structural integrity and maintenance of the Station behaving with due efficiency and economy". The rationale behind this conclusion is set out in further detail in the following chapters.

3.56. The Government's Representative also considered that the CP3 HS1 Stations review revealed a number of issues that were outside the scope of their current decisions as to whether to approve the LCRs for CP3. However, the Government's Representatives considered that some of these issues should be considered in further detail in the future by the Government's Representatives and the Department. These recommended workstreams include:

i. Exploring the revision of the HS1 Station Leases to update the specified requirements of the LCRs (set out in paragraph 5.2 of the HS1 Station Leases). These revisions would be designed to bring the HS1 Station Leases in line with current asset management best practice, and deciding on the most appropriate mechanism to ensure this drives the correct inputs for CP4; and

ii. Updating the Asset Management Strategy requirements for the HS1 Stations to:

a) provide for and assist the implementation of the ISO 55000 suite of methodologies;

b) revise and update Life Cycle Cost (LCC) models (see paragraph 3.46 above);

c) embed asset monitoring to ensure evidence-based inputs to LCC models; and

d) revise and update of LTC model,

with the aspiration of completing this work in time for the CP4 Station's review.

3.57. The Department and the Government's Representatives (as appropriate) will work closely with HS1 Ltd to support the implementation and maturing of the asset management strategy, and to improve and rebuild the LCC model and LTC models.

3.58. Further details on next steps are set out in Chapter 8.

4. Annuity (calculation of the Long-Term Charge)

4.1. This chapter provides the analysis and consideration summarised in the Targeted Consultation with stakeholders held between 13 September and 2 October 2019, consideration of feedback received from stakeholders to that Targeted Consultation and sets out the reasoning for the GRs revising their decision on how the annuity is calculated for the LTC.

Background

4.2. The LTC charges paid by train operators at each HS1 Station during CP1 and CP2 were built up from a 40-year forecast of cost, which was then smoothed into an annual annuity, and finally converted into the share attributable to each train operator.

4.3. Assumptions were applied regarding the inflation expected on these costs and the rate of return that could be expected from cash placed on escrow. The LTC model calculates the annual annuity payment that leaves the escrow balance at zero at year 40.

4.4. In its Final Submission HS1 Ltd increased the LTC by £5.1m p.a. (79%) between CP2 and CP3:

Table 4.1 - Evolution of the LTC by station

Station	CP2 LTC (£m p.a.)	Removal of Efficiency uplift (£m p.a.)	Other changes between CP2 and CP3 (£m p.a.)	CP3 LTC (£m p.a.)
St Pancras	4.282	+0.771	+2.559	**7.612**
Stratford	0.770	+0.101	+0.687	**1.558**
Ebbsfleet	0.731	+0.191	+0.737	**1.659**
Ashford	0.763	+0.102	+0.001	**0.866**
TOTAL	**6.545**	**+1.165**	**+3.985**	**11.695**

Source: HS1 Final Submission May 2019

Table 4.2 - evolution of the LTC by operator				
Operator	**CP2 LTC (£m p.a.)**	**CP3 (£m p.a.)**	**Difference (CP2 to CP3) LTC (£m p.a.)**	**Difference (CP2 to CP3) LTC (%)**
EIL	3.726	6.364	+2.638	**+70.1%**
LSER	1.943	3.772	+1.829	**+94.1%**
EMR	0.876	1.558	+0.682	**+77.9%**
Total	**6.545**	**11.695**	**+5.150**	**+78.7%**

Source: HS1 Final Submission May 2019

4.5. HS1 Ltd stated the increase in LTC is comprised of

An 18% increase from the removal of the CP2 0.6% p.a. compounding 'efficiency overlay';

An increase in renewal costs. The major element being the increased frequency of interventions for lifts, escalators and travellators, which is one of the largest categories of renewal spend. This increase is driven in part by the observed degradation in asset condition which has been greater than expected. The assets in place were designed for 'inside' operation but the level of moisture in the air is more equivalent to 'outside' conditions. It is also driven by the work HS1 Ltd have done with train operators around operational criticality, identifying that these assets are key to the passenger experience and cannot be out of service for any extended period; and

c) The application of an appropriate risk and contingency allowance (see Chapter 6 for consideration of Indirect Costs).

Government's Representatives Draft Decision and Stakeholder Consultation

4.6. The clear feedback from stakeholders throughout the process has been that HS1 Ltd's approach to pre-funding renewals and managing the trade-offs between long-term asset availability and condition, performance and value for money has resulted in an LTC that train operators believe has not been justified.

4.7. In their Final Submission, HS1 Ltd set out three annuity options for consideration, whilst noting their approach to the stewardship of the assets in the long term is set out in the Concession Agreement and the HS1 Station Leases.

4.8. These three approaches were:

a) The base case: Retaining the CP2 annuity model that takes a 40-year look ahead and pay ahead (the "CP2 Approach").;

b) Option 1: A 'buffer' approach which retained the 40-year look ahead but limited the application of the risk mark-up to the first 10 years only (not the remaining 30 years) (the "Buffer Approach"); and

c) Option 2: A short annuity model which includes direct and on-costs and the risk and contingency allowance over only 20 years (rather than the 40 years in HS1 Ltd's recommended approach)

4.9. Given the level of uncertainty in the cost estimates, the Government's Representatives in their Draft Decision considered that to avoid inefficient use of cash placed long term in low interest escrow accounts covering a risk premium on uncertain costs, that the buffer approach had merit.

4.10. The Government's Representatives presented their initial findings on the annuity options and their preference to amend the annuity calculation for the LTC to the Buffer Approach in paragraphs 3.17 to 3.28 of the Draft Decision and at the stakeholder workshop on 24 July 2019. As requested by stakeholders during the consultation, the Government's Representatives continued to discuss the approach to the annuity calculation with the ORR to seek consistency on approach across stations and route.

4.11. Whilst the Asset Stewardship Purpose is a Concession Agreement concept, and does not directly inform the Government's Representatives view on the LCRs, the recommendations of GHD around the AMS and LCC's (set out in the previous chapter) will impact on the LCRs, which in turn drives the value of the LTC. The Government's Representatives therefore sought stakeholders' views on how any modification of the annuity calculation should seek to ensure there are sufficient funds in the station escrow accounts to deliver the renewals required to meet the Life Cycle Purpose (See Annex D, Glossary), as well as mitigating future significant cost increases or 'cost shocks'.

Stakeholder response to Consultation on the Draft Decision

4.12. TfL responded that any modification of the annuity calculation should meet the asset stewardship obligation in the most efficient manner possible, avoiding the large one-off change that HS1 Ltd has proposed.

4.13. LSER stated it was not supportive of the proposed 40-year profile and considered there to be a distinction between maintaining asset stewardship levels, which consider a 40-year time horizon and pre-funding it all through the annuity. LSER thought that the escrow account should target a zero balance by 2040. LSER did not consider it appropriate or affordable for current users of the infrastructure to be required to fund the historic costs of construction (through the Infrastructure Recovery Charge) and the future cost of renewals (via the annuity) at the same time. LSER also considered that the annuity issue should be separated from this consultation process to allow more time to determine an appropriate way forward and to coincide with the ORR determination on the annuity for track, to ensure both approaches are consistent.

4.14. EIL stated that the Draft Decision does not discuss the difference between "pay forward" and "look forward", and was concerned that the Government's Representatives had not engaged with train operators to explore and discuss annuity options and needed to reflect the ORR's evolving thinking on this topic. EIL was also concerned that the Draft Decision did not acknowledge the Department's own role, including its ability, with HS1 Ltd, to amend the Concession Agreement and Station Leases. EIL expressed concern that under HS1 Ltd's proposal, "costs beyond 10 years are uncertain" but does not seem to take this into account in its assessment of the robustness of HS1 Ltd's proposals anywhere else in the document. EIL consider this very important because one of the key points for EIL in its consultation response was there is a particular need to ensure that where costs are proposed to increase significantly they are supported by commensurately robust evidence.

4.15. Although not directly relating to the question, EIL stated that trains have been operating on HS1 for 17 years and St Pancras International has been open for 10 years and gave a view that the presence of concerns about asset knowledge is a serious failing of stewardship. EIL did not believe that significant increases in charges could be justified based on previous and continuing failures of this nature. EIL stated that this point and the general approach in the rest of the Draft Decision were strongly indicative of the Government's Representatives reversing the "burden of proof" and accepting HS1 Ltd's proposals as the default.

4.16. Also, although not directly relating to the question, EIL stated that in its consideration of the risks of underfunding, the Department considers the risk of a cost shock. EIL stated that this implies that any failure of forecasting should simply be accommodated by train operators through compensating charges. EIL stated that there is no consideration that this might represent, first and foremost, a failure of forecasting and that some of that risk and cost burden should therefore be carried by HS1 Ltd.

4.17. Given the Government's Representatives Draft Decision set out a preference for the Buffer Approach, HS1 Ltd requested that the Final Decision set out how its annuity approach interacts with compliance with the asset stewardship and handback obligations and that the approach is consistent with HS1 Ltd's obligations under the Concession Agreement and HS1 Station Leases. HS1 Ltd also wanted a consistent approach between the Department and ORR on annuities for stations and route.

4.18. The Government's Representatives reviewed each of the annuity options presented by HS1 Ltd, and discussed them with the ORR to try to ensure consistency of approach with the annuity calculation for the route charges.

4.19. The key principle that all HS1 stakeholders (train operators, ORR, and HS1 Ltd) generally appears to agree on is that the 40-year look ahead as set out in paragraph 2.1(c) of Schedule 10 of the Concession Agreement[22] was the most appropriate timeframe for asset stewardship. The Government's Representatives support this view.

Government's Representatives' response to Stakeholder responses

4.20. The Government's Representatives note stakeholder concerns regarding pre-funding the annuity in an efficient manner (40-year pay ahead), recognising that a long term forward look at asset management (40-year look ahead) does not necessarily have to mean pre-funding is calculated across the same period of

[22] Available here: https://highspeed1.co.uk/media/282500/supplement-to-concession-agreement-december-2017-2.pdf

time. The Government’s Representatives continue to consider the 40-year period for both look ahead and pay ahead to be the most appropriate because:

a) It aligns to the engineering timeframe underlying the LCRs and LTC; and

b) It takes into account the substantial increase in renewal and replacement costs forecast in the later years of the 40-year period.

4.21. Using a shorter timeframe would mean operators would not be paying for the full renewal and replacement cost of the stations based on the engineering timeframe required for the route by the Concession Agreement. The Government’s Representatives thus reject the annuity option put forward by HS1 Ltd of using a 20-year annuity period.

4.22. Additionally, retaining the rolling 40-year view used in CP2 and proposed by HS1 Ltd for CP3, will mean that HS1 Ltd will act as if it is retaining the HS1 concession for a further 40 years at each review period. HS1 Ltd and the Government’s Representatives believe that this approach presents the best option for ensuring asset stewardship of the HS1 Stations and achieving the Life Cycle Purpose. It was agreed at CP2 the LTC calculation would move to a rolling 40-year Life Cycle Period.

Targeted Stakeholder Consultation

4.23. Following discussion with the ORR and having reviewed stakeholder feedback to its initial consultation, the Government’s Representatives have decided that that the preferred annuity approach should be the 40 – year approach used on CP1 and CP2 as the most appropriate method to smooth costs over the Life Cycle Period to mitigate any cost shocks in future reviews, and that the issues related to uncertainty in the costs estimates and application of risk is best addressed through the efficiency overlay.

4.24. The Government’s Representatives concluded it was more appropriate to move away from the buffer approach outlined in the Draft Decision and instead retain the existing 40-year annuity approach used in CP2.

