

# NATS (En Route) plc

NERL Reply (Redacted) – 30/12/2019

RP3 Reference: NERL006b



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# 1. Overview

## 1.1. Introduction

- 1 This is the NATS (En Route) plc (**NERL**) reply (the **Reply**) to the CAA's response submitted on 16 December 2019 (the **Response**) to the Competition and Markets Authority (**CMA**) in relation to our Statement of Case (**SoC**).
- 2 In this Reply we address the comments and criticisms made by the CAA in its Response and demonstrate that, in our opinion, the CAA has not set out any evidence or arguments that detract from or counter the position put forward in our SoC. As such, we maintain our position as set out in the SoC<sup>1</sup> that the CAA has not demonstrated that its proposed Licence modifications are in the public interest.
- 3 We have focused our Reply on the CAA's specific criticisms of the SoC insofar as they address substantive points that are relevant to the CMA's redetermination. We have not sought to restate the arguments presented previously.

## 1.2. Key themes

### 1.2.1. Role of safety

- 4 In the CAA's Response the CAA rejects our suggestion that the CAA has given undue weight to the primary safety duty.<sup>2</sup> The CAA also notes that "*an effective management team will always prioritise a high standard of safety irrespective of regulatory allowances*"<sup>3</sup> and that our SoC created some "*unnecessary ambiguity*"<sup>4</sup> with respect to these matters.
- 5 The CAA is as accountable for safety, and prioritising safety, in its regulatory role, as is NERL in the actual management of air traffic.
- 6 While executing this accountability, NERL ensures compliance with all relevant safety legislation and guidance from, for example, the Health and Safety Executive, CAA Publications and European Commission, as well as our own challenging internal safety targets. This is done such that NERL, like any business, manages its safety risks to As Low As Reasonably Practicable (**ALARP**).
- 7 NERL achieves this by a relentless focus on safety to ensure it permeates everything we do. This is done through continuous improvement and regular independent assessment of our safety systems, benchmarking against our peers, and instilling a strong, transparent and fair safety culture. These practices have made NERL a recognised global leader in ATM safety.
- 8 The plans for RP3 were carefully built in the knowledge that, without materially new mitigations to manage our prevailing safety risk profile, NERL's operations will be adversely impacted from a number of factors: the increasing age of key systems and technology; additional threats to those systems such as cyber-attacks and to controlled airspace due to, for example, drones and other incursions; the need to create additional

<sup>1</sup> SoC, para 2, p. 11

<sup>2</sup> CAA Response, para 6, p.6

<sup>3</sup> CAA Response, para 7, p.6

<sup>4</sup> CAA Response, para 18, p.9

airspace capacity; and the parallel and compounding burdens of modernising airspace and technology without compromising the day-to-day management of traffic.

- 9 The NERL RBP was therefore integrated, sequenced and indivisible. The CAA's 'modest' operating efficiencies will require a comprehensive re-design of NERL's plan. This will inevitably involve using outdated systems for longer than planned. This in turn adversely impacts the safety risk profile, which would otherwise have been mitigated by the replacement of these systems as planned.
- 10 Furthermore, especially with respect to the safety assurance activities, the delivery of this essential re-plan and day-to-day service delivery are inextricably linked because they depend on the same appropriately competent resource pools, e.g. ATCO, ATCE, ATSA, analytics and safety specialists. If we face the significant resource constraints proposed in the RP3 Decision this will inevitably reduce the available 'headroom' for management and expert resources to continually focus on such safety risk mitigation. This is due to the limited availability of resources, resultant resourcing tensions and the pressure to deliver to the NPP outcomes within the remainder of RP3.
- 11 NERL will naturally apply its safety expertise to ensure that the increased risk profile does not adversely affect its ATM service or manifest itself in more safety incidents. However, NERL believes that, with respect to safety, the RBP will not bear the cost cutting requirements applied by the CAA. NERL finds it unreasonable and unacceptable that the resultant insufficient funding will result in a prolonged exposure to systemic safety risks that could manifest in an increasing number of safety events that might otherwise have been foreseen or mitigated in advance. This outcome would be in the knowledge that there was a more complete and coherent plan available to meet the global safety principle of ALARP.

### 1.2.2. The CAA's characterisation of its RP3 Decision

- 12 A theme running through the CAA's Response is that it has been overly 'generous' in its RP3 Decision.<sup>5</sup> Clearly, we do not agree with that characterisation, given that we reached the conclusion that we had no option but to seek a referral of that decision to the CMA. We consider, however, that this perception of the CAA has coloured its approach to many of the issues that we raise and reinforces our concern that the CAA simply fails to acknowledge how stretching the cost challenges and targets are that its RP3 Decision seeks to impose. We have put forward evidence to support our interpretation of the impact of the RP3 Decision, but the CAA has not.

### 1.2.3. The role of NERL's shareholders

- 13 The CAA has suggested that NERL's plans have been subject to undue shareholder interference and that our shareholders are seeking to create an outperformance cushion.<sup>6</sup>
- 14 There is no evidence to support this assertion – it is as the CAA acknowledges a mere suspicion.<sup>7</sup> However, NERL's view is that it is a severely misplaced suspicion. In 2016 NERL was subject to an in-depth review by the CAA which had expressed concerns that NERL's governance did not reflect best regulatory practice. In that extensive review, the

<sup>5</sup> CAA Response, para 3, p.6; para 7, p.6; para 11, p. 7; para 14, p. 8; para 19, p.9; Summary box, p. 30; para 4.19, p. 35; para 4.27, p. 37; para 5.40, p. 46; Summary box, p. 77

<sup>6</sup> CAA Response, para 13, p. 8, para 19, p. 9

<sup>7</sup> CAA Response, para 19, p. 9

CAA sought the appointment of two independent directors to the Board of NERL.<sup>8</sup> In response, we reminded the CAA that the PPP structure was unique and had already been established with strong governance in mind. In particular, the PPP includes the following features:

- strategic control is shared between The Airline Group Limited (AG), a consortium of (mainly) customers, and the DfT;
- the DfT appoints three independent non-executive 'Partnership Directors', one of whom must also be the Chair of the NATS Group Safety Review Committee;
- the AG appoints the Chairman of the Board and a number of non-executive directors who are predominantly drawn from the airline industry. AG also appoints the executive directors; and
- all shareholders have provided direct undertakings to the DfT and the CAA that they will not permit management to take any actions that will breach the NERL Licence.

15 The reserved powers of the Partnership Directors are greater than the powers of any independent non-executive directors as might be appointed in other regulated industries. As a result, the CAA withdrew its demand for independent directors for so long as at least two Partnership Directors were present on the NERL Board.

16 We do not recognise the suggestion that the DfT (the largest shareholder) has or would put pressure on NERL to provide increased dividends at the expense of its other duties under the Licence. This proposition is firmly placed into the realms of fantasy on the basis that the Partnership Directors have independent status and isolate the DfT from any direct influence on the NERL Board.

17 The purpose of the AG investment in the PPP was specifically to ensure that NERL was not operated with the prioritisation of profit over safety or service delivery and that remains the situation today. Even if that were not the case, it would be financially illogical for the airline investors in AG (BA and easyJet have the largest residual shareholdings) to seek to prioritise dividends over service because any marginal improvement in dividends would be outweighed - by almost a factor of two - by the increased cost of NERL's charges given the extensive use of NERL's services by those airline investors or customers - even before considering the direct operational impact of any increased service delay on their business.

18 In reality, there has been no pressure of the sort suggested by the CAA. Rather, the shareholders' concern, through their non-executive Board representatives, has been about the shortfall in resources provided for by the RP3 Decision. As detailed in the SoC we followed a robust business planning process that developed our proposals based on appropriate grounds and considerations, including customer interests and views.<sup>9</sup> Once the final form of the CAA's RP3 Decision was published, a review was carried out for the Board before any decision was taken with regard to a referral to the CMA, with oversight from Mr Iain McNicoll, Partnership Director and Chair of the Safety Review Committee and Dr Harry Bush (see Board bios at section 6.2<sup>10</sup> of the Industry Overview). The Board had

<sup>8</sup> CAA, Proposal to modify the NATS (En Route) plc licence in respect of governance and ringfencing: Notice under section 11(2) of the Transport Act 2000, CAP 1386, February 2016, (**Proposal to modify the NATS licence in respect of governance and ringfencing: Notice under section 11(2) of the Transport Act 2000, CAP 1386**), (REP060)

<sup>9</sup> SoC, section 3.2.3, p. 36

<sup>10</sup> Industry Overview, Section 6.2, p. 56

no hesitation in concluding that the RP3 Decision was undeliverable from an operational perspective and is sufficiently concerned by the expressed suspicions of the CAA casting doubt on the governance and integrity of NERL and its Board that they wish to discuss the matter directly with the CAA and the CMA.

- 19 The irony of the CAA's approach to shareholder returns is seen in its premise as to the appropriateness of shareholder's picking up the costs where assumptions prove to be wrong.<sup>11</sup> This is in direct opposition to the CAA's Financeability Duty and, as set out in Section 11, the thin equity cushion argues for a special degree of care (especially on opex and non-reg incomes) as errors have a bigger impact than in other regulated sectors.

#### 1.2.4. Compromise in the planning process

- 20 The CAA has suggested that contrary to our position as described in the SoC,<sup>12</sup> NERL was unwilling to compromise with respect to our proposals, noting that "*...NERL's position in its SoC is almost identical to its ... initial business plan*".<sup>13</sup>

- 21 We did make "*meaningful efforts to compromise*"<sup>14</sup> and to consider the views of customers, the CAA and other stakeholders, and this did result in some movements from our original proposals.<sup>15</sup> Any opportunities to do so, however, between our initial and final business plans were constrained by the expectations for what we should deliver during RP3, both in terms of inputs and outputs, and the fact that our business plan was, we considered, the most appropriate balance of our responsibilities in light of our duties under legislation, regulation and our Licence.<sup>16</sup>

- 22 We also held 'without prejudice' conversations with the CAA immediately prior to the RP3 Decision being published. This reinforced our understanding that the CAA was not willing to sufficiently adjust the outputs in response to any reduced inputs we could offer and led us to the conclusion that the plan would be undeliverable as there would be insufficient inputs available.

#### 1.2.5. Incorporation of customer views

- 23 The CAA welcomes our efforts to consult with customers,<sup>17</sup> but suggests "*that on the key building blocks of its price controls NERL failed to reach agreement with its customers*".<sup>18</sup> The areas that the CAA highlights, however, all relate to costs and efficiency levels.<sup>19</sup>

- 24 It remains our view that we were generally in agreement with customers on the outcomes. We do not dispute that there were differences of opinion on the costs of delivery, but this is to be expected in the context of a regulatory process such as this. Customers will not be incentivised to agree with a service provider's proposals on cost whilst they retain the option for an improvement on the numbers from the regulator's intervention. This has been previously acknowledged by the CAA in its guidance for customer consultation in which it states it would be "*unrealistic*" to see agreement between NERL and its customers

<sup>11</sup> CAA Response, para 7, p.7; para 18, p.9; para 8.9, p. 74

<sup>12</sup> SoC, p.10

<sup>13</sup> CAA Response, para 21

<sup>14</sup> CAA Response, para 21

<sup>15</sup> Response to CAP1758, (SOC003), p. 8 – 10, NERL RP3 Business Plan, SOC001, p. 20 and NERL Response to CAP1758, SOC003, pp. 8-10.