4.25. The retention of a 40-year annuity, together with the application of an efficiency overlay (see Chapter 5) gives protection to, and smooths the long-term accrual of funds for future renewals and replacements, whilst incentivising a reduction in risk and improving efficiency, as the asset management strategies and IS0 55000 principles are embedded in the short term.

4.26. This is in line with the current understanding between the Government’s Representatives and the ORR regarding their emerging annuity approach for Route, and addresses the application of risk and contingency coupled with the lack of evidence impacting confidence in the costs presented by HS1 Ltd are being dealt with.

4.27. Given the degree of change to this position from the Draft Decision, the Government’s Representatives considered that it would be appropriate to run a Targeted Consultation with key stakeholders who would be impacted by it. This Targeted Consultation asked for comments on the revised position set out here regarding the annuity (calculation of the LTC), and the revised view of the Government’s Representatives.

Government's Representatives’ response to Targeted Consultation Stakeholder responses and Final Annuity Decision

4.28. The responses received to the targeted consultation are summarised in Annex C) Feedback from LSER and EIL was again supportive of an annuity period of less than 40 years but the Government’s Representatives do not believe any new argument was put forward. HS1 Ltd’s view was consistent with their Final Submission, where their base assumption supported the 40-year period, whilst offering options for consideration, including the buffer approach.

4.29. Conclusion: The Government’s Representatives continue to support the retention of the 40-year annuity approach used at CP1 and CP2 for the reasons set out in 4.19 to 4.21.

5. Efficiency Overlay

5.1. This chapter provides the analysis and consideration summarised in the consultation with stakeholders held between 13 September and 2 October 2019, consideration of feedback received from stakeholders to that consultation and sets out the reasoning for the Government's Representatives revising their decision on the efficiency overlay.

Background and Draft Decision

5.2. Following engagement with train operators at CP2, HS1 Ltd introduced into its models an efficiency overlay of 0.6%, modelled over the duration of the concession.

5.3. HS1 Ltd in their Final 5YAMS Submission proposed removing the efficiency overlay on the grounds that:

they did not consider it to be evidence based nor derived from benchmarks of similar work banks at stations comparable to HS1 Stations; and

competitive tendering ensures market prices are achieved during procurement of renewals works

5.4. The Government's Representatives' Draft Decision consultation sought views on a target level of efficiency, proposing reinstatement of the 0.6% overlay used for CP2.

5.5. Stakeholders were invited to comment on the proposal to reinstate the efficiency overlay, and at what level it should be set. They were also asked to provide any further views on how efficiency could be applied more effectively.

Stakeholder responses to Consultation on Draft Decision

5.6. All stakeholders, except HS1 Ltd, were unanimous in their support of HS1 Ltd providing greater levels of efficiency, that HS1 Ltd should be held to account, and challenged the removal of the efficiency overlay in place for CP2. Stakeholders requested additional benchmark work by the Government's Representatives in arriving at an appropriate efficiency overlay. In particular, Transport for London (TfL) stated that data and analysis from the Periodic Review process conducted for Network Rail should be used to inform the process.

5.7. HS1 Ltd proposed to remove the efficiency overlay in their Final 5YAMS submission as they did not consider 0.6% to be evidence based nor derived from benchmarks of similar work banks at stations comparable to HS1 Stations. HS1

Ltd maintained this position in their response to the Government's Representatives Draft Decision consultation, and stated in their response to the targeted consultation that they are confident their CP3 proposals represent good value for train operators and taxpayers, and are based on a robust evidence base.

5.8. The Government's Representatives asked GHD to conduct some additional benchmarking of efficiency targets following stakeholder feedback provided at the stakeholder workshop and in response to the consultation on the Draft Decision.

5.9. Taking the information provided by GHD into account alongside the feedback provided by stakeholders, the Government's Representatives set out in their letter to stakeholders of 13 September 2019 the revised position set out below to enable stakeholders an opportunity to comment on the revised findings.

5.10. The Government's Representatives continue to believe that in the light of HS1 Ltd having not included efficiency targets in its July 2019 Submission, that a robust efficiency overlay is needed to ensure HS1 Ltd are "*behaving with due efficiency and* economy*"*[23] as set out in paragraph 5.4 of the HS1 Station Leases.

5.11. The Government's Representatives consider the most relevant comparator data to be the PR18 final determination for Network Rail Infrastructure Limited (NRIL) CP6 efficiency targets. For renewals these were set a target of 13% cost reduction through efficiency including a frontier shift for new technology and innovation over the course of their control period i.e. 2.5% per annum.

5.12. The Government's Representatives found that the NRIL efficiency target was benchmarked with other rail infrastructure managers across the globe, and also with other regulated industries. The 13% cost reduction covers the whole of NRIL's asset base, incorporating stations and route. GHD were not able to disaggregate this figure further to make a more direct comparison to HS1 Station assets. However, given that NRHS has access to the NRIL procurement framework it can reasonably be expected that HS1 Ltd should be pushing NRHS to achieve similar efficiency savings.

5.13. However, the Government's Representatives consider it significant that the HS1 Station portfolio is smaller and that the assets are newer, reducing the potential for savings. In contrast, given a large proportion of the inputs have not been significantly updated from CP2, the Government's Representatives consider this give scope for additional savings. On balance the Government's Representatives have therefore made a judgement on a reasonable level of efficiency to be applied.

5.14. The Government's Representatives also considered evidence from regulatory reviews of other industries. Most of these related to Opex which are less directly comparable but do provide insight. The Civil Aviation Authority in regulating charges at Gatwick Airport identified a catch-up efficiency target of 0.75% p.a. plus a target of 9% frontier shift efficiencies totalling an overall efficiency target of 1.65%. Gatwick Airport was considered to provide useful insight as it is similar to St Pancras International Station in having a large associated retail business. Ofwat in its CP 2015-2020 determination set out that water and sewerage companies be set with a 1.9% efficiency target. As Ofwat uses Totex which contains a substantial element of Capex, this was also considered to provide useful insight.

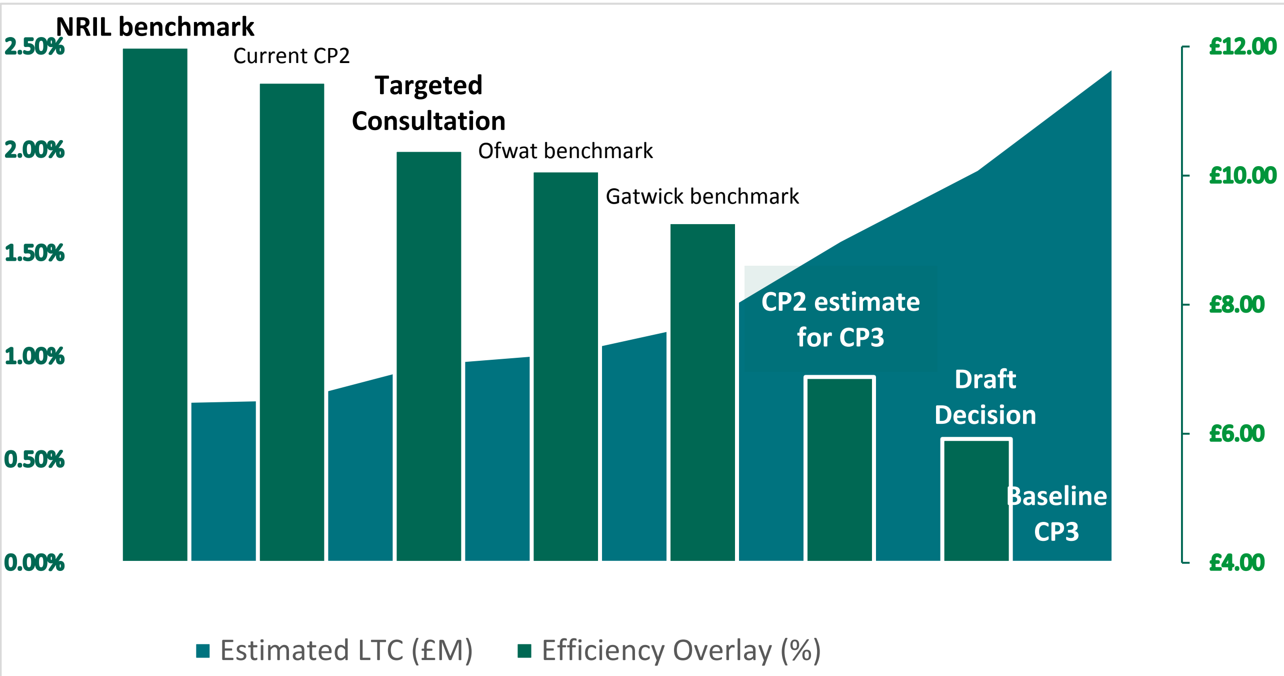
[23] See paragraph 5.7.1 in Annex B2 of this document

5.15. In the absence of directly comparable benchmarks, the Government's Representatives have considered the efficiency targets primarily for NRIL and to a lesser extent, as a sense check in making their judgement, Gatwick Airport and the water companies.

5.16. To show the contrast these are ranked in Figure 1 showing the impact on LTC for varying levels of efficiency. The Government's Representatives asked a finance analyst at the Department to modify the LTC model to include variable efficiency inputs. This allowed a limited sensitivity analysis of the evidence put forward by stakeholders and HS1 Ltd in response to their views on the efficiency overlay.

5.17. The HS1 Ltd baseline, the efficiency level required to hold charges at CP2 level, the Draft Decision and revised position set out in the Targeted Consultation are included alongside the NRIL, Ofwat and Gatwick Airport benchmarks.

Figure 5.1 Estimated LTC for range of efficiency targets



Note: In the graph above 'Estimate if CP2 prices held refers to the level of efficiency required for CP3 prices to be equivalent to CP2. The 'CP2 estimate for CP3' refers to the estimate of CP3 costs made at the time of the CP2 review. For both, the efficiency values are the overlays needed in the CP3 model to deliver this level of LTC as shown in the above graph.

5.18. The Government's Representatives believe a higher level of efficiency is needed than the 0.6% p.a. used at CP2 and proposed in the Draft Decision because:

i. the CP2 approach excluded sufficient catch up efficiencies where savings are achieved from implementing current best industry practice; and

ii. the frontier shift targets expected from technological improvements and other innovations in recent regulated industries e.g. 1.5% proposed by Ofwat for CP19, exceed the 0.6% used in CP2.

5.19. A target of above c. 2.4% p.a. would result in an LTC lower than the current CP2. This is not considered appropriate given the acknowledgement that unit costs are in the correct range, and the frequency and volume of renewals and replacements is expected to rise.

5.20. Recognising:

a) the limited benchmarks available;

b) the limited evidence behind HS1 Ltd's cost estimates (which are based mainly on cautious manufacturer warranty life cycles);

c) the need for a robust efficiency overlay to drive HS1 Ltd to seek adequate levels of efficiency in CP3; and

d) the ability to revisit the efficiency level in CP4 once HS1 Ltd has developed its delivery and efficiency plans for CP3,

the Government's Representatives have made use of available benchmarks from within the rail sector and in reasonably comparable regulated sectors and consider the most relevant to be the 2.5% efficiency overlay for NRIL in CP6. However, the Government's Representatives also consider this to be too high for HS1 Ltd given its substantial smaller asset base and newer assets.

5.21. Lacking a granular analysis of the NRIL assets and associated efficiencies, the Government's Representatives have assessed a reasonable reduction to be 20% giving an efficiency overlay of 2.0%. This is slightly above the 1.9% for Ofwat Totex in 2015-2020 and 1.65% for Gatwick reflecting a greater perceived scope for catch up efficiency given the lack of evidence provided by HS1 for efficiencies in CP2.

5.22. This conclusion is further supported by the following:

a) GHD were assured by the benchmarking of unit rates by Pell Frischman with very few outliers found and being comparable to GHD's own database, and therefore are deemed reasonable.

b) HS1 Ltd acknowledged that material rates had not been changed from CP2, and was an area to be reviewed as the new Asset Management Strategy is implemented.

5.23. The Government's Representatives agree with HS1 Ltd that the efficiency overlay will be applied to the LTC (not to individual renewals and replacements projects). This is intended to help ensure that HS1 Ltd are "*behaving with due efficiency and* economy*"*[24] as set out in paragraph 5.4 of the HS1 Station Leases.

5.24. This position was tested with stakeholders as part of the Targeted Consultation process described earlier.

5.25. The Government's Representatives are aware that officials in the Department are engaged with HS1 Ltd in their review of the Station Concession Agreement and HS1 Station Leases with the objective to support improved service delivery, efficiency and outcomes for passengers. This review is intended to assist HS1 Ltd to extract more value from their supply chain and key contractor, Network Rail (High Speed).

[24] See paragraph 5.7.1 in Annex B2 of this document

Targeted Stakeholder Consultation responses and the Government's Representatives' response

5.26. Responses were received from LSER, HS1 Ltd and Eurostar. A summary of these responses is at Annex D.

5.27. LSER did not make any comments on the revised efficiency proposal in their response.

5.28. EIL stated that as a young operation HS1 Ltd should be able to achieve efficiencies at the top end of the range and proposed a 2.5% efficiency overlay. The Government's Representatives continue to believe that 2.0% is appropriate for the reasons given in 5.20.

5.29. HS1 Ltd, in its response to the targeted consultation, seemed to suggest that it now agreed that: a) the inclusion of some form of a frontier shift efficiency overlay was evidenced; b) the efficiency level proposed by the Government's Representatives in their Draft Decision and targeted consultation, of a 0.6% efficiency overlay, fell within a justifiable range for frontier shift efficiency; and c) the inclusion of some form of efficiency overlay was appropriate.

5.30. However, HS1 Ltd also argued that efficiency had been demonstrated through CP2 by keeping costs within the CP2 funding envelope. The Government's Representatives did not find this argument persuasive as the actual workload delivered in CP2 is not the same as that proposed when producing the CP2 renewals plan.

5.31. In its day to day management role HS1 Ltd referred to the Department as having a role in approving quarterly withdrawals from the escrow. Whilst the Department do have a role in this process it is one of non-objection rather than approval. For clarity, it is HS1 Ltd's responsibility under the terms of the HS1 Station Leases to meet its obligations with regards to cost management, including the realisation of efficiencies. It is the Government's Representatives obligation under the terms of the HS1 Station Leases when approving the LCRs for the next control period to consider whether the LCRs enable HS1 Ltd to fulfil the Life Cycle Purpose and that the Forecast Life Cycle Works Costs do not exceed the amount that a prudent landowner behaving with due efficiency and economy would incur.

5.32. HS1 Ltd expressed concerns at the use of efficiency overlay data from other sectors and the difference in size of the NRIL work bank. As per paragraph 5.10 of this document, and paragraphs B6 and B7 of the Targeted Consultation letter, the Government's Representatives share these reservations about other sectors, but believe Gatwick Airport and the Water sector provide some useful insight and as per paragraph 5.14, and paragraphs A11 and A12 of the Targeted Consultation letter, have placed greater weight on the NRIL CP6 efficiency overlay, including a reasonable downward reduction for the difference in size of the work bank.

5.33. HS1 Ltd suggest that the Government's Representatives had revised the level of efficiency in response to operator affordability concerns. The Government's Representatives would like to make clear that they have reached their decision by considering whether any of the Discretionary Rejection Conditions have been met. Train operator affordability is not a distinct Discretionary Rejection Condition. Including an efficiency assumption is considered standard industry (best) practice and the Government's Representatives maintain the inclusion of an efficiency overlay is something HS1 Ltd should have done and is required to do to ensure HS1 Ltd behave with due efficiency and economy per paragraph 5.4 of the HS1 Station Leases.

5.34. HS1 Ltd notes that a 2.0% efficiency overlay would cumulate to a substantial reduction over 40 years, potentially leading to an underfunding of the escrow balance. The Government's Representatives note that of the 2.0% efficiency gain 1.4% is for catch up efficiency and 0.6% for frontier shift efficiency. However, the Government's Representatives consider it appropriate to amend their position to apply catch up efficiency over CP3 rather than over the full 40 years covered by the LTC model. The frontier shift efficiency is applicable over the 40 years.

5.35. The judgement of the Government's Representatives is that it is also reasonable to include the catch-up efficiency overlay to CP4. Not all workstreams will arise in CP3 so the Government's Representatives believe that the catch-up efficiency gains can be expected over more than one control period. In addition, the Government's Representatives consider that there is scope for catch-up efficiencies within CP3 and CP4, for example, as a result of HS1 Ltd's current reliance on manufacturer estimates of asset life cycles, rather than a more evidence based approach. The expectation is that the efficiency overlay will be reviewed at CP4, when renewal profiles and costs should be based on asset condition following the alignment with ISO 55000. Efficiency is expected to be presented in HS1 Ltd's CP4 submission either explicitly as part of the forecasting or as part of an explicit cost efficiency plan.

Final Decision on efficiency overlay

5.36. Conclusion: The Government's Representatives have concluded an efficiency target of 2.0% should be applied to the cost estimates in the CP3 LCRs and to [the cost estimates for] CP4 through the LTC model. This is both for frontier shift efficiencies (0.6%) and catch up efficiencies (1.4%). In CP3 LCR cost estimates for CP5 and beyond an efficiency target of 0.6% is to be applied in the model covering frontier shift efficiencies. This is intended to help ensure that HS1 Ltd are behaving with due efficiency and economy as set out in paragraph 5.4 of the HS1 Station Leases.

5.37. The Government's Representatives have looked at other regulated industries and how the linked issues of low confidence in the evidence provided in HS1 Ltd's submission, is balanced with the need for price control and therefore how efficiency has been treated. Using similar methodologies and reasoning the Government's Representatives have considered the following in reaching its conclusion:

i. stakeholder feedback;

ii. low confidence in forecasts provided by HS1 Ltd;

iii. the inclusion of risk and contingency line items in the LCRs;

iv. lack of evidence around efficiency achieved in CP2 or projected for CP3;

v. recognition of the proposed implementation of ISO 55000;

vi. recognition that volumes for material asset categories have increased;

vii. move towards a delivery plan based upon data on asset conditions; and

viii. additional benchmarking evidence and analysis.

5.38. The Government's Representatives expect HS1 Ltd to produce a cost efficiency plan, that deals with both catch-up and frontier shift as part of the delivery plan for CP3. Evidence of delivery against this plan and similar proposals for efficiency in CP4 should be picked up through revised reporting at quarterly meetings, and fed into the next control period review.

5.39. Given the monitoring of escrow balances, and the governance in place for the various gate stages of project approvals, which includes input to the procurement stages to review quotes received for works, the Government's Representatives will work with HS1 Ltd to ensure that renewals and replacements are not deferred as a result of implementing efficiency initiatives, and that on-going service quality is maintained through improved asset condition monitoring and performance data. This is reviewed through the quarterly station renewal and replacement portfolio meetings.

5.40. The Government's Representatives recognise this is a blunt instrument, however, until such time as HS1 Ltd can produce sufficient evidence around risk, efficiency and greater asset knowledge, the Government's Representatives consider it important to include a mechanism by which HS1 Ltd is encouraged to pursue efficiency savings in the short term.

5.41. The final LTC will therefore be calculated on the following basis:

The sum of (LCC cost per station plus contingency % applied at each station) less the efficiency overlay %.

5.42. This would give the indicative budget of £18.8m (post-efficiency) for station renewals activity with the 2.0% efficiency overlay:

Table 5.1 Indicative budget for CP3 station renewals

	LCC costs	Contingency	Total budget	Budget less annual efficiency @ 0.6%	Budget less annual efficiency @ 2.0%	CP total efficiency @ 0.6%	CP total efficiency @ 2.0%
St Pancras	9.86	1.48	11.34	11.00	10.25		
Stratford	3.2	0.48	3.68	3.57	3.33		
Ebbsfleet	2.54	0.25	2.79	2.71	2.53		
Ashford	2.71	0.27	2.98	2.89	2.69		
TOTAL	18.31	2.48	20.79	20.18	18.80	3.1%	10.6%

5.43. Applying the 2.0% efficiency overlay in CP3 and CP4 and the 0.6% efficiency across the remainder of the 40 Year LTC model drives the c.£8.8m value for LTC (from the £11.7m 'baseline').

6. Costs, indirect costs, LTC modelling assumptions and LTC value

6.1. This chapter sets out the various cost inputs that flow from the LCRs through to the modelling of the LTC, such as direct and indirect costs, assumptions around inflation and interest rates, and the approach used by HS1 Ltd in developing its models. It then goes on to summarise the impact of the Final Decision on the value of the LTC.

Direct Costs

6.2. HS1 Ltd validated its 40-year renewals work bank with technical advisors, Pell Frischmann.

6.3. HS1 Ltd identified that one of the main factors driving the increase in LCC from CP2 to CP3 was the increased frequency of interventions for lifts, escalators and travellators, which is one of the largest categories of renewal spend.

6.4. Overall the Government's Representatives technical advisors GHD considered that the updated asset lives were appropriate and the value of the works proposed to be undertaken in CP3 will be deliverable, though delivery and efficiency plans for the CP3 work banks need to be developed by HS1 Ltd.

Indirect costs

6.5. HS1 Ltd, using advice from its appointed independent technical advisors, proposed indirect costs covering risk and contingencies specific to the mix of assets being reviewed at each station as follows:

Table 6.1 - indirect costs by station and control period

	CP3-4	CP5-6	CP7-8	CP9-10
St Pancras	15%	15%	10%	20%
Stratford	15%	15%	10%	5%
Ebbsfleet	10%	15%	10%	10%
Ashford	10%	10%	15%	10%

Source: HS1 Final Submission May 2019

6.6. GHD assessed the weighted average indirect cost as being 13.9%. GHD, in its analysis, found that a risk and contingency allowance had been incorporated into the LTC model, assessed as a weighted average of 13.9%. GHD had reservations about the approach that had been taken by HS1 Ltd, however, GHD's view was that the overall figure was not unreasonable when compared with the ORR's determination for the NRIL PR18 renewals portfolio (10.7% risk allowance on £21bn maintenance and renewals portfolio), given that NRIL's portfolio is a mix of stations and route, with a smaller contingency, and taking into consideration the relative size of the HS1 Concession portfolio.

6.7. Whilst NRIL is not a perfect comparator, it is considered to be the closest industry comparator. The Government's Representatives support this view and consider it is reasonable given the c.£422m HS1 Concession portfolio has less ability to absorb "shocks", particularly compared to the much larger NRIL portfolio.

6.8. The Government's Representatives believe that efficiencies can also be gained from indirect costs, which supports application of the overlay at the LTC level (see Chapter 5).