<sup>16</sup> SoC, p. 9 - 10; para 6, p.12; paras.137 - 140, p. 40

<sup>17</sup> SoC, Section 3.2.3.4, p. 38

<sup>18</sup> CAA Response, para 22, p.10

<sup>19</sup> CAA Response, para 22, p.11



on issues relating to costs because of *"the very different commercial perspectives each side has"*.<sup>20</sup>

- 25 As a result, we do not consider that the areas of customer disagreement referenced by the CAA signify anything important about the merits of the process or the outcome. More generally, we are disappointed with the CAA's description of NERL that could be misinterpreted as us not respecting our customers' legitimate interests in our operation or us not actively engaging with our customers to understand their businesses.
- 26 In reality, NERL has consistently sought to understand our customers' priorities and work collaboratively with them, above and beyond our Licence requirements (see Section 12: Annex A below). Further information on the role of customer engagement in the development and framing of our capex governance proposals is also provided in Section 9 below.

### 1.2.6. General framework for CMA decision

- 27 The CAA has built on its interpretation of the CMA's role in its Response, once again seeking to draw an inappropriate parallel between this process and a telecommunications-related judicial review case.<sup>21</sup> As we set out in the SoC, we maintain our view that the CAA is seeking to unduly fetter the discretion of the CMA to reach its views on this redetermination in accordance with the provisions of the TA00.<sup>22</sup>
- 28 For the avoidance of doubt, to the extent that any of our criticism of the CAA's position addresses the rationality or otherwise of the CAA's decision, this should not be taken to mean that we equate this process to a judicial review process, nor that we consider the judicial review thresholds should apply.<sup>23</sup> The relevant framework remains as set out in s12 TA00.

### 1.2.7. Alleged Failure to deliver on RP2 promises

- 29 The CAA's Response suggests that elements of its RP3 Decision, including the capex governance mechanisms, were influenced by NERL's alleged failure to deliver during RP2.<sup>24</sup> We consider that this is a mischaracterisation of the events during RP2. As such we do not consider it to be adequate justification for the scale and nature of the changes that the CAA is proposing for RP3. We address this in detail in Section 9.3.1 below and in a separate paper that we have produced which describe the evolution of the RP2 capex plan and the associated governance approach in more detail.<sup>25</sup>

### 1.2.8. The importance of recognising the interdependencies in our plan

- 30 Although it is often convenient to conceive the proposed regulatory settlement as comprising separate "building blocks", such as capex, opex and the cost of capital, it is important not to lose sight of the inter-connected nature of NERL's business, particularly given the primacy of safety, as described in Section 1.2.1 above.
- 31 As we explained in the SoC (see Section 3.2.4.1), the airspace modification programme not only drives capex in the business, but also impacts opex, to cover input to the design process, implementation and training. If there are insufficient operating resources, staff

<sup>20</sup> CAA, Process Update for the Economic Regulation of NERL: A mandate for Customer Consultation between NERL and airspace users: CAP1019, April 2013, (**A mandate for Customer Consultation between NERL and airspace users: CAP1019, April 2013**), (REP053), p. 6

<sup>21</sup> CAA Response, para 24, p.11; CAA Notice of Reference, paras 1.17 - 1.18, p.16

<sup>22</sup> SoC, Section 3.4.2, p. 45

<sup>23</sup> CAA Response, para 26, p.12

<sup>24</sup> CAA Response, para 7.1, p. 66

<sup>25</sup> NERL006a Evolution of NERL Capex Programme and Governance, 27 December 2019, (**NERL006a Capex Evolution Paper, 27/12/19**)

will have to be diverted from day-to-day operations, which would affect performance standards and have an impact on financial rewards and incentives. Alternatively, airspace modification could be slowed down so that day-to-day performance is not affected. However, that would present a risk to safety and performance from legacy systems and risk penalties under the capex governance regime. So, a combination of a demanding programme of airspace reform, an inadequate opex allowance, over ambitious performance objectives, and an uncompromising safety regime would result in unsatisfactory outcomes, that are not in the public interest.

- 32 Also, it should be remembered that all elements of the price control, and the interactions between them, have an impact on the risks faced by investors and hence the cost of capital. Investors will be looking at risks to their returns, regardless of whether the source is exogenous (traffic, weather etc.), the features of the business (such as operational leverage and the primacy of safety over shareholder returns) or whether it arises from an inadequately resourced regulatory settlement. The allowed cost of capital should reflect not only these external risks, but also the risk that NERL will not be able to operate within the envelope of capex and opex without breaching operational and safety requirements.
- 33 For this reason, it is important to look beyond the individual building blocks of the proposed settlement and consider how they work together as a whole. It is important to consider this in the context of the safety and operational requirements of the business as well as the legitimate interests of investors.

### 1.3. Structure of the Reply

- 34 The structure of this Reply mirrors the structure of the SoC and the Response.

## 2. Traffic

The CAA's Response supports the continued use of the most up to date STATFOR traffic forecast for RP3 on the basis that, despite acknowledged limitations in the treatment of the effect of a moving Jetstream locale, the STATFOR forecasts have been more accurate than NERL in RP2 to date.

We break down the CAA's claims to demonstrate that:

- NERL's forecasts have historically been more accurate than STATFOR in making five-year forecasts of traffic, which is the relevant measure.
- The reasons for this, as stated in our SoC, largely arise from the acknowledged superior treatment by NERL of UK specific factors such as the Jetstream locale and displacement rather than loss of traffic among London airports.

We also address the surprising CAA proposition that its views on the assumptions underpinning the UK traffic forecast should displace the opinion of recognised UK experts such as the Met office and the DfT.

### 2.1. Overview

35 The purpose of this Chapter is to consider the contrasting views of the CAA and NERL with respect to which traffic forecasts the CMA should rely upon in reaching its redetermination.

### 2.2. Introduction

36 In our SoC<sup>26</sup> we demonstrated why we consider that the NERL traffic forecasts are a more accurate and reliable source of predicted traffic volumes in the UK than the forecasts provided by the Statistics and Forecast Service of the European Air Traffic Control agency within Eurocontrol (STATFOR).

37 In particular, we outlined the limitations in the STATFOR methodology, particularly with respect to factors such as the North American Jetstream locale, that impact the accuracy of its UK traffic projections and which are properly accounted for in the NERL models.

38 The CAA's arguments in its Response in support of the use of the STATFOR forecasts focus on two areas:

- **Accuracy of forecasts** - the CAA asserts that STATFOR's forecast is historically more accurate than NERL's, based solely on the accuracy of the 2019 to date forecast; and
- **Reliability of the assumptions** – the CAA asserts that it has key insights into traffic forecasting that differ from NERL, STATFOR, the DfT, and the UK Met office, which

<sup>26</sup> SoC, Section 4, p. 49

challenge the reliability of the assumptions that underpin the NERL forecasts in particular.

39 We tackle each of these points in the following sections. Overall, we do not consider that the CAA has provided any additional evidence or arguments in its Response which alter our view on the two available forecasts.

## 2.3. Issues arising from the CAA's Response

### 2.3.1. Accuracy of forecasts

40 The CAA states that "*the main reason for [using the STATFOR forecast] was that STATFOR has been more accurate in forecasting traffic in 2019 than NERL*".<sup>27</sup> We consider that it is inappropriate for an assessment of accuracy to be based purely on the eight months between February and October 2019 when it is possible to test that accuracy across a greater historical period.

41 A more complete analysis of the accuracy of NERL and STATFOR traffic forecasts is provided in the additional traffic support pack<sup>28</sup> that is submitted along with this Response. This shows that NERL's forecasts are more accurate in absolute terms, and by reference to recent performance:

- **Absolute terms:** the five year traffic forecasts produced by NERL and STATFOR over the eight years between 2005 and 2013 (2013 being the latest available five year forecast where the actuals for the full five year period are now known) show that NERL's forecast is 2% more accurate than STATFOR's forecast in terms of flight forecasts (an 11% absolute margin of error vs 13% respectively).<sup>29</sup> With respect to TSUs, it should be noted that STATFOR only started to include TSU forecasts from 2013 onwards. This comparison shows that the NERL forecast is 1% more accurate than STATFOR (6% absolute margin of error vs 7% respectively).<sup>30</sup>
- **Recent performance:** assessing the forecasts produced by NERL and STATFOR for the last seven years from 2012 onwards using the Mean Average Percentage Error (MAPE) method, the NERL flight forecast is more accurate than STATFOR in five of the seven years.<sup>31</sup>

42 In relation to actual traffic in 2019 to date, Table 1 below shows that flight volumes for 2019 are expected to be much closer to NERL's forecast than STATFOR's. The CAA identifies that the Thomas Cook failure is a key factor affecting 2019 traffic.<sup>32</sup> However, even without the Thomas Cook failure, the volume of flights in 2019 would have been midway between the NERL and STATFOR forecasts and the differences are small.<sup>33</sup> This suggests, at best, that neither 2019 forecast is more accurate than the other.

43 Actual service unit volumes in 2019 have grown more quickly than expected and will be around 1% higher than STATFOR's forecast but 2% higher than NERL's forecast.<sup>34</sup> This is

<sup>27</sup> CAA Response, para 2.2, p. 16.

<sup>28</sup> Traffic Forecast Support Pack for Response, 19 December 2019, (**Traffic Support Pack, 19/12/19'**), (REP032)

<sup>29</sup> Traffic Forecast supporting pack for CMA FINAL (SOC011), p. 48

<sup>30</sup> Traffic Support Pack, 19/12/19, (REP032), p. 19

<sup>31</sup> Traffic Support Pack, 19/12/19, (REP032), p. 19

<sup>32</sup> CAA Response, para 2.8, p. 18

<sup>33</sup> Traffic Support Pack, 19/12/19, (REP032), p. 7

<sup>34</sup> Traffic Support Pack, 19/12/19, (REP032), p. 14 - 16

mainly due to the position of the North Atlantic Jetstream, which has been Northerly in 2019, as well as strong growth of the transatlantic overflight market segment.<sup>35</sup>

- 44 As explained in the SoC,<sup>36</sup> NERL's forecast assumed a gradual movement during 2019 towards the 5-year average position of the Jetstream, whereas the STATFOR forecast did not. Naturally, the STATFOR forecast for 2019 will appear more accurate as a result because the position remained Northerly in 2019, but this does not automatically imply that the STATFOR assumption for RP3 as a whole is more credible (see Section 2.3.2 below).