6.9. In its response to the Draft Decision, EIL partly from its reading of the GHD report, raised the following concerns with the indirect costs covering risks and contingencies:

i. the inclusion only of the "medium" and "maximum" spend scenarios in the calculation of contingency, excluding the "minimum" case;

ii. the failure to undertake a Quantitative Cost Risk Analysis

iii. that the Government's Representatives consider the approach being taken by ORR for track indirect risk and contingency costs. Note: The Government's Representatives have been in regular discussion with the ORR on this issue.

iv. that both the interrelationship between contingency and escrow and the evolution of risk and contingency over time are considered. The Government's Representatives address the interrelationship between contingency and escrow in Chapter 4 and have looked at the risk and contingency over time as a weighted average discussed in 6.6.

6.10. The Government's Representatives conclude the approach set out in paragraph 6.6 above aligns with the best available industry comparator – the NRIL CP5 risk allowance.

6.11. The Government's Representatives are additionally reassured by HS1 Ltd's response to the Draft Decision where it has committed to exploring the use of QCRA (a project management tool used to estimate risk provisions) in future periodic reviews which will be supported by improved HS1 asset knowledge.

Cost of debt

6.12. HS1 Ltd's proposals in the LCRs assume a cost of debt of 6%. However, it has been noted that for the ORR's PR14 process, a cost of debt of 4.3% was assumed (and subsequently agreed in the ORR's approval of HS1 Ltd's PR14 submission). The Government's Representatives asked HS1 Ltd for an explanation of this apparent inconsistency.

6.13. HS1 Ltd responded that the same cost of debt has been used for both PR14 and the CP2 stations review. HS1 Ltd's Weighted Average Cost of Capital ("WACC") (6.6% nominal), with inflation set at 2.75% drives the discount rate within the annuity and this includes a 4.3% long term debt cost. Separately there is a 6% overdraft cost of funding when the escrow account balance is modelled as negative.

6.14. The 4.3% noted above is a long-term bond debt cost secured on the HS1 network assets which can be secured at cheaper rates than a short-term overdraft facility. HS1 Ltd adds that, overall, the models are insensitive to even large changes in this assumption as the escrows are assumed to be in deficit for only a few years and only towards the end of the period under review.

6.15. The Government's Representatives agree with this position.

Modelling approach and assumptions

Approach to modelling

6.16. HS1 Ltd's model for CP3 employs a primarily time-based approach. Given the age of the assets (with the exception of the slightly older Ashford International station), and the current maturity of the AMS, the Government's Representatives agree that this is a sensible approach for CP3.

6.17. The Government's Representatives will work with HS1 Ltd to improve LCC modelling; in particular by moving to a model based upon condition-based asset data. Similarly, the Government's Representatives will also work with HS1 Ltd to improve LTC modelling to incorporate a more sophisticated approach to modelling risk and contingency indirect costs.

6.18. For example, the Government's Representatives modified the LTC model to allow for the inclusion of variable efficiency rates, as part of their analysis, and will share this with HS1 Ltd to support further improvements.

6.19. Subject to the need to improve LCC and LTC modelling in paragraphs 6.17 to 6.18, the Government's Representatives are content with the modelling which HS1 Ltd and its consultants have undertaken.

Underlying assumptions

6.20. In response to HS1 Ltd's consultation on the LCRs, EIL speculated that the underlying assumptions in the LTC model are too conservative and suggested that a review of the assumptions which underpin the LTC estimates be carried out, to ensure that they are both realistic and efficient.

6.21. HS1 Ltd used an annual Retail Prices Index (RPI) assumption of 2.75% within the forecasts. This assumption was based on triangulation from a variety of external forecasts. GHD also questioned the rationale for HS1 Ltd's flat rate assumption of 2.75% for inflation.

6.22. As the modelling is based on a 40-year forecast, HS1 Ltd noted that a small variation in actual RPI does not materially alter the annuity. Whilst the actual RPI will likely be different to that forecast during CP3, any variation will be reflected in the charges collected from train operators and the allowance spent on renewals in nominal terms.

6.23. HS1 Ltd further noted that there will be the opportunity to reset RPI assumptions in 2020 if there is a fundamental shift in the forecast long term view of RPI in the future, away from the consensus range currently used. This would also impact on the nominal interest rate and cost of capital assumptions used.

6.24. The yield based model developed by HS1 Ltd for estimating the interest rate on long term investments was reviewed by the Government's Representatives and was deemed to be fit for purpose and an improvement on the more simplistic approach used at CP2. The model, which gives an interest rate on long term investments of 1.22% per annum, uses yield curve data from December 2018. A refresh was not considered necessary as Brexit and political uncertainty has made interest rate forecasting especially difficult.

6.25. The Government's Representatives opinion is that whilst these rates appear conservative in relation to historical long-term averages, given the current uncertainties for the short and medium term the decision to keep to the 1.22% rate of interest is reasonable for CP3. Additionally, there will be the opportunity to review these rates again at the next review for CP4 when the medium to long term outlook may be clearer. Also, the view of the Government's Representatives is that the impact on the LTC from changes to the interest are not material, and any adjustment is best applied at the next review, when there should be more certainty about long term forecasting.

6.26. HS1 Ltd modelled 80% of the escrow balance being invested in long term investments and 20% in current accounts. The estimated return of 0.7% on current account deposits was considered reasonable.

Impact of the Final Decision on the Long Term Charge

6.27. Given the Final Decision set out in the Chapter 4, provisional analysis by the Government's Representatives shows the approach will reduce the total annual station charges by 24% from the £11.7m per annum proposed by HS1 Ltd to c.£8.8m per annum (2018/19 prices). This remains 35% pa above current CP2 charges of c.£6.5m per annum. It is below the forecast for CP3 charges of c.£9m per annum estimated at CP2.

6.28. The Government's Representatives, in reviewing the annuity calculation options are cognisant of the competing objectives to smooth the annuity as much as possible, versus setting charges for the short term and striking the right balance for intergenerational equity.

6.29. The Government's Representatives' view is that in consideration of the factors set out in this chapter, and in taking a regulatory approach it would not be appropriate to either:

i. Continue with charges at the current CP2 levels. Whilst there is a lack of confidence in the forecast figures, it is acknowledged that volumes have increased, and therefore to hold charges would create a funding gap for future renewals works.

ii. Set the charges as proposed in full by HS1 Ltd in their final 5YAMS submission, given the lack of asset knowledge, the application of risk and the lack of evidenced efficiency savings and the need to take these concerns also raised by stakeholders into account.

6.30. The Government's Representatives have concluded that the following measures are appropriate to apply to the LTC for the reasons set out in Chapters 4, 5 and 6 above:

i. A 40-year annuity consistent with the approach used in CP1 and CP2

ii. An efficiency target, to be applied as follows:

   a) 2.0% for both CP3 and CP4 this will be made up of 1.4% catch-up efficiency and 0.6% frontier shift efficiency; and

   b) For CP5 onwards a 0.6% frontier shift efficiency only.

6.31. The net effect of these decisions is set out in tables 3.5 and 3.6.

6.32. The figures in Tables 6.2 and 6.3 are indicative, and are estimations from the Government's Representatives analysis of the LTC. As set out in Chapter 8 (Next Steps), it is for HS1 Ltd to take the LTC Final Decision and subsequently apply the correct charges to each operator in line with the Station Access Conditions.

Table 6.2. Modification to the HS1 CP3 LTC by station

18/19 prices	HS1 final submission	Adjustment for St Pancras	Efficiency overlay (note 1)	Final Decision
	£m	£m	£m	£m
St Pancras	7.612	0.043	-1.895	5.760
Ebbsfleet	1.558	-	-0.320	1.238
Stratford	1.659	-	-0.487	1.172
Ashford	0.866	-	-0.203	0.663
Total	**11.695**	**0.043**	**- 2.905**	**8.833**
CP2				6.545
Change in LTC				35.0%
Note 1: efficiency overlay				
CP3	-2.0%			
CP4	-2.0%			
CP5-CP8	-0.6%			

Table 6.3. Modification to the HS1 CP3 LTC by train operator				
18/19 prices	CP2 LTC	HS1 CP3 submission	Draft decision	Final Decision
	£m	£m	£m	£m
EIL	3.726	6.364	4.861	4.813
LSER	1.943	3.772	2.918	2.841
EMR	0.876	1.558	1.180	1.179
Total	**6.545**	**11.695**	**8.959**	**8.833**

6.33. HS1 Ltd raised a concern that applying the 2.0% efficiency overlay throughout the whole LTC model would potentially lead to significant underfunding of the escrow accounts putting future renewals or the asset handback condition at risk.

6.34. In reviewing this evidence, and to ensure compliance with the HS1 Station Leases, the Government's Representatives, commissioned a light touch sensitivity analysis to understand the impact of the efficiency overlay (see Figure 5.1).

6.35. As stated in the Targeted Consultation, the intention of the efficiency overlay is to focus effort in the short term to materialise cost savings within CP3 and ensure the cost base and forecasts for CP4 are more robustly evidenced based and include explicit assumptions on future efficiencies.

6.36. Following this sensitivity analysis, the Government Representatives have concluded there is no need to change any assumptions on escrow profiling at this stage.

6.37. Following extrapolation of the model through the sensitivity analysis, Ashford International is the first station account to go negative in 2036/37 (within CP5), and across CP5 the Ashford account would require c.£4m of financing to balance the account, based on current forecasts.

6.38. Whilst this is within the duration of the current Concession, the opinion of the Government Representatives is that this is not material (c.1% of full renewals portfolio value), and it is likely this can be mitigated given progress in achieving and refining the efficiency targets, improved asset management, profiling of works, and refinement of cost/risk estimation in the reviews to be held ahead of CP4 and CP5.

6.39. Additionally, if at a future review the risk is considered to be more likely to materialise, HS1 Ltd and the Department could review the escrow arrangements (set out in Schedule 10 of the HS1 Station Leases) to identify potential mitigations.

6.40. The sensitivity analysis also shows it is not until 2047 (CP7) that the escrow total in aggregate across the HS1 Stations goes negative by c.£29m. As this is beyond the current Concession term (which runs to 2040), the view of the Government Representatives is that the value is likely to change through the four control period reviews between now and CP7, and the mitigations as described above for Ashford specifically would equally apply across the whole stations portfolio.

6.41. The escrow cash flow projection will be kept under review with HS1 Ltd and if any material change warrants a change in position given a renewed risk assessment action should be taken at that stage, but is not required now.

7. Other Considerations

7.1. This chapter sets out the key issues emerging from the stations review, feedback from the Government's Representatives' technical advisors and stakeholders, following the workshop, bilateral meetings, and formal consultation responses that relate to areas not covered previously in this document.

7.2. These topics do not necessarily directly relate to the Government's Representatives' decision on whether to approve the LCRs. However, they are considered in the Final Decision as they are relevant to issues raised by Stakeholders, and are related to the LCRs in respect of challenging a number of inputs and assumptions that stakeholders believe would impact on the LTC.

Asset Condition at Handback

7.3. HS1 Ltd contend that the current definition of asset condition at handback within the HS1 Station Leases drives increased costs, particularly near the end of the Concession term.

7.4. The Departments' assertion is that the requirement, set out in the HS1 Station Leases that the HS1 Stations should be handed back in "good and substantial repair" remains valid and that costs can be reduced and controlled as HS1 Ltd adopt their plans to improve asset monitoring and intelligence, and meet their efficiency targets. The Department believes there is no need to alter the definition for asset handback condition, assuming the AMS set out by HS1 Ltd is fully implemented, as this will drive efficiencies; more accurate cost inputs and provide more surety on asset condition and renewals. As the AMS matures through each CP review the greater the assurance that the renewal plans support handback of assets in a state 'good and substantial repair' will be met.

7.5. The Government's Representatives understand the Department worked with HS1 Ltd to come to an agreement on this issue.

7.6. The Government's Representatives agree with this position and will write to HS1 Ltd requesting a detailed delivery plan describing how and when they intend to fully implement the AMS before the start of CP4.

7.7. Additionally, moving to a 40-year rolling view of asset stewardship will help mitigate any cost shocks in future control periods and at the end of the current concession. This was previously agreed at CP2 but has not been formally implemented as discussed in paragraphs 2.3 to 2.5.

7.8. Consultees were invited to provide comments on the draft conclusion that the definition of asset condition at handback should be retained, and that focus is placed on asset monitoring.

7.9. At the outset of the review period HS1 Ltd were seeking a more specific definition of the asset handback condition. During CP2 a workstream had been progressed with the Department to audit the baseline asset condition and to apply a categorisation that could subsequently be used, in conjunction with renewals strategies, to forecast the asset condition at the end of the concession. HS1 Ltd continue to use these categorisations of asset condition. However, these are being refined as they move their AMS to ISO 55000.

7.10. HS1 Ltd originally considered that specific condition statements were required for handback at 2040 for each asset, and therefore through this specification of the handback condition it was likely renewals cycles would have to be accelerated to ensure all assets met the handback requirement in 2040 thus driving up volumes and the value of the LTC.

7.11. The Department took a different view whereby a specific handback definition is not required for each asset, and that the existing definition is sufficient. As described in paragraph 3.8 above, as the AMS matures and is supported by robust asset monitoring information, the forecast renewal cycles will be more accurate, both in respect of timing and cost. Therefore, at the end of the concession through subsequent CP review processes there will be continual assurance that the asset life cycle purpose is being delivered, and by default the assets will be in a state of 'good and substantial repair and condition'.

7.12. In CP5 and CP6, immediately preceding the end of the concession, there will be more focus on those assets whose lifecycle falls just before or just after the end of the concession. The Government's Representatives would expect at that point to determine with HS1 Ltd, together with input from stakeholders, how to treat the expected small number of movements are to be managed, based on more robust asset intelligence, and which may impact the LTC.

7.13. LSER, EMR and TfL support the conclusion to retain the current definition of asset handback condition, on the basis HS1 Ltd increase the level of asset monitoring, and that this is linked to the LCC and LTC models. However, Eurostar considered there was inadequate evidence to form an opinion.

7.14. The Government's Representatives have recommended the introduction of an independent annual audit of asset condition, through an extension of the Department's station monitoring work conducted on specific train operator franchises with Full Repairing and Insuring (FRI) leases, which operate in a similar fashion to the HS1 Station escrow accounts, and with similar asset management strategy requirements.

7.15. Conclusion: The Government's Representatives' conclusion is that the definition of asset condition is retained. HS1 Ltd are asked to set out by March 2020 clear plans for implementing asset monitoring by March 2023 and how this information will feed into the LCC and LTC models for CP4.

Station enhancements

7.16. Whilst enhancements are not currently covered in the HS1 Station Leases, and is outside the scope of the review decisions, it is recognised there need for a clearer framework should the need arise for future enhancement works.

7.17. The Government's Representatives conclude that the principle of user pays should continue for the short term, and agree with HS1 Ltd's approach to consult on changes to the Network Statement that clarify the policy on station enhancements, their approach, charging principles, approvals process, and how they would seek to resolve any disputes.

7.18. The Government's Representatives recommend that the Department will continue to work with HS1 Ltd to develop longer term options for a station enhancements framework on the HS1 network, which would require amendment to the Concession Agreement.

7.19. Stakeholders should also note that the Department published its Rail Network Enhancements Pipeline (RNEP)[25] in March 2018 describing a wider approach to enhancements on UK railways where government funding is required. This should also be read in conjunction with Rail Market Led-Proposals[26] setting out guidance on how the Department expects to receive market-led proposals, and the process by which they will be considered. Stakeholders were invited to provide comment on how the processes described in this chapter are applied to station enhancements on the HS1 network, or on alternative proposals.

7.20. TfL responded by stating that any framework should align with practise on the rest of the network and funding should not be solely based on financial considerations of the users concerned. They supported the development of a range of options.

7.21. LSER suggests, given the small size of HS1 Stations, enhancements should be treated on a case by case basis, rather than designing an overarching framework.

7.22. All stakeholders agreed with the concept of paragraph 3.11 in the Draft Decision but believed it should be 'beneficiary pays' rather than 'user pays'. This would require a clear assessment of who the beneficiaries are, including HS1 Ltd, EIL, LSER, EMR, retail tenants or others, and clarity that any apportionment is consistent with the relevant charging regulations. This is discussed further in the chapter on LTC contributions from other sources at paragraph 7.31 onwards.

7.23. LSER requested that HS1 Ltd should adopt an approach consistent with that taken by NR at managed stations; where the income received from retailers, charges should be adjusted accordingly to prevent excessive charging on operators due to lack of contribution from retail.

7.24. HS1 Ltd confirmed their intention to develop a stations enhancement policy to be shared with stakeholders later in the year.

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[25] https://www.gov.uk/government/publications/rail-network-enhancements-pipeline
[26] https://www.gov.uk/government/publications/rail-market-led-proposals

7.25. HS1 Ltd thinks that the Rail Network Enhancements Pipeline (RNEP) and Market-Led Proposals guideline should be considered in the development of the HS1 enhancement framework. Whilst RNEP does not apply to HS1 there are many similarities in the stage-gate approach.

7.26. Conclusion: The Department has set out the existing frameworks available for station enhancements, and the Government's Representatives conclude there is no need to change existing arrangements. The Government's Representatives recommend that the Department will continue to work with HS1 Ltd, and stakeholders, on developing a suitable framework that includes a beneficiary pays approach, and looks forward to the proposals to be circulated later this year.

Optionality: Cost, Quality and Performance

7.27. Consultees were invited to comment on whether they are willing to accept lower customer experience and service quality outputs from critical assets such as lifts and escalators to reduce charges.

7.28. The unanimous train operator response was an expectation that through efficiencies and improved asset stewardship HS1 Ltd should be providing improved asset performance for the same or less cost.

7.29. Stakeholders would welcome the ability to have greater clarity on the optionality of maintenance and renewals proposals. However, there was recognition and acceptance that current asset knowledge provides insufficient baseline performance information or confidence.

7.30. Conclusion: The Government's Representatives will ask HS1 Ltd to provide evidence to support such options in future reviews.

LTC contributions from other sources

7.31. The Government's Representatives note the issue raised through the stakeholder engagement process, by current contributors to the LTC, that the user pays principle at St Pancras International station, does not take account of the Thameslink, Southern and Great Northern (TSGN) franchise (which is not counted as part of St Pancras International) or the impact of non-rail users at retail outlets in the stations.

7.32. Again, whilst this is outside the scope of the review decisions, the Government's Representatives understand that the Department's HS1 commercial team, are working with the specification team for the TSGN franchise within the Department, alongside HS1 Ltd, to identify and review a range of options that potentially requires the TSGN franchise to make an appropriate contribution to the LTC for St Pancras International station. Any options that are subsequently taken forward for adoption will not be in place for the start of CP3. The Government's Representatives recommend that the Department and HS1 Ltd keep stakeholders informed of progress as options are developed.

7.33. The Government's Representatives believe there is no mechanism under the HS1 Station Leases or the Concession Agreement to require LTC charges to be applied to retail outlets at the HS1 Stations, given retail income is unregulated under the HS1 contractual and financial structure.

7.34. The charging framework required by the Rail Regulations and which is set out in Schedule 4 of the Concession Agreement does not refer to non-rail users at stations. Instead, it includes a broad requirement that charges should be set in a manner compliant with the Rail Regulations.

7.35. The Rail Regulations stipulate that HS1 Ltd is ultimately responsible for determining the access charges that apply to its network, including in respect of its stations. The ORR is the regulatory body in charge of deciding appeals on these issues and we would therefore expect any objections to the level of station access charges to be raised with the ORR.

7.36. In their response TfL suggested that HS1 Ltd should seek applicable grant funding for appropriate asset renewals to reduce the burden on the LTC for payees.

7.37. Conclusion: The Government's Representatives confirm there will be no change to the current arrangements for retail contributions. The Government's Representatives recommend that HS1 Ltd work with their wider stakeholders to identify funding opportunities that reduce the burden on the LTC and the charges to train operators.

Asset Stewardship

7.38. Part of HS1 Ltd's asset stewardship duty is to efficiently manage the funds held in the escrow accounts for future renewal activities. It is important the cash flow does not impede delivery of renewals.

7.39. During CP2 HS1 Ltd, with the consent of the Secretary of State, moved the station and route escrow accounts to a new bank following the processes set out in the Concession Agreement and HS1 Station Leases to retain compliance.

7.40. The new bank accounts have streamlined the escrow payments and withdrawals process, using internet banking, ensuring urgent works are not delayed. Additional checks have been put in place to ensure the Government's Representatives have the all the required information before authorisation of any withdrawal. The quarterly station renewal meetings profile forthcoming withdrawals in line with the agreed programme of works scheduled for the control period.

7.41. The Government's Representatives are fully engaged with the ORR who are consulting on a discussion document on HS1 escrow arrangements, including financial risk, incentives and governance[27].The ORR will report on this area of

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[27] https://orr.gov.uk/__data/assets/pdf_file/0018/41409/dicussion-document-on-hs1-escrow-arrangements-2019-07-12.pdf

work through the route periodic review process. The Department will review the findings with both HS1 Ltd and the ORR.

7.42. Government's Representatives Conclusion: The Government's Representatives are content that the Department has worked with HS1 Ltd to review the ability to make more efficient use of funds on account through the current contractual arrangements, and that these will provide greater treasury management flexibility for HS1 Ltd, enabling them to be more agile in the way authorised investments are placed to make more efficient use of funds.

7.43. In particular the Department is working with HS1 Ltd regarding the use of non-ringfenced banks, to seek to gain higher returns from invested funds (whilst accepting more risk given investments may go up or down and may not offer full protection of the whole balance) and an Escrow Cash Management Policy and Strategy developed by HS1 Ltd.

7.44. The compatibility between the asset stewardship and the annuity approaches is discussed under paragraph 4.9.

7.45. The Government's Representatives also recommend that through the lessons learned exercise, the Department and HS1 Ltd explore the case for targeting a wider pool of investments and if necessary whether these options justify progressing a change to the Concession Agreement to increase the scope further.

8. Next Steps for the CP3 review

8.1. This chapter sets out the next steps for the CP3 review following the Final Decision and conclusion set out in this document. It also sets out longer term next steps, including how the Government's Representatives' decision will be monitored in CP3 and through a lessons learned exercise.

Implementation

8.2. Paragraph 5.13 of Schedule 10 of the HS1 Station Leases states that "subject to any modifications pursuant to paragraph 8[28], the Tenant[29] shall implement the Life Cycle Report as approved or determined in accordance with this paragraph 5". Formal implementation of the charges contained within the LCRs is carried out by HS1 Ltd through the mechanism in Condition 105 of the HS1 SACs.

8.3. Condition 105.3.5 of the SACs states that "Where the Life Cycle Report for the Station, including any modifications to the Long Term Charge proposed by the Station Facility Owner[30] and notified to the Users[31] in accordance with Condition 105.3.2, has been approved by the Government's Representative or otherwise determined in accordance with the LTC Schedule at least 30 Business Days prior to the commencement of the relevant Review Period[32]…the Station Facility Owner shall no later than 10 Business Days from the date of such approval or determination give written notice to each User (a "Review Notice"):

i. specifying the Long-Term Charge…for the first Relevant Year in the next Review Period…; and

ii. providing any additional supporting information as the User may reasonably require in a form and to an amount of detail which is sufficient to make a proper assessment of the effect of the modification(s) to the Long-Term Charge."