Table 1 – Forecast comparison data

	Latest NATS forecast	STATFOR Feb-19*	STATFOR variance	NERL May-19	NERL variance
Flights '000	2,563	2,579	-16 (-0.6%)	2,560	3 (0.1%)
TSUs '000	12,566	12,406	160 (1.3%)	12,297	269 (2.2%)

Source: STATFOR figures are rebased on Eurocontrol Network manager data

### 2.3.2. Reliability of the assumptions

- 45 The CAA makes a number of assertions with respect to the assumptions that underpin traffic forecasting that take a different view to recognised experts in aviation traffic forecasting. The implication is that the CAA considers itself to be more knowledgeable in these matters than those experts. Despite the CAA's role as the regulator for this sector, we do not consider that is likely to be the case. The key assertions are listed and addressed below:

- **a 0.9% (TSU) variance between the forecasts represents "limited materiality".**<sup>37</sup> To illustrate the materiality of this 0.9% difference, the financial value calculated in accordance with traffic volume risk sharing rules (where NERL bears the first 2% of traffic volume risk in full) is equivalent to almost £28m over RP3 (in 2017 prices). This represents a material issue for NERL.
- **North Atlantic tracks will not return to normal levels "as soon as 2020".**<sup>38</sup> NERL has sought advice from the UK Met Office, a recognised expert in forecasting weather patterns, about the North Atlantic Jetstream which drives the position of the North Atlantic Tracks. The Met Office supports the use of a five-year average for the Jetstream locale.<sup>39</sup> We consider that the Met Office's views on issues relating to weather are likely to be more authoritative than the opinion of the CAA. Nonetheless, to take account of uncertainties NERL adopts a 'smoothing' transition, with the reversion to the five-year average taking place over a 12-month period, rather than a 'step change'. Our updated Dec-2019 forecast (see Section 0 below) assumes that the five year average will be effective from 2021 onwards.<sup>40</sup> The CAA states that it does "not disagree" that North Atlantic tracks "are more likely to return to normal levels

<sup>35</sup> Traffic Support Pack, 19/12/19, (REP032), p. 14 - 16

<sup>36</sup> SoC, para 173, p. 51

<sup>37</sup> CAA Response, para 2.4, p. 17

<sup>38</sup> CAA Response, para 2.7, p. 17

<sup>39</sup> Traffic Forecast supporting pack for CMA FINAL (SOC011), p. 35

<sup>40</sup> NATS December 2019 Forecast Report, 19/12/19 (**Forecast Report, 19/12/19**), (REP033); NATS Dec-19 Base Forecast, 19/12/19, (**Base Forecast, 19/12/19**), (REP034); and NATS December 2019 Forecast Executive Summary, 19/12/19, (**Forecast Executive Summary, 19/12/19**), (REP035)

eventually”<sup>41</sup> yet it is advocating the use of the STATFOR traffic forecast that assumes that the North Atlantic tracks will not return to normal levels at all during RP3.<sup>42</sup> The CAA has not reconciled this contradiction.

- **aircraft weights are increasing and should be reflected in the traffic forecasts:**<sup>43</sup> We have taken aircraft weights directly from the DfT model with the quoted functionality fully enabled and have checked this with the DfT. The DfT model, which uses forward looking data such as aircraft orders and retirements etc, as opposed to the historic growth rates used by STATFOR, is currently projecting that aircraft sizes are actually reducing in size by approximately 0.2% p.a.<sup>44</sup> This is caused by a variety of factors with the Heathrow and Gatwick increases (as assumed by the CAA<sup>45</sup>) being more than offset by reduced weight elsewhere across the UK - mainly due to newer, lighter airframes.<sup>46</sup> The CAA’s assertion that aircraft weights are increasing is simply incorrect. We have added the DfT’s latest aircraft weight assumptions into our NATS Dec-19 traffic forecast.<sup>47</sup>

### 2.3.3. Other points of clarification

46 The CAA suggests in its Response that we have incorrectly reflected STATFOR traffic numbers.<sup>48</sup>

47 In our Traffic Support Pack, the STATFOR numbers that we quoted in the SoC have been re-based to align with historic Eurocontrol network manager data. Internally, we refer to these as ‘STATFOR derived’ values, and only make this adjustment to allow direct comparability with NERL figures. The difference between the STATFOR derived values and those provided directly by STATFOR (without adjustment) is shown in Table 2 below. Importantly, the year on year growth rates are identical, and the size of the difference in TSU figures is immaterial (0.02%). The CAA is well aware of the reason why this adjustment is made.<sup>49</sup>

<sup>41</sup> CAA Response, para 2.7, p. 17

<sup>42</sup> Traffic Forecast supporting pack for CMA Final (SOC011)

<sup>43</sup> CAA Response, para 2.11 – 2.13, p. 18 - 19

<sup>44</sup> Extracted from Department for Transport (DfT) aviation forecasting model, NATS Dec19 Run 2, also Traffic Forecast Support Pack, 19/12/19, (REP032), p. 14 - 15

<sup>45</sup> CAA Response, para 2.11, p. 18

<sup>46</sup> Traffic forecasting supporting pack for CMA Final (SOC011), p. 38

<sup>47</sup> Forecast Report, 19/12/19, (REP033); Base Forecast, 19/12/19, (REP034); and Forecast Executive Summary, 19/12/19, (REP035)

<sup>48</sup> CAA Response, para 2.9, p. 18

<sup>49</sup> RP3 CAA NATS Traffic Forecast Meeting, 25 March 2019, (‘RP3 CAA NATS Traffic Forecast Meeting, 25/03/2019’), (REP052), p. 15

Table 2 Comparison of STATFOR figures with NERL's STATFOR derived figures

	Flights (000s)				TSUs (000s)			
	STATFOR	% growth	STATFOR derived	% growth	STATFOR	% growth	STATFOR derived	% growth
2017	2,534	3.5%	2,516	3.7%	11,768	8.2%	11,764	8.2%
2018	2,558	0.9%	2,537	0.9%	12,194	3.6%	12,192	3.6%
2019	2,600	1.7%	2,579	1.7%	12,408	1.8%	12,406	1.8%
2020	2,649	1.9%	2,627	1.9%	12,648	1.9%	12,646	1.9%
2021	2,686	1.4%	2,664	1.4%	12,891	1.9%	12,889	1.9%
2022	2,737	1.9%	2,715	1.9%	13,183	2.3%	13,181	2.3%
2023	2,771	1.3%	2,749	1.3%	13,406	1.7%	13,404	1.7%
2024	2,802	1.1%	2,780	1.1%	13,615	1.6%	13,613	1.6%
2025	2,826	0.8%	2,803	0.8%	13,800	1.4%	13,798	1.4%
RP2	12,463	14.6%	12,352	14.8%	57,399	24.3%	57,362	24.2%
RP3	13,645	7.8%	13,535	7.8%	65,743	9.7%	65,733	9.7%

## 2.4. Traffic forecast updates

48 NERL has recently released the Dec-19 traffic forecast.<sup>50</sup> The CAA notes that it agrees with our suggestion that the “CMA should use an updated forecast in any redetermination” and goes on to suggest the use of the STATFOR Feb-20 forecast.<sup>51</sup> We are planning to re-base our Dec-19 forecast to take into account 2019 actual data consistent with the STATFOR Feb-20 forecast and will aim to provide this to CMA at the same time (or as close as possible) as the STATFOR Feb-20 forecast is available. However, as the final STATFOR version won't be released until early March, there will be limited time to review and provide commentary between the two forecasts.

49 As mentioned above, the latest NERL Dec-19 forecast has been updated for:

- the new requirement in the EU performance regulation to use actual track distance flown as opposed to flight planned track distance flown;<sup>52</sup>
- aircraft weights based on the DfT forecast model;
- higher transatlantic overflight market segment growth rates based on what we have seen in 2019 to date and research which suggests this will continue in early RP3;<sup>53</sup> and

<sup>50</sup> NATS Dec-19 BASE forecast report (REP033); NATS Dec-19 Base Forecast, 19/12/19, (REP034); and NATS Dec-19 base Forecast Executive Summary, (REP035)

<sup>51</sup> CAA Response, para 2.14, p.19

<sup>52</sup> CAA Response, para 2.16, p.19

<sup>53</sup> Several airlines have published evidence that they will be expanding their network of transatlantic city pairs overflying the United Kingdom (Lufthansa lufthansa.com, Delta delta.com, United united.com, American Airlines aa.com). This is supported by analysis of OAG schedules data [oag.com](http://oag.com). Additionally, ICAO North Atlantic Economic, Finance and Forecasting traffic forecast NAT EFFG/37 November 2019 working paper 2 “Traffic forecast” predicts further

- the relatively small impacts of the Thomas Cook collapse and the grounding of 737MAX aircraft.

50 These updates address all of the concerns raised by the CAA in the draft and final RP3 Decision, the Notice of Reference and the Response.

51 We have compared our Dec-19 NERL forecast against the most recent STATFOR forecast (Sep-19). The Sep-19 STATFOR forecast contains 0.7% more TSUs than the NERL Dec-19 forecast for the RP3 period. The causes of this variance are fundamentally the same as those identified when we compared the NERL May-19 and STATFOR Feb-19 forecasts – i.e. limitations in the approach taken by STATFOR in relation to the jet stream position. These issues cannot be addressed by STATFOR due to modelling constraints and will remain a systemic issue.<sup>54</sup>

## 2.5. Conclusion

52 In summary:

- NERL's traffic forecasts have been more accurate than STATFOR on average over both the long term and in more recent periods;
- assumptions for aircraft weights, global weather patterns, and other technical forecasting points should be left to expert modellers (e.g. DfT, Met Office) and not overruled by the economic regulator;
- the differences between the currently available traffic forecasts are important and material and should not be ignored; and
- the CAA has not provided any evidence or argument to undermine its conclusions in its RP3 Decision in which it acknowledged that the NATS forecast methodology was "*theoretically preferable*" for the UK.<sup>55</sup>

53 The updated NERL traffic forecast for Dec-19 addresses all of the concerns previously raised by the CAA. In early March 2020, both NERL and STATFOR will provide a further update. However, systemic issues within STATFOR's forecasting model are not expected to be resolved, and as such we still expect STATFOR's next TSU forecast to be overstated.

growth for North-Atlantic traffic: "Low-cost carriers such as Westjet, Norwegian Air and Air Canada's Rouge will add significant growth in the North Atlantic. Legacy carriers ... will respond to low-cost carriers' growth by adding more flights of their own" ICAO North Atlantic Economic, Finance and Forecasting traffic forecast NAT EFFG/37 November 2019 working paper 2, NAT Traffic and Fleet Forecast, (**NAT Traffic and Fleet Forecast**), (REP094)

<sup>54</sup> SoC, para 176, p. 51

<sup>55</sup> CAA RP3 Decision Appendices, (SOC041) C3 p.12.



## 3. Airspace Change Organising Group

NERL agrees with the CAA that NERL has more expertise and a greater overview of controlled airspace flow management than other stakeholders. On that basis, NERL welcomes, and has been pro-active in taking on, a role in the CAA's Airspace Modernisation Strategy (**AMS**).

However, the scale of the contribution that the CAA is attempting to mandate for NERL through its airspace change Licence condition appears to mainly reflect the CAA's ambition for its AMS. It does not effectively balance NERL's existing Licence obligations, the resources available to us and the demands of our existing RP3 technology and airspace transformation programme in the manner required by the TA00 public interest test.

Reasonable and practical amendments to the terms of the Licence condition, as set out in the this section, would potentially satisfy the public interest test, although not necessarily fulfilling CAA's aspiration for NERL's level of contribution to the AMS.

### 3.1. Overview

54 The purpose of this Chapter is to consider the contrasting views of the CAA and NERL with respect to the scope of the responsibilities of, and the level of funding available for, the Airspace Change Organising Group (**ACOG**), as well as the CAA's general approach to the Airspace Modernisation Strategy (**AMS**) in RP3.