8.4. The Relevant Year is the first year of CP3 i.e. 1 April 2020 to 31 March 2021. A User is a passenger operator or non-passenger operator.

8.5. Following approval or determination of the final LCRs, HS1 Ltd serves Review Notices on each train operator thereby formalising the LTC.

[28] Interim review process as set out in the HS1 Station Leases
[29] ie. HS1 Ltd
[30] ie. HS1 Ltd
[31] ie. TOCs
[32] ie Control Period

Post project 'lessons learned' review

8.6. The CP3 stations review has been the second such periodic review of HS1 Ltd's stations. Given the findings outlined in the technical advisers' reports and referenced in this document, and as a matter of best practice, the Department and HS1 Ltd have committed to undertake a post-project review of the CP3 stations review process.

8.7. The Government’s Representatives expect that all aspects of the CP3 stations review will be open to consideration.

8.8. As organisations which have been involved for the duration of the review, the feedback the Department receive from stakeholders will be critical in ensuring that any lessons are learned and improvements made, are to be carried forward in future stations control period reviews. As such, stakeholder contributions are encouraged. The Department will write with further details about the lessons learned review at a later date.

Monitoring the decision in CP3 and beyond

8.9. The review process does not stop with the issue of a Final Decision. The Government’s Representatives will continue to monitor HS1 Ltd's progress against the agreed LCRs throughout CP3.

8.10. Monitoring of expenditure will also take place through the escrow withdrawal procedures set out in the Concession Agreement and HS1 Station Leases, and through quarterly station renewal review meetings.

8.11. The Department, through the Concession Agreement and the HS1 Station Leases, also retains a right of audit over the escrow accounts, and we expect to use the audit tools available to monitor delivery over CP3.

8.12. Beyond CP3, the Government’s Representatives acknowledge HS1 Ltd's commitment to moving beyond a time-based approach to its asset management, towards a condition-based and, even later in the concession period, a risk-based approach.

8.13. The Government’s Representatives in making their Final Decision recommend the Department sets an expectation that asset monitoring and information must improve, and will form a strong focus of the CP3 action plan and monitoring arrangements. This is anticipated to be through the tracking of recommendations, through monthly and quarterly meetings.

Annex A: Glossary of Terms

This annex contains a glossary of the terms used in this document.

5YAMS – Five-year Asset Management Strategy

AMAS – Asset Management Annual Statement

AMS – Asset Management Statement

Asset Stewardship Purpose – The Asset Stewardship Purpose is to secure in respect of the HS1 Railway Infrastructure:

2.1.1 its operation and maintenance;

2. 1.2 its renewal and replacement; and

2.1.3 the planning and carrying out of any Specified Upgrades and other upgrades, in each case:

(a) in accordance with Best Practice;

(b) in a timely, efficient and economical manner; and

(c) save in the case of the EDF Assets, as if HS 1 Co were responsible for the stewardship of the HS 1 Railway Infrastructure for the period of 40 years following the date that any such activities are planned or carried out, subject to:

(i) the Safety Authorisation for HS I; and

(ii) the Capability Requirements.

Concession Agreement – The Concession Agreement dated 14th August 2009 as amended and restated for the design, construction, financing, operation, repair and maintenance of High Speed 1, between The Secretary of State for Transport and HS1 Ltd

CP – Control Period

CP1 – HS1's Control Period 1 (October 2009 – 31 March 2015)

CP2 – HS1's Control Period 2 (1 April 2015 – 31 March 2020)

CP3 – HS1's Control Period 3 (1 April 2020 – 31 March 2025)

CP4 – HS1's Control Period 3 (1 April 2025 – 31 March 2030)

CP5 – HS1's Control Period 3 (1 April 2030 – 31 March 2035)

Department (the) – the Department for Transport

EIL – Eurostar International Limited

EMR – East Midlands Railway Limited. Train operator using St Pancras International station from August 2019. Successor franchisee to EMT.

EMT – East Midlands Trains Limited. Train operator using St Pancras International station until August 2019. Predecessor franchisee to EMR.

FOIA – Freedom of Information Act 2010

FRI lease – A **full repairing and insuring lease**. A lease where the costs of all repairs and insurance are borne by the tenant.

GHD – the GRs' technical advisors, is a conglomerate of Gutteridge Haskins and Davey Ltd (GHD) supported by Gleeds Cost Management Limited, Steer Davies & Gleave Ltd and Initiate Consulting Limited

Government's Representative – Appointed by the SoS for Transport

GR – Government's Representative

HS1 – High Speed One

HS1 Ltd – HS1 Limited

HS1 network – the physical HS1 infrastructure, including both route and stations

HS1 Stations – St Pancras International, Stratford International, Ebbsfleet International and Ashford International

HS1 Station Leases – both: a) the lease document dated 30 September 2010 between the SoS and HS1 Ltd for the lease of London St Pancras Station, Stratford Station and Ebbsfleet Station (as amended); and b) the Ashford International Lease.

IRC – Investment Recovery Charge levied as part of HS1 Ltd's track access charges and regulated by the ORR.

ISO 55000 – ISO 55000 describes how a business should set up a system for asset management. This is a key part of risk management, and helps to protect the business from losses due to equipment failure. Furthermore, it prevents unnecessary asset maintenance and replacement, driving efficiency as a core aim of the business. It is an international standard covering management of assets of any kind. Before it, a Publicly Available Specification was published by the British Standards Institution in 2004 for physical assets. The ISO 55000 series of Asset Management standards was launched in January 2014.

LCC – Life Cycle Cost

LCR – Life Cycle Reports

Life Cycle Period – the period 50 years commencing on 1 April 2011

Life Cycle Purpose – The Life Cycle Purpose is to ensure that each Station shall be in good and substantial repair and condition during the whole of the Life Cycle Period. See paragraph 2.1 to Schedule 10 of the HS1 Station Leases for further detail.

LSER – London & South Eastern Railway Limited

LTC – Long Term Charge (used to fund renewal and replacement work)

NRHS – Network Rail (High Speed) Limited

NRIL – Network Rail Infrastructure Limited.

ORR – Office of Rail and Road

PR14 – The 2014 Periodic Review of HS1 Ltd, conducted by ORR

QX – Qualifying expenditure (used to fund operation and maintenance work)

Rail Regulations – meaning the Railways (Access, Management and Licensing of Railway Undertakings) Regulations 2016

RPI – Retail Price Index

SACs – the HS1 Station Access Conditions

Stakeholders – HS1 Ltd, London & South Eastern Railway Ltd.(LSER), East Midlands Trains Ltd (EMT), East Midlands Railway Ltd (EMR) and Eurostar International Ltd (EIL) plus Transport for London (TfL) and Freight Operators (please note that the Government's Representatives did not receive any formal consultation responses form freight operators as they are not users of the HS1 Stations),), and including the ORR as regulator for Route.

SoS – The Secretary of State for Transport (for England and Wales)

TfL – Transport for London

TOC – Train Operating Company

Train operators – London & South Eastern Railway Ltd.(LSER), East Midlands Trains Ltd (EMT), East Midlands Railway Ltd (EMR) and Eurostar International Ltd (EIL).

TSGN – Thameslink, Southern & Great Northern TOC franchise

Annex B: Review Requirements

B1 - Provisions of HS1 Station Leases

This annex contains the provisions of the HS1 Station Leases relevant to a stations periodic review.

This extract (paragraph 5.2.1 to 5.4.9 of Schedule 10 of the HS1 Station Leases[33]) sets out what the Life Cycle Report for each station must contain:

"5.2 Each Life Cycle Report shall, in respect of each Station, include:

Works undertaken and costs incurred

5.2.1 a summary of the following in respect of the current Review Period:

(a) the Life Cycle Works carried out by the Tenant (or that it is anticipated will have been carried out by the end of the current Review Period);

(b) the Available Life Cycle Funds at the end of each Financial Year (or the anticipated Available Life Cycle Funds by the end of the last Financial Year in the current Review Period);

(c) the Life Cycle Works Cost (or anticipated Life Cycle Works Cost by the end of the current Review Period);

(d) the Deferred Life Cycle Works Savings (if any) approved in previous Life Cycle Reports;

(e) the Life Cycle Works Savings (if any) brought forward from previous Review Periods;

(f) the effect of any Relevant Changes of Law that have occurred during the Review Period;

(g) an analysis of breakdown frequencies and the performance of the Elements of the Station which were identified in the Asset Management Strategy as being monitored by the Tenant;

(h) the renewals and replacements (if any) undertaken by the Station Operator in order that it discharged its Safety Obligations in respect of the Station but which were not identified in the current Life Cycle Report ("Station Safety Works");

5.2.2 in respect of the current Review Period a progress report, comparison and reconciliation by reference to the Life Cycle Report approved for the current Review Period of:

(a) the Life Cycle Works actually completed to date against those anticipated giving the reasons for any differences;

[33] Clause 5.2.1 to 5.2.6 of the Ashford International Lease

(b) the Life Cycle Works Cost incurred to date against those anticipated giving the reasons for any differences;

(c) the Life Cycle Works Savings achieved to date against those anticipated;

5.2.3 a summary of the following up to the end of the previous Review Period for each Element of the Station of:

(a) the aggregate amount of the Life Cycle Works Cost;

(b) the aggregate amount of the Deferred Life Cycle Works Savings (if any); and

(c) the aggregate amount of the Life Cycle Works Savings (if any);

Forecast Life Cycle Works

5.2.4 in respect of the next Review Period:

(a) the Tenant's detailed proposals for the carrying out of the Forecast Life Cycle Works including any notices consents and approvals required in order to carry out and complete them;

(b) the Forecast Life Cycle Works Cost;

(c) the effect of any Relevant Changes of Law that will occur during the Review Period;

(d) the forecast amount of Available Life Cycle Funds at the end of each Financial Year;

5.2.5 in respect of the remainder of the Life Cycle Period a summary of any changes to:

(a) the Forecast Life Cycle Works to be undertaken in each subsequent Review Period and Overhang Period in respect of each Element of the Station;

(b) the Forecast Life Cycle Works Cost in each subsequent Review Period and Overhang Period in respect of each Element of the Station; and

(c) a forecast of the amount of Available Life Cycle Funds for each subsequent Review Period and Overhang Period;

Deferrals

5.2.6 the Tenant's proposals (if any) for:

(a) the deferral to any later Review Period or Overhang Period or the permanent omission of any Life Cycle Works that are identified in the Asset Management Strategy as being required in the Review Periods and/or Overhang Periods following the Review Period in which the Life Cycle Report is produced; and/or

(b) the distribution of any Deferred Life Cycle Works Saving pursuant to paragraph 7.1;

which shall include:

(c) in respect of a proposal in relation to a proposed deferral or permanent omission:

(i) confirmation by the Tenant that the proposed deferral or permanent omission will not result in the Tenant being unable to comply with its obligation under Clause 4.3.1 and 4.14 or the Life Cycle Purpose to be achieved; and

(ii) a report setting out the likely effect on performance arising out of or in connection with the proposed deferral or permanent omission;

(d) the forecast Deferred Life Cycle Works Saving arising from paragraph 5.2.6(a); and/or

(e) the forecast reduction in the Long Term Charge, the LTC and the Tenant's Share arising from paragraph 5.2.6(b);

This extract (paragraph 5.3 of Schedule 10 of the HS1 Station Leases[34]) sets out the role of the Government's Representative, in approving the LCRs:

5.3 [Following]...receipt of the proposed Life Cycle Report for each Station, the Government's Representative shall provide the Tenant with its written response to the Tenant's submission. Such response shall, in respect of each Station:

5.3.1 indicate whether the Government's Representative approves or does not approve the Life Cycle Report; and

5.3.2 if it does not appove the Life Cycle Report, its reasons for not approving it.

This extract (paragraph 5.4 of Schedule 10 of the HS1 Station Leases[35]) sets out when the Government's Representative can withhold its approval of a LCR:5.4 The Government's Representative may only withhold its approval of a Life Cycle Report if in the reasonable opinion of the Government's Representative:

5.4.1 further details or information should be included in the Report or provided in support of the Tenant's proposals;

5.4.2 if the report is implemented, it will not permit the Tenant to comply with its obligations under clauses 4.3.1 and 4.14 or the Life Cycle Purpose to be achieved;

5.4.3 the Tenant's proposals regarding the deferral or permanent omission of any Life Cycle Works do not accurately reflect the condition of the Station or the remaining useful life of the Element of the Station;

5.4.4 the Forecast Life Cycle Works Cost for the next Review Period exceeds such amount as a prudent land owner responsible for the structural integrity and maintenance of the Station behaving with due efficiency and economy, may incur in carrying out the Forecast Life Cycle Works in the next Review Period provided that where the Tenant has subcontracted its obligations in respect of renewal and replacement of the Station to the Station Operator, the Tenant shall be deemed to have acted as a prudent land owner responsible for the structural integrity and maintenance of the Station behaving with due efficiency and economy where it has used reasonable endeavours to manage the Station Operator;

5.4.5 a Deferred Life Cycle Works Saving that the Tenant proposes should be distributed may be required for the carrying out of any Life Cycle Works to any Element of the Station up to the earlier of (i) the expiry of two subsequent Review Periods and (ii) the expiry of the Term;

[34] Paragraph 5.4 of the Ashford International Lease
[35] Paragraph 5.4 of the Ashford International Lease

5.4.6 in relation to the distribution of any Life Cycle Works Saving proposed by the Tenant, the matters set out in paragraphs 7.3.1 or 7.3.2 (See Annex B2) apply;

5.4.7 a modification to the LTC proposed by the Tenant is not required or is not permitted by paragraph 5.7 (See Annex B2);

5.4.8 the Tenant's proposals for any modifications of the Asset Management Strategy (including the Life Cycle Budget) do not accurately reflect its proposals in respect of any of the matters set out in the Life Cycle Report to which the Government's Representative has not withheld its approval;

5.4.9 the Adjustment Arrangements which the Tenant has implemented and/or proposes to implement as a consequence of the Tenant having made an Adjustment to the Available Life Cycle Funds in the current Review Period (or anticipated to be made prior to the end of the current Review Period), do not sufficiently mitigate the likelihood that:

(a) the Life Cycle Budget will or is reasonably likely to be exceeded in respect of any Element of the Station;

(b) there will be a shortfall in Available Life Cycle Funds required for Life Cycle Works in respect of any Element of the Station in any Review Period or Overhang Period; or

(c) there is, or may with the passage of time, be an event or events that may give rise to an Event of Default.

B2 – References from HS1 Stations Leases

4.3 **Repair**

4.3.1 Subject to clause 4.3.3, to keep the Stations and Temple Mills Depot in good and substantial repair and condition and to maintain the remainder of the Premises in accordance with the obligations on the Tenant's part contained in clause 7.1 of the Concession Agreement.

4.3.2 Subject to clause 4.3.3, to the extent that the Premises provide necessary support protection and shelter to the Landlord's Remaining Land to keep the Premises in such repair and condition as is necessary to retain such support shelter and protection.

4.3.3 In relation to any part of the Premises which is the subject of an Inferior Lease the Tenant shall only be obliged to comply with clauses 4.3.1 and 4.3.2 if and to the extent that the relevant Inferior Lease obliges the tenant of the relevant part of the Premises to comply with equivalent provisions.

4.14 **Yield up**

At the expiration or sooner determination of the Term to yield up to the Landlord the Premises together with the buildings or structures which may at such time be erected thereon or on some part thereof maintained and kept in accordance with the covenants contained in clause 4.3 and schedule 10.

5. **Long Term Charge**

...

5.7 No modification to the LTC in respect of a Station shall be made unless:

5.7.1 in the case of a modification following a Relevant Change of Law the amount of the modification is such reasonable amount as:

> (a) a prudent land owner responsible for the structural integrity and maintenance of the Station behaving with due efficiency and economy, may incur in (or save by reason of) complying with requirements resulting directly and necessarily from the Relevant Change of Law in question provided that where the Tenant has subcontracted its obligations in respect of renewal and replacement of the Station to the Station Operator, the Tenant shall be deemed to have acted as a prudent land owner responsible for the structural integrity and maintenance of the Station behaving with due efficiency and economy where it has used reasonable endeavours to manage the Station Operator; and
>
> (b) it is fair and reasonable to be borne by the Users;

5.7.2 the modification is required as a result of the distribution of a Life Cycle Works Saving or a Deferred Life Cycle Works Saving proposed by the Tenant in relation to the Station, which the Government's Representative has approved;

5.7.3 the modification reflects an arrangement the Tenant has reached with the Users of the Station;

5.7.4 in the case of a modification relating to the Tenant funding any Increased Life Cycle Costs, the Government's Representative is satisfied that a prudent land owner responsible for the structural integrity and maintenance of the Station behaving with due efficiency and economy, would have incurred such Increased Life Cycle Costs provided that where the Tenant has subcontracted its obligations in respect of renewal and replacement of the Station to the Station Operator, the Tenant shall be deemed to have acted as a prudent land owner responsible for the structural integrity and maintenance of the Station behaving with due efficiency and economy where it has used reasonable endeavours to manage the Station Operator;

5.7.5 in the case of a modification relating to the Tenant suffering or incurring costs in connection with any Station Safety Works carried out by the Station Operator, the Government's Representative is satisfied that the Tenant has used reasonable endeavours to minimise such costs;

5.7.6 in the case of any other modification, the Government's Representative is satisfied that:

(a) any of the assumptions about costs or revenues underlying the setting of the LTC for the Station; or

(b) any assumption as to the recoverability of or amount of any item of cost incurred by the Tenant or Subsequent Operators which is not recoverable under the LTC for the Station is materially inaccurate or has changed in such a way as would, in the opinion of the Government's Representative:

(c) have led the Government's Representative to arrive at materially different conclusions as to the appropriate level of the LTC for the Station; and

(d) if the Government's Representative were not to approve modifications of the kind contemplated by this paragraph 5.7.6, have a material and adverse effect on the interests of the Tenant to an extent that it would be likely that the Tenant would find it unduly difficult to finance its activities.

7.3 The Government's Representative shall only be entitled to withhold its approval to any proposal under paragraph 7.2 if in its reasonable opinion:

7.3.1 the Tenant has not complied with the Life Cycle Report for the Station in respect of the Review Period following the Review Period in which Life Cycle Works Saving was achieved; or

7.3.2 the Available Life Cycle Funds for the Station for the next Review Period are insufficient to allow the Tenant to comply with its obligations under clauses 4.3.1 and 4.14 or the Life Cycle Purpose to be achieved.

B3 – HS1 Lease - Schedule 10 (Annex 1) – Asset Management Strategy Requirements

An Asset Management Strategy ("Strategy") shall comply with each of the following requirements.

1. Scope
The Strategy shall consider only the renewals and replacement of the Station. Maintenance and repair activities shall be excluded.

2. Station Elements
The Strategy shall identify each of the elements of the Station which will need to be renewed and/or replaced during the Life Cycle Period. Unless the parties agree otherwise the elements of the Station shall comprise:

substructure;

frame;

upper floors;

roof;

stairs;

external walls;

windows and external doors;

internal walls and partitions;

internal doors;

wall finishes;

floor finishes;

ceiling finishes;

fittings and furnishings;

sanitary appliances;

services equipment;

disposal installations;

water installations;

heat source;

space heating and air treatment;

ventilation systems;

electrical installations;

fuel installations;

lift and conveyor installations;

fire and lighting protection;

communication installations;

specialist installations;

site works;

drainage;

external services; and

minor building work.

3. Life Cycle Works

The Strategy shall describe, in reasonable detail:

(a) the renewal and/or replacements works which will need to be undertaken in relation to each of the elements of the Station in order for the Tenant to comply with its obligations under clauses 4.3.1 and 4.14 and the Life Cycle Purpose to be achieved; and

(b) the anticipated year in the Life Cycle Period when such works should be undertaken in order for the Tenant to comply with its obligations under clauses 4.3.1 and 4.14 and the Life Cycle Purpose to be achieved.

4. Performance Monitoring

The Strategy shall identify those elements of the Station for which the Tenant will monitor breakdown frequencies and gather performance data.

5. Life Cycle Budget

Expenditure

The Strategy shall for each of the works identified in paragraph 3 above, contain:

(a) an estimate of the costs of carrying out such works;

(b) a statement of the assumptions, including those in respect of inflation and interest rates, which the Tenant has used in preparing the cost estimates; and

(c) an explanation, in reasonable detail, of the principal components of the cost estimates (including any management fees or contingencies) and the factors on which the costs estimates are based.

Revenues

The Strategy shall contain for each Financial Year of the Life Cycle Period an estimate of:

(a) the Long Term Charge which will be received by the Tenant in relation to the Station;

(b) any Income which will be received by the Tenant pursuant to the escrow arrangements in relation to the Station; and

(c) a statement of the assumptions, including those in respect of inflation and interest rates, which the Tenant has used in preparing the estimates of the Long Term Charge and investment income.

Cashflow

The Strategy shall include an analysis of the forecast cashflows of the revenues and expenditures described above and identify any potential shortfalls between forecast revenues and forecast expenditure.

6. Financial Model

The Strategy shall include a financial model and supporting explanatory documentation which enables the parties to determine in relation to the Station:

(a) the Available Life Cycle Funds in a Financial Year;

(b) the financial effect of any acceleration, deferral or permanent omission of any renewals and/or replacements at the Station;

(c) the financial effect any new renewals and/or replacements at the Station not previously included in the Asset Management Strategy;

(d) the extent of any savings arising where the actual costs of undertaking certain renewals and/or replacements at the Station is less than the estimated cost of such renewals and replacement; and

(e) the financial effect of applying any savings to fund the costs of any renewals and/or replacements at the Station which are in excess of the cost estimate for such works.

7. Long Term Charge

The Strategy shall include a financial model and supporting explanatory documentation which enables the parties to:

(a) determine the level of the LTC for the Station which is necessary to fund the proposed station renewals and replacements at that Station;

(b) determine the level of any changes to the LTC for a Station to reflect:

any changes in the estimated costs of the proposed renewals and/or replacements at the Station;

any acceleration, deferral or permanent omission of any renewals and/or replacements at the Station;

any new renewals and/or replacements at the Station; not previously included in the Asset Management Strategy;

the application of any costs savings or changes in the expected levels of Income

Annex C: Summary of responses to the Draft Decision

This annex contains a high level summary of the responses received from stakeholders to the questions raised in the Draft Decision document. Full stakeholder responses are published alongside this Final Decision on the website.

Effective Management/Holding HS1 accountable

C1. Stakeholders have expressed a desire for HS1 to align with best practise adopted on the rest of the network.

C2. Stakeholders also raised concern for how HS1 manage NRHS and communicate with customers on HS1.

C3. There was some support for HS1's approach to its cash management policy but stakeholders believe the approach to funding is inefficient.

C4. A main concern of stakeholders were that these proposals were not supported by robust forecasts, effective policies or efficient forecasting and spend.