### 3.2. Introduction

55 NERL has been proactive in its desire to contribute to the AMS in a way that can fully utilise its expertise and experience, while ensuring that any perceived conflicts of interest are addressed by DfT and CAA continuing to demonstrate their ultimate accountability for AMS decisions. However, with our experience of the challenges of large scale airspace change in RP2, we are clear on the need for NERL's involvement to be both balanced and realistic. We perceive that Licence change is being driven by the CAA's own Airspace Policy agenda without due account being taken of our primary Licence obligations. We believe we have a constructive role to play in a large proportion of the additional tasks that have been set out at a high level in the Licence condition. This is for the reasons stated by the CAA, in that we have the greatest level of expertise in this area and we believe the achievement of the controlled airspace aspects of the AMS to be in the best interests of our customers. However, we require more granularity of the detail, and in particular we need reasonable and practical Licence conditions to reduce regulatory risk and uncertainty.

56 As we set out in our SoC,<sup>56</sup> ACOG is the vehicle for independent stakeholder input into the broader AMS. This is separate from NERL's direct accountabilities for airspace changes directly affecting the en route airspace structure for which NERL is responsible under its Licence.<sup>57</sup> Our initial concerns arose from the inclusion in the CAA's RP3 Decision of a final

<sup>56</sup> SoC, Section 5, p. 55

<sup>57</sup> NERL Licence, 2018, (SOC005)

form of Licence condition which contained broad statements and absolute obligations on NERL both in its own capacity and as the ultimate legal owner of the ACOG function.

57 The CAA's Response has now set out in more detail some of the limits and practical expectations of the CAA with regard to the arrangements for NERL's participation in the CAA's AMS programme. Those expectations were not reflected in the final form of the Licence condition, but the explanations provided by the CAA provide some level of comfort that a more acceptable form of Licence condition, potentially supplemented by guidance notes, might be achievable and discussions continue to that end. However, we remain concerned with a number of aspects of the CAA's approach. We have addressed those concerns in the following sections.

### 3.3. Issues arising from the CAA's Response

#### 3.3.1. Link between government policy and matters in the public interest

58 The CAA states that as certain AMS related matters are included within the ATM and Drones Bill (referred to as the Transport Bill in the SoC and elsewhere in this Reply) they therefore "*remain government policy and accordingly [the CAA's proposed Licence condition] remains in the public interest*".<sup>58</sup> The inference from this statement is that the CAA considers that any measure that seeks to implement government policy is automatically in the public interest. The consequence of that is that the CAA considers it is appropriate to include those measures in NERL's Licence.

59 We consider that this is a fundamental misunderstanding of the public interest test to be applied to the CAA's RP3 Decision. As set out in detail in section 3.4.2 of the SoC, the public interest test is satisfied by an appropriate and reasonable balance between the Duties set out in the TA00 and any other matters that might be considered in the public interest, with an overriding obligation to prioritise the primary Safety Duty. The fact that a matter, such as the content of the Transport Bill, forms part of government policy does not provide a fast track into the CAA's RP3 Decision, guaranteeing that its inclusion is in the public interest. It merely provides another factor which is to be assessed and balanced alongside the Duties specified in the TA00.

60 In any event it is worth noting that even to the extent it is accepted that being government policy is an indicator of a modification being in the public interest, the Transport Bill is still at draft stage and there is no guarantee it will pass through the legislative process unamended, if at all. As such, it feels presumptuous to embed that aspirational policy into NERL's Licence with all the consequences that brings.

61 This issue appears to go to the heart of the concerns NERL has, not just with the ACOG Licence condition but the approach of the CAA to the allocation of funds and the setting of priorities for NERL in RP3. The CAA has made it clear that it regards AMS as the "*key strategic consideration*" for NERL in RP3.<sup>59</sup> In addition, in its Response the CAA repeatedly states that NERL's participation in airspace modernisation is in the public interest.<sup>60</sup> Again, this conflates the CAA's, NERL's and DfT's desire to involve NERL in the AMS as the subject expert, with the public interest test to be applied by the CMA to the RP3 Decision.

<sup>58</sup> CAA Response, para 3.33, bullet 6, p.29.

<sup>59</sup> CAA's Notice of Reference, para 9.

<sup>60</sup> CAA Response, Summary Box, p. 20.

62 However, it is NERL's view that this is more than the conflation of two concepts. It is indicative of the fact that the AMS arises from the CAA's executive accountabilities for airspace management,<sup>61</sup> and that the CAA clearly desires the full participation of NERL in the AMS to ensure its success. The CAA should take these aspirations for NERL's role in the AMS and treat them simply as another factor to be considered in the RP3 Decision. However, subsequent discussions between NERL and the CAA in relation to the ACOG Licence condition<sup>62</sup> have left the impression that the airspace change Licence conditions emanate directly from the CAA's Airspace Policy Group and that appears to have created a de facto fast track for AMS related matters to be included in the RP3 Decision without the CAA carrying out an impact assessment or proper consideration of the public interest test.

### 3.3.2. NERL's role in the delivery of AMS

63 The CAA's Response purports to justify the extension of NERL's accountabilities for airspace change on two main grounds.<sup>63</sup>

- First, that NERL has the relevant knowledge and expertise.<sup>64</sup> This is agreed, subject to the important consideration that such expertise is a scarce resource that is not automatically available for activities outside of NERL's direct accountabilities; as an efficient operator NERL does not retain or recruit staff in excess of those strictly required for its business plan.
- Second, that NERL's role is analogous to a network provider and that therefore it is a natural corollary of NERL's licensed monopoly role that NERL should take on accountability for all aspects of UK airspace planning and design.<sup>65</sup> This characterisation of NERL's role and accountabilities is not the basis on which NERL has operated its services, nor the basis on which the CAA has regulated NERL's services, since PPP. To date, NERL has focused its attention on the provision of ATC services within areas of controlled airspace. NERL is specifically not licensed to carry out Airfield control services.<sup>66</sup>

64 The extension of NERL's obligations to the creation of a masterplan for the whole of UK airspace is a major undertaking. Therefore, not unexpectedly, there have been extensive conversations between DfT, NERL and CAA (Airspace Policy Group) about the nature of this extended role and how it would address perceived conflicts of interest among AMS stakeholders.<sup>67</sup> The solution to that issue has been a number of discrete and time limited activities intended to keep the AMS moving forward pending an agreed consolidation by way of Licence change for RP3. The discrete activities include:

- the co-commissioning letter for NERL to create in RP2 the first part of a masterplan addressing the key priority of airspace change for London and the South-East. Funding for this was outside the RP2 licence settlement; and

<sup>61</sup> CAA Teach In Slides, Slide 4.

<sup>62</sup> Meeting on 12 December between NERL and CAA (ERG and Airspace Policy team)

<sup>63</sup> CAA Response, para 3.23, p.25 and para 3.30, p.27

<sup>64</sup> CAA Response para 3.4, p.21

<sup>65</sup> CAA Response para 3.4, p.21

<sup>66</sup> NERL Licence, (SOC005) Part II, para 3, definition of the services making up the Core Services

<sup>67</sup> Airspace Modernisation Coordination Paper, for 14 December trilateral meeting, (**Airspace Modernisation Coordination Paper**), (REP055); and Paper on Mechanisms for Enacting Airspace Change, for 14 December trilateral meeting, (**Paper on Mechanisms for Enacting Airspace Change**), (REP056)

- the concept of ACOG (formerly AMOG) as an independent programme delivery coordination body comprising industry stakeholders was established based on separate funding.
- 65 However, substantive discussions on the form and content of the RP3 Licence condition were deferred by the CAA throughout the RP3 decision making process and the publication of the final form of Licence condition as part of the RP3 Decision was made without taking on board feedback offered by NERL.
- 66 This approach to the expansion of NERL's and/or ACOG's role in the AMS is problematic for two reasons:
- First, the scope of the CAA's expectations for NERL, through ACOG, go far beyond what is reasonable. The proposed licence modifications, if imposed, would render NERL responsible for the delivery of a change programme in respect of which it has no effective control over substantive parts of the requirements.
  - Second, and more significantly, this represents a material departure from the core purpose of NERL under the TA00 without recognition of the significance of that change.
- 67 The CAA states that £15m was 'ring fenced' from the opex efficiency challenge to allow these AMS related costs in full.<sup>68</sup> But as we demonstrate below, this approach underestimates the challenge of adding new and unplanned work-scope onto NERL's RP3 investment programme, which is already at the highest level of complexity and forward planning. It also betrays CAA's consistent lack of understanding of the integrated nature of NERL's business resources. NERL has made repeated representations that airspace change is not a distinct activity that can be bolted onto everyday operational activity.<sup>69</sup> Instead, it must be integrated into day-to-day activity and shares scarce resources with the operation. Airspace change must therefore necessarily have a lower priority in practical terms.
- 68 NERL's priorities under the Licence are clear in that our first priority is to ensure that we comply with our present obligations, in particular in respect of safety but also in respect of ensuring that present reasonable traffic demand is met. NERL's business plan has already set the priorities for an efficient increase in network capacity, requiring technology change before airspace change at the end of a long and complex programme. NERL should not be required under its Licence to devote additional resources to AMS matters that would undermine our compliance with our present obligations, without CAA stipulating this by way of Licence change.
- 69 The proposed final Licence condition does not provide any basis for NERL to prioritise AMS related activity over present operational or technology change priorities and yet at the same time imposes absolute obligations to carry out that AMS activity, apparently without any impact assessment or consideration of the balance required to satisfy the public interest test. Further, it is our view that any attempt to create such a 'ring fence' would not be consistent with the CAA's duty under s 2(6) TA00 to impose the minimum necessary restrictions nor with NERL's duties under s8 TA00. NERL cannot lawfully be

<sup>68</sup> CAA Response, para 15, p. 8

<sup>69</sup> SoC, para 19, p. 14; para 51, p. 24; para 65, p. 26; para 66, p. 26; para 72, p. 28; para 88, p. 30; para 96, p. 31; para 121, p. 36; para 123, p. 37; and para 137 – 138, p. 40 and 'Performance Risk Cycle' diagram on p. 41; Industry Overview, p. 16; and Site Visit presentation, SV001 (13 December 2019)

forced to divert resources needed to comply with its Licence obligations in terms of its service today in order to develop the provision of the service in the future.

- 70 We welcome the clarifications the CAA has provided regarding its intent for the Licence condition but observe that both the scale of what might be required to deliver the airspace change programme and the related costs are still very uncertain. For example, the most recent guidance from the SoS to the CAA<sup>70</sup> sets out priorities for the AMS that are new and far wider than the efficient flow of traffic within controlled airspace and are no longer aligned with the criteria referred to in the proposed Licence condition. In addition, on 20 December 2019, Heathrow Airport announced a minimum 12 month delay to its Runway 3 project which is the cornerstone of the London and South-East airspace plans.<sup>71</sup> As such, the creation of absolute obligations will create an unacceptable risk that NERL may find itself in breach of its Licence for reasons entirely outside our control, as well as the risk that NERL's contribution will have been inadequately funded due to consequential reworking of plans for changing government policy and other circumstances. We therefore set out below the changes required to create an acceptable Licence condition that satisfies the public interest test under the TA00.