C5. Stakeholders called for more robust scrutiny and challenge on HS1 to improve its asset stewardship, knowledge and management plans, risks and contingency proposals.

C6. EIL suggested a temporary cost price freeze, until HS1 demonstrate basic efficient management.

Asset Management/Stewardship

C7. Generally stakeholders support HS1 Ltd adoption of ISO 55000.

C8. Stakeholders expressed disappointment at the lack of meaningful benchmarking.

C9. EIL suggested funding should be held flat in real terms for the next control period, with HS1 required to demonstrate meaningful change in their asset management, stewardship and calculation of costs.

C10. Stakeholders query what incentives or improvements the Department will provide to ensure HS1 mature their management and efficiency?

C11. Stakeholders state (regarding question 6) that operators do not have the required knowledge or have seen supporting insight or analysis to comment.

Asset Condition at Handback

C12. There was mixed reaction to Question 2 "*Consultees are invited to provide comments on the draft conclusion that the definition of asset condition at handback should be* retained, and that focus is placed on asset monitoring."

C13. Some stakeholders support the draft determination on its proposal of asset handback condition.

C14. Some stakeholders believe this line of questioning lacks evidence. They claim this could lead to either operators having to commission their own analysis or remain unable to meaningfully answer the question.

Costs and Indirect Costs

C15. Stakeholders agree with comments on concerns with the maturity of the asset knowledge and agree with a fundamental review of the escrow accounts.

Cost of debt

C16. EIL state the Department lacks a credible view regarding costs of debt, particularly what the costs of maintaining funds in an overdraft fund when the escrow account is not forecast to go into deficit for 25 years.

Station Enhancements

C17. Stakeholders welcomed engagement and development on future enhancements framework.

C18. Some stakeholders believe rather than a framework, there should be a case-by-case basis.

C19. Stakeholders have concern with the language of "user pays" and believe that it should be "beneficiary pays".

C20. Concern has been raised by stakeholders that TSGN and Retail units do not contribute to the LTC.

C21. Stakeholders have raised concerns whether the Department has considered the charges being on operators are fairly apportioned, in relation to relevant regulations.

C22. Stakeholders do not think it is appropriate that operators subsidise retail units and have to bare the full costs of these commercial areas

C23. One stakeholder has requested from the Department a formal determination whether the level of apportionment of costs to rail users is compliant with Directive 2012/34 as transposed into UK via the 2016 Access Management Regulations

Annuity Modelling

C24. Stakeholders have expressed a desire that the station annuity modelling should be brought out of scope and brought in line with the ORR's treatment of track annuity.

C25. Stakeholders expressed that there should be developed options for stakeholders.

C26. Some stakeholders did not support the 40-year annuity model as they question why operators should pay the IRC and future renewals.

C27. Some stakeholders have queried why there has not been a discussion on the differences with pay forward and look forward, with some stakeholders stating these are different and should be treated differently.

C28. There was wider concern with the immaturity of HS1's asset stewardship and knowledge which is driving alternative annuity models.

C29. Some stakeholders have questioned why the Draft Determination ignores "burden of proof" and allows HS1's proposals to be the default.

C30. Stakeholders further questioned what considerations the Department is making, if any, for stakeholders regarding cost shocks, or will they simply have to bare the costs.

C31. EIL posed the question on whether the Department had taken any such review (on modelling with RPI) or has its consideration been limited to simply asking HS1 to clarify these limited aspects of it.

C32. Further stakeholders question why the increase is being allowed despite the immaturity of the modelling methodology.

Efficiency overlay and contingency

C33. Stakeholders support the reinstatement of the efficiency overlay and reject HS1 Ltd proposal to remove this.

C34. Stakeholders disagree with the 0.6% adoption, as put forward in the draft determination.

C35. Stakeholders have questioned the evidence behind the 0.6% proposal, citing the lack of evidence the overlay was met in CP2.

C36. Further stakeholders do not believe 0.6% robustly challenges HS1 to drive efficiency.

C37. Stakeholders believe that HS1 should be held to account and exposed to the risk of poor budgeting through efficiency targets and hard budgetary constraints.

C38. LSER propose an overlay of 3.7% p.a. to drive efficiency. Eurostar suggest 2.0% p.a. which is their current efficiency overlay internally.

C39. Eurostar reiterated previous sentiment that there should be no real terms increase in charges should be permitted until HS1 have demonstrated over CP3 a track record of efficient delivery implementation

Contingency

C40. Stakeholders stated that they have not seen adequate evidence and benchmarking to justify the contingency mark-up of 30%.

C41. Stakeholders cited NRIL and NR of having contingency at levels of around 10%.

C42. Stakeholders are seeking clarity on work the Department has undertaken to determine the scope for efficiency, unit cost analysis and benchmarking

C43. The Department provides no evidence or analysis on forming the view that HS1's contingency and risk proposals are appropriate.

C44. They state it is difficult to see how the Department could assure itself that the funding proposed in the Draft Determination is either necessary or will spent efficiently and effectively.

C45. The Department has failed to provide evidence to consultees which would allow them to submit informed considerations.

LTC contributions from other sources

C46. Stakeholders rejected question 5 and did not accept lower performance on assets.

C47. Further stakeholders seek more clearly defined options to understand the impact more fully.

C48. They question what baseline level of performance is currently being operated and with the immaturity of HS1's asset knowledge how could they expect to lower performance?

Other comments

C49. Stakeholders stated in their responses the desire for more evidence based approach, using benchmarking to achieve the results in the final determination.

C50. Stakeholders continue to have concerns on the increasing costs and have little confidence in HS1's asset management ability to achieve efficiency and see these costs reduced, without having incentives.

C51. There is further concern from stakeholders that the Department does not have sufficient time to undertake a full and considered response to their consultation.

C52. Eurostar has requested to know 'point-by-point' how each of their comments has been considered and determined.

C53. Eurostar also requested how the Department has split its interests from its regulatory duty.

Summary of HS1 Ltd's Response to Draft Decision

C54. HS1 stated they have maintained excellent performance standards for train operators and passengers.

C55. They recognise the requirement of assurance of the LCCs which feed the LTC model, the renewal workbank is based on day-to-day asset knowledge which has been independently assured by GHD and Pell Frischmann

C56. They note concerns from stakeholders on NRHS and management of the stations but state that they have inherited a contract (expire 2086) and a key part of this contract targets efficiencies.

C57. They understand the growing renewals requirement, which put into the LTC, presents affordability challenges to operators.

C58. They welcome the Departments position on the Buffer Approach. However, they would like clarity on how the Department will expect this approach to be consistent with the CA and Station Leases.

C59. They echoed the sentiment of other stakeholders and would like to see a joined up approach to annuity with the Department and the ORR to ensure consistency applied to future control periods.

C60. They reiterate that their contingency is based on independent advice driven by risk factors associated with the renewal of station assets.

C61. HS1 state their evidence points towards their proposed contingency levels being appropriate and factored into the LTC calculation.

C62. They believe it may be suitable to adopt a Quantitative Cost Risk Assessment (QCRA) in time to reassess development of CP4 plans.

C63. They welcome working with the Department to refine plans and arrangements surrounding how contingency will be applied.

C64. They reject the 0.6% efficiency overlay as it is not evidence-based nor derived from benchmarks of similar renewal workbanks of stations similar to HS1 Stations. Further they state that the 0.6% will defer renewals and lead to uplifts in QX charges.

C65. HS1 state that efficiency overlay should be applied to the overall LTC; pre-funding.

C66. They welcome the stance on retail and the TSGN franchise, which will be revisited to possibly include contribution to the St Pancras LTC.

C67. They welcome the Department's stance at stakeholder work shop, that the non-compliances are technical in nature and not material to reject the LCRs.

C68. They suggest there should be a workstream with the Department to close these non-compliance off before the start of CP4.

C69. HS1 are intending to develop a stations enhancement policy with stakeholders, with the possibility of the Rail network enhancements pipeline (RNEP) or Market-led proposals being considered in the development of the framework

Annex D: Summary of responses to Targeted Consultation

This annex contains a high level summary of the responses received from stakeholders to Targeted Consultation which followed changes to the Draft Decision. Full stakeholder responses are published alongside this Final Decision on the website.

LSER

D1. LSER opposes the 40-year profile, as they do not consider it fair that current users should fund both the historic cost of construction (through the IRC) and the future cost of renewals (via the annuity) at the same time.

EIL

D2. EIL propose that HS1 should face the risk of funding exposure should they fail to deliver their efficiency overlay.

D3. EIL propose that HS1's ability to levy higher charges should be contingent on their demonstrable implementation of the commitments and requirements of previous control periods.

D4. EIL note a failure of asset knowledge on the part of HS1, and the latter's failure to link asset strategies and forecasts to their charging models.

D5. EIL propose a 10-year pay-forward basis, as costs can be more accurately predicted over a shorter period, and it can be more accurately who will benefit to what extent from the maintenance of the line.

D6. EIL propose a 2.5% efficiency overlay.

D7. EIL considers that as HS1 is a young business there should be significant scope for efficiencies, meaning its efficiency overlay should be placed amongst the higher end of the benchmarked organisations.

HS1 Ltd

D8. HS1 Ltd notes they are on track to meet the efficiency target set at PR14 (0.6%), delivering the portfolio at £16.03m on a funding envelope of £16.12m.

D9. HS1 Ltd notes DfT has had oversight of their efficiency processes for the past 5 years, and has not previously raised concerns. Similarly, EIL propose a 10-year pay-forward basis, as costs can be more accurately predicted over a shorter period, and it can be more accurately who will benefit to what extent from the maintenance of the line.

D10. HS1 Ltd notes that GHD did not raise concerns with HS1 Ltd's proposed cost inputs for CP3.

D11. HS1 Ltd note that the long life cycle of many of their assets (the example of the stations' CCTV systems is cited) means there are efficiencies being delivered at present over time periods that would not be captured by an overlay over CP3.

D12. HS1 Ltd suggest the evidence supports an overlay of 0.5 to 0.7%, in line with typical frontier shift.

D13. HS1 Ltd note a 2.0% overlay pa would strip 55% of the renewal costs over the 40-year period. They also suggest it would be difficult to restrict a 2.0% overlay to CP3, as at the next review a precedent for high efficiencies will have been set.

D14. HS1 Ltd asserts that neither DfT nor GHD has clearly defined the application of "efficiency" for the purposes of the CP3 review.

D15. HS1 Ltd largely rejects the benchmarking between it and other utilities and infrastructure organisations. It claims a disparity in outlay and operating expenditures between Gatwick and HS1 Stations, and questions the relevancy of data regarding road and rail maintenance in this question of station charges.

D16. HS1 Ltd notes the small size of its operations compared to the other benchmarked organisations. They note HS1 Ltd's £20.7m portfolio over CP3, compared to NRIL's £21bn portfolio for its own CP6. HS1 asserts the difference in size prevents HS1 Ltd achieving the same economies of scale as larger organisations.

D17. HS1 Ltd notes a significantly different approach to station work banks compared to NRIL. HS1 Ltd approaches asset renewal on an asset-by-asset approach, compared to NRIL's "top-down, broad-brush" approach. HS1 Ltd claims the difference in approach undermines direct comparisons.

D18. HS1 Ltd register their concern that the Targeted Consultation period was 13 days long, as opposed to the 6 to 12 weeks they would expect. Please note, the consultation period was extended to 21 days long.

D19. HS1 Ltd similarly registers concern that the GRs have only 7 days to consider consultation responses before publishing their Final Decision, and request DfT confirm its decision-making process with stakeholders. Please note that ultimately the Government's Representatives took 14 days to consider consultation responses before sending its Final Decision to stakeholders.