### 3.3.3. Changes required to the draft Licence condition

- 71 NERL had understood that ACOG was required to operate sufficiently independently of NERL to give true effect to its impartiality. If the CAA expects NERL to take ultimate accountability for the actions, finances and deliverables of ACOG then it follows that NERL must have the ability to direct and control ACOG to the extent required to assure those matters. The CAA has offered to provide further clarity on the scope of the required impartial decision making which NERL will then need to assess against the matters for which NERL will be held accountable.
- 72 The CAA referred in the Licence condition to the criteria against which the masterplan deliverable will be judged as acceptable or not. NERL remains concerned that those criteria are not specified in the Licence, only incorporated by reference to other documents. Since the criteria reflect government policy and present circumstances (such as the Runway 3 scheduling) they should be specified in the Licence. This would mean that any change to those criteria would require a Licence change, with all the protections that process offers. Otherwise, NERL will face the uncertainty that its Licence obligations have changed by implication when these external reference points are amended, increasing the risk of breach and/or increased costs outside of NERL's control.
- 73 In addition, the CAA has listed a number of factors outside of the control of NERL/ACOG which the CAA will take into account in determining whether or not NERL/ACOG has produced a satisfactory masterplan.<sup>72</sup> Clearly the extent to which this list of potential impediments materialises will impact on the efficacy of the resulting masterplan. The Licence condition, or associated guidance, will need to make clear that any judgement of the quality, effectiveness or consensus among stakeholders with respect to the masterplan, will be assessed solely in the context of factors within NERL/ACOG's reasonable control.
- 74 The CAA has clarified that any efficient costs incurred due to changes in scope from implementing additional airspace changes would be met from the Opex Flexibility Fund

<sup>70</sup> Letter from Grant Shapps Transport Secretary to Deirdre Hutton CAA, regarding ACOG, 04 November 2019, (**Letter from Grant Shapps Transport Secretary to Deirdre Hutton CAA, regarding ACOG, 04/11/2019**), (REP007)

<sup>71</sup> BBC News, Heathrow third runway 'delayed for 12 months', 20 December 2019, (**Heathrow third runway 'delayed for 12 months', 20/12/2019**), (REP054)

<sup>72</sup> CAA Response, para 3.23, p. 24

(OFF).<sup>73</sup> Given the strong likelihood that policy decisions and circumstances will lead to reworking of the masterplan, which has not been budgeted within the £15m, NERL believes that the efficient costs of that reworking should also be met from the OFF.

- 75 The proposed Licence condition states that NERL should have responsibility for maintenance of the masterplan through to 2040. As CAA acknowledges in its Response, the initial scope of the masterplan is for London and the South East, with an extension to the whole of the UK later in RP3, the detail of which has not yet been specified.<sup>74</sup> It is inappropriate for NERL (or ACOG) to take accountability for maintenance of the masterplan through to 2040 either on a practical basis or on a budgetary basis in a Licence condition that relates to a budget for the period only to the end of 2024. The requirement to maintain the masterplan should be removed from the Licence condition. To the extent that maintenance by way of reworking the masterplan is required within RP3, this is addressed in paragraph 74 above. Any adjustment or maintenance of the masterplan beyond 2024 should be the subject of an RP4 decision.

#### 3.3.4. Legal basis for placing extra responsibilities on NERL

- 76 NERL does not dispute and takes no issue with having an absolute obligation to carry out airspace change in respect of its own airspace changes identified in the masterplan. Provided that appropriate opex resources are made available (see Section 6 below), NERL has planned for those projects as part of its investment programme. Of greater concern to NERL are aspects of the Licence condition that relate to NERL taking accountability for the delivery of airspace change proposals on behalf of (mainly) uncooperative or incapable airports in respect of their own airspace. The CAA provides two justifications for this Licence condition: that it is in the public interest as reflected in the proposed Transport Bill and that it will encourage recalcitrant airports to carry out their own airspace changes.<sup>75</sup>
- 77 The CAA postulates that it would be in the public interest to include this Licence condition on the basis that it will enable the masterplan to be kept on track and it should be incorporated into the Licence while waiting for the Parliamentary process to progress the Transport Bill. It then goes on to state that the Licence condition would be modified if the Transport Bill changed from its draft form when passed. As set out in paragraph 62 above, it is important not to conflate something that might, in an ideal world, be held to be in the public interest, with the satisfaction of the public interest test. Incorporation of such an obligation before it becomes law is speculative and creates regulatory uncertainty in the settlement, which is exacerbated by the prospect of subsequent amendments.
- 78 There is no evidence that this condition would incentivise airports to work on and bring forward their own airspace change proposals in accordance with the requirements of the masterplan. This is simply an unproven theory. Of the 17 airports that will need to comply with the master-planning, there may well be some that have no capability or motivation to participate in the master-planning or are even disincentivised to do so due to the onerous requirements of the CAA's CAP 1616 approval process. Such airports may actually be incentivised by the existence of the condition to avoid their own change proposals, knowing that NERL will be required by CAA to carry out the work in any event.
- 79 Given the late imposition of this condition into the RP3 process, NERL has not taken into account either the financial risk or the programmatic risk of attempting to carry out

<sup>73</sup> CAA Response, para 3.31, p. 26

<sup>74</sup> CAA Response, para 3.20 and 3.33, p. 24 and 27

<sup>75</sup> CAA Response, para 3.28, p.26.

airspace changes for parties that refuse to carry out their own airspace changes. We note the CAA's clarification that funding for any such work would need to be made available from the OFF, although we are unclear the extent to which CAA has assessed the funding levels of the OFF for this and other contingent activity. For example, the very fact that the OFF will make funds available for NERL to complete non-NERL airspace changes might in itself disincentivise airports to carry out their own airspace changes. If all of those 17 airspace changes were funded by the OFF it could, when taken together with unplanned master-planning funding as requested in paragraph 74 above, fully utilise the OFF.

80 Even if NERL was requested to carry out only a few of these airspace changes, for there to be manageable risk and for NERL to ensure that it can continue to comply with its primary Licence duties, NERL would also need to have the right to refuse to complete such airspace changes on any of the following premises:

- that the necessary airspace planning expertise is not available or, if available, does not have the capacity to carry out the airspace change activities within the necessary timescales due to the requirements to carry out NERL's own airspace change obligations;
- that NERL cannot, due to the integrated nature of the resource requirements for its operation, technology and airspace programmes, make available the required resources without an adverse effect on its own investment programme; or
- that in all the circumstances NERL assesses that it does not have a reasonable prospect of success in completing the airspace change proposal and obtaining approval from the CAA. In particular, NERL has made clear both to the DfT in relation to its development of the Transport Bill, and to the CAA subsequently, that community engagement has to date been exclusively the preserve of airports for low level airspace changes and that NERL's prospects for a successful engagement in the place of an airport are therefore very low.

### 3.4. Conclusion

81 NERL believes that the CAA's approach to the Airspace change Licence condition is symptomatic of its approach to opex funding in its RP3 Decision. The CAA has failed to engage with the detail of the NERL business model and, in particular, the integrated requirements for the involvement of operational staff in technology and airspace programmes. The proposition that airspace change funding or activity can be ring fenced in financial terms ignores the underlying requirement for NERL to deliver its operation and technology changes alongside airspace change.

82 In order to provide for NERL participating in the AMS to the best of its ability but still providing NERL with the flexibility to achieve its other priorities for customers in RP3, any Licence obligations relating to airspace change must be reasonable and balanced in their terms. This will ensure that our willingness to do the right thing for our customers and the travelling public, does not materialise as an allegation of Licence breach, whether due to day-to-day operational failures or failure to plan for the future. This concern is even more acute as the Transport Bill includes (as currently drafted) a new regime of unlimited fines for Licence breach, accumulating at a rate of 0.1% of annual turnover daily, with no upper limit.

## 4. Service Quality Targets

The CAA states that it has set 'generous' performance targets in its Response. NERL is concerned that this assertion does not take into account the intensity of technology transition periods throughout RP3 in service of replacing end of life systems and deploying class leading DSESAR technology solutions.

Therefore, we maintain our support for our proposed methodology of retaining challenging, but ultimately achievable, targets through the use of delay allowances for agreed and efficiently planned delay caused by transitions.

### 4.1. Overview

83 The purpose of this Chapter is to consider the contrasting views of the CAA and NERL with respect to the methodology and metrics associated with our service quality targets.

### 4.2. Introduction

84 In our SoC,<sup>76</sup> we provided evidence that the service quality targets in the CAA's RP3 Decision mean that NERL will not meet our targets in four out of the five years of RP3, resulting in a financial penalty of over £5 million in total when combined with:

- transitions for airspace and technology changes;
- higher traffic, and
- insufficient opex allowance.

85 This is inconsistent with principles of Best Regulation Practice and undermines the purpose of incentive-based regulation.

86 In its Response the CAA has claimed that it has set "*relatively generous service quality targets and low powered incentives*" to give NERL "*the flexibility to pursue airspace and technology modernisation*".<sup>77</sup> The CAA characterises our position as set out in the SoC as absolving ourselves "*of any meaningful stretch*" in our targets to the detriment of our customers.<sup>78</sup>

87 The CAA has misrepresented our approach. As we demonstrated in the SoC<sup>79</sup> and is reinforced in the sections below, the level of targets and incentives that we support are stretching when seen in the context of the RP3 programme overall and are therefore also in customers' interests.

<sup>76</sup> SoC, Section 6, p. 59; and para 205, p. 59 - 60

<sup>77</sup> CAA Response, Summary Box, p. 30.

<sup>78</sup> CAA Response, Summary Box, p. 30.

<sup>79</sup> SoC, Section 6, p. 59



### 4.3. Issues arising from the CAA's Response

#### 4.3.1. Are the service quality targets really "generous"?

88 As we demonstrated in our submissions to the CAA on its service quality target proposals, our proposals (as supported in the SoC) are ambitious. We put forward an alternative proposed target of 20.4 seconds of delay per flight per year in response to the CAA's draft decision. Our analysis our was that it would be 20% more stretching than our expected performance in years 2023 and 2024, which is reflected in Figure 4 of our SoC.<sup>80</sup>

89 Our analysis in the SoC shows that we anticipate incurring penalties against these targets in four of the five years of RP3.<sup>81</sup> We consider that this represents targets which are unduly stretching, as opposed to being too 'generous'. In contrast, the CAA does not appear to have carried out any analysis of the impact of its targets in order to reach its conclusion that they are 'generous' and has not provided any evidence to support its assertion that it has taken "*due account of the strategic and operational context for RP3*".<sup>82</sup>

90 Instead, the CAA has simply restated its position that it considers that our historical performance suggests we should be capable of lower levels of delay than targeted in RP1 and RP2.<sup>83</sup> A comparison with historical levels of performance is, however, only valid to the extent that the drivers of delay in each period are broadly equivalent. The key driver contributing to delays in RP3 is the impact of the transitions associated with the delivery of airspace change. In RP2 we underwent substantial transitions in 2016 and 2018. These were also the two years in which we failed to meet our service quality targets.<sup>84</sup> In contrast, we are expecting large transitions in almost every year of RP3 and more than one in most years.<sup>85</sup> The comparison with historical performance simply serves to reinforce the fact, therefore, that these targets are stretching when viewed in the context of the transformative programme planned for RP3.

#### 4.3.2. Low powered incentives

91 The CAA's Response argues that the CAA set "*low powered incentives*"<sup>86</sup> which it had reduced from its original views "*so as not to discourage planned deployments, in the event they were triggered*".<sup>87</sup> The CAA concludes that this approach was in the public interest despite overall support from airspace users for "*the principle of higher power (and asymmetric) incentives to hold NERL to account for day to day service delivery*".<sup>88</sup>

92 However, as stated in our SoC, we do not believe this is in the public interest.<sup>89</sup> The correct regulatory approach has to be to carry out the analysis to set the right targets, including evaluating any trade-offs, instead of minimising the financial consequences of getting them wrong.

#### 4.3.3. Comparison to other sectors

93 In the CAA's Response it looked to other regulated sectors, such as water and Heathrow Airport Limited, that are subject to service quality targets and incentives to demonstrate

<sup>80</sup> NERL response to CAP1758 (SOC003), Table 14, p. 108 and p. 64 of SoC where 20.4 seconds = 0.35 minutes

<sup>81</sup> SoC, Section 6.6, p. 64

<sup>82</sup> CAA Response, Summary Box, p. 30.

<sup>83</sup> CAA Response, para 4.3, p. 31.

<sup>84</sup> CAA Response, Figure 4.1, p. 31; SoC para 208, p. 61.

<sup>85</sup> NERL response to CAP1758 (SOC003), Table 14, p. 108

<sup>86</sup> CAA Response, Summary Box, p. 30.

<sup>87</sup> CAA Response, para, 4.12, p.34.

<sup>88</sup> CAA Response, para 4.15, p.34.

<sup>89</sup> SoC, para 224, p. 65

that in comparison the financial impact and penalties arising from poor performance are much greater than those which NERL would be exposed to under the CAA's RP3 Decision.<sup>90</sup>

- 94 Table 3 below shows the potential impact of service quality frameworks based on return on regulated equity, which is a more relevant basis of comparison. It shows that NERL is broadly in line with the comparators chosen by the CAA, instead of facing a less stretching regime as suggested by the CAA using its revenue approach.<sup>91</sup>

Table 3 A comparison of the service quality incentives as a % of wholesale revenue against return on regulated equity

Regulated company	Revenue impact	RoRE impact
NERL	+0.8% to -1.75%	+1.0% to -2.2%
Severn Trent	+3.7% to -6.7%	+1.9% to -2.83%
South West	+3.2% to -5.2%	+1.84% to -2.12%
United Utilities	+3.5% to -6.7%	+1.21% to -1.38%
Heathrow	+1.4% to -7.0%	+0.4% to -1.8%

Source: CAA Response, p. 36 and NERL analysis based on Ofwat financial models for PR19 and review of Heathrow's Q6 licence.<sup>92</sup>

#### 4.3.4. Protecting the interests of customers

- 95 The CAA has suggested that our proposals fail to take into account the impact of delays on our customers,<sup>93</sup> and also note that airspace users had favoured more "*ambitious delay targets*".<sup>94</sup>
- 96 As a general comment, if it is accepted that customers favour the delivery of technology and airspace modernisation, then the potential for greater delays during the implementation and transition periods is an unfortunate but unavoidable consequence<sup>95</sup>. We are fully aware of the impact of delays on our airspace users and that was a key driver behind our proposal of transition allowances. Instead of simply being a measure to soften our targets, as the CAA has implied, we considered that this mechanism would help to optimise information flows between NERL and its customers about how to schedule transitions to minimise disruption to those customers<sup>96</sup>.

#### 4.3.5. Licence compliance

- 97 For the avoidance of doubt, we were not making the suggestion in our SoC that the Project Oberon investigation was triggered by a failure to meet our capacity performance targets.<sup>97</sup> We do have concerns, however, that if the service quality targets are set at such a stretching level that we are guaranteed to fail to meet them, this will have a reputational impact and may increase both the likelihood of airspace users making allegations that we have not complied with our Licence obligation to meet reasonable demand, and the

<sup>90</sup> CAA Response, para 4.21 - 4.22, p.36.

<sup>91</sup> RP3 RBP Appendices, (SOC021), p.149

<sup>92</sup> CAA RP3 Decision, (SOC012);

PR19 final determinations: Ofwat, Severn Trent Water final determination, 16 December 2019, (**Severn Trent Water final determination**), (REP091), Table 2.4, p. 26;

Ofwat, PR19 final determinations: South West Water final determination, 16 December 2019, (**South West Water final determination**), (REP092) Table 2.4, p. 24;

Ofwat, PR19 final determinations: United Utilities final determination, 16 December 2019, (**United Utilities final determination**), (REP093), Table 2.4, p. 28; NERL calculations based on CAA (2014); and

Economic regulation at Heathrow from April 2014: Notice granting the licence, CAP1151, (SOC109)

<sup>93</sup> CAA Response, para 4.4, p.31 - 32.

<sup>94</sup> CAA Response, para 4.6, p.32.

<sup>95</sup> Industry Overview, Section 2.6.4, p. 25

<sup>96</sup> RP3 RBP Appendices, (SOC021), p. 34

<sup>97</sup> CAA Response, para 4.28, p. 38

likelihood of the CAA determining that the allegations pass the threshold of being non-trivial and non-vexatious for an investigation to be commenced.<sup>98</sup>

#### 4.3.6. Consistency with EU regulations

98 The CAA has made the argument that our service quality proposals are “*not necessarily consistent with EU performance regulation because the ... transition delay exemption mechanism would apply to both C1 and C2 and NERL did not demonstrate how [it] would be consistent with the EU legal framework*”.<sup>99</sup>

99 As we noted in the SoC, we consider that any such concerns about consistency are overstated and suggest that the CAA is applying a higher standard than is required.<sup>100</sup> The CAA has been clear that it can and will deviate from EU targets if there is a good reason for doing so.<sup>101</sup> As we have previously stated, we consider that the transitional requirements arising from the implementation of DSESAR constitute such a good reason.<sup>102</sup>

#### 4.4. Conclusion

100 In conclusion, we stand by our position as set out in the SoC that the service quality targets in the CAA’s decision are not in the public interest. They are not based on analysis of what it is possible for NERL to achieve at a time of technological transformation and will result in repeat penalties that remove any effective incentive and systematically lower the expected rate of return.

<sup>98</sup> SoC, para 221, p.65

<sup>99</sup> CAA Response, Second bullet, para 4.4, p. 32

<sup>100</sup> SoC, para 222, p. 65

<sup>101</sup> Our incentivisation with respect to environmental targets is one area where this approach has been taken by the CAA as NERL is incentivised by reference to 3Di as opposed to the European metric KEA: CAA Response, para 4.23, p.37.

<sup>102</sup> SoC, para 223, p. 65

## 5. 3Di

The CAA continues to support its decision to make NERL accountable for factors outside its control.

This approach remains unjustified by evidence and inconsistent with the principles of effective regulation.

If this inconsistency is not addressed, it will affect the motivation of front-line ATCOs in using this metric to help them mitigate the environmental impact of aviation.

### 5.1. Overview

101 The purpose of this Chapter is to consider the contrasting views of the CAA and NERL with respect to the 3Di environmental targets for RP3.

### 5.2. Introduction

102 As demonstrated in our SoC<sup>103</sup> whilst we support targets which actively seek to reduce the impact of aviation activity on the environment, it is not in the public interest to have incentive measures which capture factors that are not within our control.

103 The CAA's approach, which acknowledges this issue but discounts it, is inconsistent with good regulatory practice and unsupported by evidence. We do not consider that the CAA has made any new points in its Response that change our perspective on these issues.

### 5.3. Issues arising from the CAA's Response

#### 5.3.1. Significance of having consistent metrics

104 The CAA recognises "*the importance of not inappropriately constraining the evolution of the environmental 3Di metric if important new information emerges*" but qualifies this statement by reference to the "*benefits in maintaining a broadly consistent approach over time*".<sup>104</sup> However, this fails to address the points made in our SoC about the fact that we know the planned airspace modernisation changes will have an impact on 3Di performance, but we will not know where or how until at least mid-RP3.<sup>105</sup> In such circumstances, we do not see how the risks associated with the inclusion of such factors in the metrics are outweighed by any benefits from consistency.

#### 5.3.2. Accountability for events outside NERL's control

105 Our proposals for 3Di were calibrated to exclude the impact of factors outside our control. The CAA accepts that "*not all such factors will be in NERL's direct control (such as adverse weather)*" but regardless it considers that "*NERL is the organisation best placed to mitigate the impact of such factors on airspace users*".<sup>106</sup>

<sup>103</sup> SoC, p.67

<sup>104</sup> CAA Response, para 4.7, p. 32

<sup>105</sup> SoC, para, 235, p. 69.

<sup>106</sup> CAA Response, para 4.7, p. 32

106 We consider that the position of the CAA is illogical and inconsistent with good regulatory practice, particularly given that airports are responsible for changing airspace below 7,000 feet. It is also inconsistent with the CAA's approach to financial incentivisation for the C2 service quality target which excludes causes of delay outside NERL's control.<sup>107</sup> We note that the CAA has not produced any additional evidence to support its assertion that NERL is "*...best placed to mitigate the impact of such factors*".<sup>108</sup>

107 As a general comment, we note that it is the case that NERL has unilaterally taken steps to work proactively with customers to mitigate the impact of weather-related delays on customers (see Section 12.2.3). However, the fact that we chose to take such steps in our customer's interests does not justify an approach whereby our 3Di targets hold us financially responsible for the impact of such uncontrollable events.

### 5.3.3. Customer support for NERL's proposals

108 The CAA also seeks to support the position taken in its RP3 Decision by arguing that "*airspace users were supportive of the proposed level of ambition we had set (or thought it should be more ambitious) and supported the decision not to allow most of the exclusions proposed by NERL*".<sup>109</sup> The CAA also states that to the extent that airspace users agreed with NERL's 3Di proposals it was only subject to the "*caveat that there was further discussion ... on the proposed exclusions and level of ambition*".<sup>110</sup>

109 We do not recognise this description of the airspace users' position on our proposed exclusions at the time of the customer consultation during summer 2018. The Co-Chairs Report describes the metric definition as "*agreed*" instead of "*provisionally agreed*" (or equivalent).<sup>111</sup>

110 The airspace users did request to be provided with further information about how NERL's proposed exclusions would affect the 3Di score<sup>112</sup>. However, our understanding was that it reflected due diligence being undertaken on the understanding that the targets had been agreed and would be endorsed by the CAA rather than suggesting that airline acceptance was caveated, or indicating any concern about the basis of our calculations.

111 Looking at the airspace users' responses to the CAA's draft proposals we consider that the CAA is overstating the level of support they expressed for the CAA's approach over NERL's. Of the five airlines that submitted a response, three did not offer any opinion on the inclusion of uncontrollable factors in the 3Di metric.<sup>113</sup> Of the remaining two airlines that offered support for the CAA's draft proposals, one offered no explanation for their support. The other explained that they wanted fuel savings to be prioritised over noise by NERL in lower airspace and therefore wanted NERL to be motivated to focus on fuel savings by being held accountable for uncontrollable factors.<sup>114</sup> We do not consider that

<sup>107</sup> SoC, para 211, p. 63.

<sup>108</sup> CAA Response, para 4.7, p.32

<sup>109</sup> CAA Response, para 4.8, p.32.

<sup>110</sup> CAA Response, para 4.8, p.32.

<sup>111</sup> Co-Chairs Report, 2018, (SOC016), p.22 - 24

<sup>112</sup> Co-Chairs Report, 2018, (SOC016)

<sup>113</sup> Virgin Atlantic, Response to CAA Draft UK Reference Period 3 Performance Plan proposals (CAP1758), 12 April 2019, (**Virgin Atlantic Response to CAP1758**), (REP095); Emirates, Response to CAA Draft UK Reference Period 3 Performance Plan proposals (CAP1758), 11 April 2019, (**Emirates Response to CAP1758**), (REP096); and Ryanair, Response to CAA Draft UK Reference Period 3 Performance Plan proposals (CAP1758), 12 April 2019, (**Ryanair Response to CAP1758**), (REP097);

<sup>114</sup> PCS Aviation Group, Response to CAA Draft UK Reference Period 3 Performance Plan proposals (CAP1758), 12 April 2019, (**PCS Response to CAP1758**), (REP097);

this is sufficiently convincing evidence for the CAA's claim that airspace users supported its approach.

- 112 We note also that the Trades Unions expressed support for NERL's proposals, stating that *"As representatives of experts who operate in the operational environment continuously, we ask the CAA to review this position, to ensure that the measure has credibility as an incentive and doesn't become irrelevant to operational staff."*<sup>115</sup>

#### 5.4. Conclusion

- 113 In conclusion, we stand by our position as set out in the SoC that the 3Di metric would be better focused on factors that are within our control, especially given the support for this approach from air traffic controllers and the importance of their motivation to deliver RP3 outcomes. We do not consider that the CAA has provided any evidence or argument to counter that position.

<sup>115</sup> Draft UK Reference Period 3 Performance Plan Proposals CAP1758, Response Submission by Prospect, 12 April 2019 (**Prospect response to CAP1758**), 12/04/2019, para 32, p. 6

## 6. Opex

The CAA's Response repeats the CAA's views that there is insufficient evidence to support NERL's claims about the efficiencies built into our plan, and restates its support for the scale of its proposed efficiency challenge to our opex. The CAA does not provide any new evidence or arguments in support of these assertions and assumptions.

However, investment in the right levels of opex is critical in ensuring service levels for customers not just in RP3, but also in RP4 and beyond, and thus requires a longer term perspective. Appropriate, value for money, efficient opex is essential in ensuring:

- a safe operation;
- minimising delays;
- maximising flight efficient routes to save airlines fuel; and
- society emissions.

This is offered by the opex allowance in our RP3 RBP and not in the CAA's RP3 decision.

### 6.1. Overview

114 The purpose of this Chapter is to consider the contrasting views of the CAA and NERL with respect to the opex allowance required by NERL for RP3.

### 6.2. Introduction

115 As set out in our SoC (see Chapter 8) we believe that our plan struck the right combination of being both efficient and effective by delivering the right service at the right price. We consider that the CAA's efficiency challenge and reduction in our opex remains unjustified and unachievable without a reduction in outputs or service performance.<sup>116</sup>

116 The CAA's Response makes five main points:

- the CAA claims that **EU ACE benchmarking** carried out by the recognised European Performance Review Unit, which provides technical support for the setting of EU wide performance targets that the CAA refers to throughout its determination documents, is not appropriate and reflects 'mixed evidence';<sup>117</sup>
- the CAA claims that it is debatable whether or not the CAA's final decision would meet **EU wide cost efficiency targets**, but in doing so appears to disregard the written European Commission (EC) guidance on the criteria that should be used to assess costs;<sup>118</sup>

<sup>116</sup> SoC, Section 8.6.7, p. 84.

<sup>117</sup> CAA response, para 5.78, p. 58

<sup>118</sup> CAA response, para 5.26, p. 44

- the CAA rejects the **evidence provided by Economics Insight** and previously by NERL that the evidence provided by Steer/Helios is flawed;<sup>119</sup>
- the CAA continues to assert that its high-level observations on **historic outperformance and past efficiency improvements** are appropriate, without addressing any of our arguments that the CAA has ignored the underlying opportunities for these efficiencies - opportunities which have mainly been exhausted and are much reduced going forward; and
- the CAA once again relies on stating there is 'insufficient evidence' on the **efficiencies already built into NERL's plan**, despite a substantial amount of detail being provided and a refusal to provide specific requests or clarification on what evidence it is seeking but has not received.<sup>120</sup>

117 We respond to each of these points in the sections below.

### 6.3. Issues arising from the CAA's Response

#### 6.3.1. EU ACE benchmarking

118 The CAA's Response describes the comprehensively collected, collated, and analysed data from the Performance Review Unit (PRU), used for EU-wide ANSP ACE benchmarking and relied upon by NERL and EI, as "*inconclusive at best and of little value from a regulator's point of view in setting reasonably challenging efficiency targets*".<sup>121</sup> It is worth noting that the PRU provides information and advice to the Performance Review Body, which makes recommendations to the European Commission for the setting of EU-wide cost efficiency targets, to which the CAA refers regularly in both the RP2 and RP3 determination documents.

119 The CAA's main reasons for its characterisation of this evidence are considered in the following sections.

#### 6.3.1.2. The comparison does not distinguish NERL from NATS

120 The CAA criticises the ACE benchmarking because it does not separate out the performance of NERL from that of NATS (which includes terminal services provided by NSL in the UK).<sup>122</sup> It is rather surprising that the CAA takes this position given that:

- the CAA acknowledges that there are inevitably differences in cost allocation between en route and terminal across Europe<sup>123</sup> – looking at costs on a gate-to-gate basis helps to avoid this cost distortion; and
- the main ACE indicator - overall financial cost effectiveness - is split out by the PRU between en route and terminal.

121 For Gate to Gate (i.e. including Terminal) NATS is best in class of the 5 ANSPs in its comparator group.<sup>124</sup> For en route (i.e. NERL only) NATS is also best in class of the 5 ANSPs in its comparator group.<sup>125</sup> For ease of reference, of the 5 other (6 in total) efficiency metrics measured by the ACE benchmarking, NATS is also best in class on

<sup>119</sup> CAA response, Summary Box, p. 39

<sup>120</sup> CAA Response, para 5.37, p. 46; para 5.45, p. 47; para 5.63, p. 53; para 5.64, p. 53; para 5.64, final bullet, p. 53.

<sup>121</sup> CAA Response, para 5.59, p. 52.

<sup>122</sup> CAA Response, para 5.64, First bullet, p. 53.

<sup>123</sup> CAA Response, para 5.64, First bullet, p. 53.

<sup>124</sup> ACE Benchmarking Report, 2017, (SOC059), Figure 2.5, p.16 and p. 113

<sup>125</sup> ACE Benchmarking Report, 2017, (SOC059), p. 23 and p. 138



economic cost effectiveness, best in class on ATCO employment cost per flight hour, second best on ATCO productivity, second best on ATCO cost per ATCO hour, and second best on support cost per flight hour.

#### 6.3.1.3. Is a 2017 assessment reflective of 2019 performance?

122 The CAA suggests NERL's performance in 2017 benchmarking is not current and may not be reflective of 2019.<sup>126</sup> NERL referenced the 2016 ACE benchmarking in its RBP (the latest available at the time it was published) and the 2017 ACE benchmarking since then (the latest currently available). In both the 2016 and 2017 reports, as well as in the 2015 report, NERL's performance has been comfortably the best of its comparator group.<sup>127</sup> We welcome the CAA using 2015, 2016, 2017, or, once available, analysing the 2018 ACE benchmarking and have not expressed any "selective" preference for 2017.

#### 6.3.1.4. Relevance of the comparator group

123 The CAA states that it is unclear whether the comparator group is relevant.<sup>128</sup> It expresses concerns that NERL has adopted a simple approach for comparing itself against other large European ANSPs.<sup>129</sup> However, this description fails to acknowledge that NERL has not created this comparator group for itself by itself, but has drawn on the work of PRU, which has developed its views about the right comparators over time, based on its own analysis, expert judgement and advice from external experts<sup>130</sup>. The PRU has used the comparator group for NATS consisting of ENAV, ENAIRE, DSNA, DFS, and NATS since 2008, based on similarities in size, social economic and operational environments<sup>131</sup>. Therefore, it seems illogical to NERL that the CAA would ignore the comparator group established by the recognised experts in the benchmarking of ANSPs, or to suggest that the wider complexities have not been engaged with.

124 The CAA makes suggestions that the comparison could be improved through the inclusion of other ANSPs.<sup>132</sup> In relation to the specific suggestions that the CAA makes:

- comparisons to MUAC, LVNL, and Belgocontrol are inappropriate due to those ANSPs being responsible for either upper airspace only or lower airspace only;
- the CANSO database, cited as an alternative data source to ACE by the CAA,<sup>133</sup> is less relevant to NATS due to other large European ANSPs not participating in it<sup>134</sup>;
- the suggestion of using the USA ANSP as a comparator<sup>135</sup> seems to contradict the points made by the CAA elsewhere about economies of scale<sup>136</sup> given that the FAA is a single ANSP with common systems, centres, procedures, etc. across the whole of the USA, compared to the ANSPs operating in separate EU states.

<sup>126</sup> CAA Response, para 5.64, bullet 2, p. 53.

<sup>127</sup> ACE Benchmarking Report, 2017, (SOC059); ACE Benchmarking Report, 2016, (SOC060); and ACE Benchmarking Report, 2015 (REP037)

<sup>128</sup> CAA Response, para 5.65, p.53.

<sup>129</sup> CAA Response, para 5.67, p. 54.

<sup>130</sup> For example, the "clustering analysis" carried out by Steer to support the PRB's advice to the European Commission for in EU-wide target ranges for RP3, cited in EU-wide target ranges for RP3 - Annex 2. Air Navigation Service Providers: Advice on benchmarking of ANSPs and EU-wide cost targets, (SOC169), p. 57.

<sup>131</sup> ATM Cost-Effectiveness (ACE) 2006 Benchmarking Report, Prepared by the Performance Review Unit (PRU) with the ACE Working Group, May 2008 (**ACE Benchmarking Report 2006**), (REP089), vii.

<sup>132</sup> CAA Response, para 5.72, p. 55.

<sup>133</sup> CAA Response, para 5.79, p. 58.

<sup>134</sup> CANSO, Global Air Navigation Services Performance Report 2016, 2011 – 2015 ANSP Performance Results, The ANSP View, December 2016, (**CANSO Global Air Navigation Services Performance Report 2016**), (REP090), p. 6. (This was due to duplication with ACE benchmarking combined with concerns that the data are less accurate).

<sup>135</sup> CAA Response, para 5.79, p.58

<sup>136</sup> CAA Response, para 5.69 - 5.70, p. 58

### 6.3.1.5. Mixed evidence on performance

125 The CAA claims in its Response that there is mixed evidence on performance comparative to other European ANSPs.<sup>137</sup> The CAA states that the analysis provided by NERL in Appendix J of our revised business plan “shows that NATS costs are higher than the average costs across all European ANSPs” for 5 of the 6 indicators.<sup>138</sup> This comment is disingenuous given that NERL, as one of the largest ANSPs in Europe, should not in all seriousness be compared to the likes of the Maltese, Cypriot, or Moldovan ANSPs which are included in that European average along with all other EU ANSPs. This is true of all of the larger EU ANSPs who all have generally higher costs than the smaller EU states. The PRU’s selection of comparator groups reflected their views of the appropriate bases for comparisons.

126 In summary we do not find that any of the CAA’s concerns provide any reason to discount the EU ACE benchmarking or to ignore it as a key piece of evidence in assessing our efficiency and performance against other ANSPs.

### 6.3.2. EU wide efficiency target measures

127 The CAA states that “the EU wide efficiency targets are not a binding cap on the challenge we set to NERL”.<sup>139</sup> Although we do not dispute that characterisation, we do suggest that, given the significance that the CAA attributed to these targets in its RP2 determination, that they are an important reference point to be considered.

128 The CAA claims that “it is indeed debateable whether those savings [in its RP3 Decision] do exceed the EU-wide targets of 1.9%”.<sup>140</sup> The CAA describes its assessment of unit operating costs in its RP3 Decision, rather than determined costs upon which the EU targets are based, as being “equivalent to an average reduction of 1.9% p.a.” relative to 2019.<sup>141</sup>

129 We are surprised that the CAA considers this area to be ‘debateable’ given that the European Commission (**Commission**) has set out clearly within the Commission Implementation Regulation 2019/317, Annex IV how cost efficiency should be assessed.<sup>142</sup> The criteria set out by the Commission in relation to the assessment of cost efficiency are: (1) focused on determined cost, and not on one individual building block (for example operating costs as the CAA has referenced in its Response);<sup>143</sup> and (2) identify three particular criteria, and an allowable deviation from those criteria, to measure cost efficiency. The 3 criteria used by the Commission are as follows:

- **Criteria 1: the level of cost efficiency ‘during the RP3 period’.** On this basis, NERL’s RBP delivers a 2.3% pa reduction between 2019 and 2024 using the traffic forecast contained within the RBP, considerably exceeding the 1.9% target.<sup>144</sup>
- **Criteria 2: the ‘longer term trend’ measure of how unit costs have reduced between 2014 to 2024 (RP2 and RP3 combined).** This criteria recognises that the selection of one particular base year and use of only the relatively short RP3 time horizon to assess cost efficiency is inappropriate as it will naturally ‘skew’ results due to the uneven

<sup>137</sup> CAA Response, paras. 5.75-5.78, p. 57 - 58

<sup>138</sup> CAA Response, para 5.76, p. 57

<sup>139</sup> CAA Response, para 5.24, p.44

<sup>140</sup> CAA Response, para 5.26, p.44

<sup>141</sup> CAA Response, para 5.27, p. 44

<sup>142</sup> [Commission Implementing Regulation \(EU\) 2019/317, Annex IV, Criteria for the Assessment of Performance Plans and Target at National or Functional Airspace Block Level](#), (accessed on 22/12/19)

<sup>143</sup> CAA Response, para 5.27, p. 44

<sup>144</sup> Calculations for CMA Efficiency, 27 December 2019, (**Calculations for CMA Efficiency**), (REP075)

profile of costs from year to year. The EU wide target for this ten-year period is a real DUC reduction of 2.7% per annum. NERL's RBP delivers a 2.64% per annum reduction on this basis, using the traffic forecast in the RBP.<sup>145</sup> If the NERL May-19 forecast is used, this delivers a 2.8% pa reduction across this ten-year time horizon.<sup>146</sup>

- **Criteria 3: the 'relative cost of each ANSP compared to other ANSPs of similar size / operating environment.** On this basis, as shown in ACE benchmarking, NERL performs very well, and the Commission will take this into account within the efficiency assessment. The comparator groups have been selected by the Commission to create as close to a 'like for like' assessment as possible.

130 A deviation from the criteria above is also allowed, because the Commission is required, under Article 14(1) to "... assess the consistency of the national performance targets ... with the Union-wide performance targets on the basis of the criteria laid down in point 1 of Annex IV, and taking into account local circumstances".<sup>147</sup> In particular, deviation is allowed if additional costs are required to deliver capacity gains.<sup>148</sup> In this respect, it is important to note that the UK's RP3 cost efficiency would be 0.4% per annum<sup>149</sup> higher (better) if the ACOG and OFF funds relating to airspace modernisation, which is critical for future capacity and which add 2% to determined costs, were excluded from the calculation. NERL's view is that the UK would be justified in making a strong case to explain that if these costs, which are temporary and will largely be returned to customers if unspent, were excluded from the UK plan, the underlying rate of cost reduction is even greater than shown above and would outstrip the EU wide target by some margin.

131 Put simply, when considering the full range of criteria used by the Commission to assess cost efficiency – i.e. at a determined cost level, including both the RP3 efficiency, the longer term trend, comparison against other ANSPs, and taking account of local factors such as additional costs relating to capacity, NERL's RBP achieves the EU-wide targets for cost efficiency. The CAA does not need to cut costs relative to NERL's RBP, to meet, or even indeed exceed, the EU wide targets.

### 6.3.3. Reliability of the Steer/Helios report

132 We maintain our view that the Steer/Helios report is flawed and unsupported by evidence.<sup>150</sup> The CAA's responses to the specific criticisms raised in relation to the Steer/Helios advice regarding the individual elements of opex are effectively just a restatement of Steer/Helios' approach in its report, rather than an attempt to respond to the particular points raised by EI.<sup>151</sup>

### 6.3.4. Historic outperformance and past efficiency improvements

#### 6.3.4.1. General approach

133 NERL does not take issue with the principle of using historic performance indicators as one of multiple sources of evidence upon which the CAA bases its decision. However, any regulator must take due care that the causes and drivers of historic performance, good or bad, are assessed and understood to determine whether they represent a good predictor of future performance – just as financial institutions regularly warn customers that past

<sup>145</sup> Calculations for CMA Efficiency, (REP075)

<sup>146</sup> Calculations for CMA Efficiency, (REP075)

<sup>147</sup> SES Regulations, (SOC004), Article 14, L56/15

<sup>148</sup> SES Regulations, (SOC004), Annexe IV, L 56/46

<sup>149</sup> Calculations for CMA Efficiency, (REP075)

<sup>150</sup> SoC, Section 8.6.4, p. 81.

<sup>151</sup> CAA Response, paras. 5.43 - 5.57, p.47 - 51.

performance is no guarantee of future results. This applies to whatever period the CAA elects to use as the basis for any analysis and is not, as CAA claims, a “selective” approach to arguments and evidence motivated by a desire on NERL’s part to use a particular base year that generates more favourable results than another.<sup>152</sup> Instead, NERL considers that the CAA has not followed good regulatory practice with respect to its assessment and thus its conclusions on historic performance are flawed.

#### 6.3.4.2. Identification of a baseline year

134 For instance, we understand that using a single year as the baseline for assessing opex can create risks as *“there are fluctuations in opex, for example due to weather events, and therefore opex in any individual year may not be a good reflection of the future”*.<sup>153</sup> For this reason, when determining an opex baseline in previous redeterminations in the water sector, the CMA *“considered that using any one year might be unrepresentative and that an average was therefore a more robust approach. We have therefore used an average for the AMP5 period, excluding items that we consider either non-recurring or inefficient.”*<sup>154</sup> As such, the CAA’s reliance on 2017 is inappropriate unless it has carried out adequate due diligence to ensure that this one year is representative in terms of the drivers of cost for the future.

135 It should be noted that while the 2019 audited regulatory accounts are not yet available, the CAA has chosen not to make use of the 2018 audited regulatory accounts which are available. In that respect we note that the CAA discounts the 2017 ACE benchmarking because *“it does not provide evidence of the relationship between NATS performance in 2017 and 2019”*.<sup>155</sup> At the same time, however, the CAA is content to use 2017 data for this assessment, without giving any consideration to the 2018 data.

#### 6.3.4.3. Appropriate unit of measurement

136 The CAA discounts NERL’s view that flights, rather than CSUs should be used to assess changes in unit costs.<sup>156</sup> The rationale given by the CAA is that CSUs are the billing unit against which customers are charged. We recognise that CSUs are used to bill customers, but as CSU volumes are affected by, in particular, aircraft weight (which as the CAA notes has increased historically, but does not drive costs in any way) we remain of the view that simple flight volumes are a better unit for this calculation – i.e. they are a more genuine driver of cost given that it is flights that NERL is directing.

#### 6.3.5. Efficiencies already built into NERL’s plan

137 In its Response the CAA relies once again on its default position that there is *“a lack of detailed support”* for the £70m unsecured savings in our plan, justifying its approach which completely discounts this from its assessment.<sup>157</sup> We have provided a number of slides in the Opex Support Pack<sup>158</sup> which set out detailed support for the anticipated efficiency savings. As with a number of other areas where the CAA purports to having received insufficient evidence, we remain unclear as to what further evidence the CAA requires.

<sup>152</sup> CAA Response, Summary Box, p. 39.

<sup>153</sup> Bristol Water Final Determination (SOC111), para 5.31(b), p. 139

<sup>154</sup> Bristol Water Final Determination (SOC111), para 5.55, p. 146

<sup>155</sup> CAA Response, para 5.64, bullet 2, p. 53.

<sup>156</sup> CAA Response, para 5.18, p. 43.

<sup>157</sup> CAA Response, para 5.21, p. 43.

<sup>158</sup> Operating Cost Support Pack, (SOC106), p 9

### 6.3.6. Other points

- 138 The CAA also raises some other more minor points that misrepresent NERL's arguments and require correction.
- 139 The CAA suggests that we raised "*detailed objections to [the CAA's] targets based on obstacles to further our efficiencies, including redundancy costs and high levels of unionisation*".<sup>159</sup> This is not the case. Instead, we simply highlighted in our SoC that even if we believed such efficiencies were deliverable, the CAA had failed to include in the RP3 plan the costs required to fund a restructuring programme to deliver any such efficiencies.<sup>160</sup>
- 140 The CAA implies that NERL already has the means to achieve the opex cuts proposed by the CAA because we have said we have had to implement some temporary, unsustainable austerity measures in the face of the uncertainty over the RP3 outcome.<sup>161</sup> The CAA has elected to ignore that these measures are temporary and unsustainable.
- 141 The CAA says that we have identified no areas where we expect to out-perform our business plan assumptions.<sup>162</sup> In fact NERL has stated that, overall and in combination, there are more cost pressures and risks than areas of out-performance and opportunity but there are a very small number of individual budget lines with some out-performance potential. The only item that is material is £1.1m p.a. of apprenticeship levy rebate for TATC training that was not planned in our RP3 plan. However, noting the recent delay in Heathrow runway 3 go live date (see paragraph 3.3.2.70 above), it seems likely that we should now be able to delay some TATC training costs into RP4 from RP3. Against this, we are aware of potentially larger cost pressures in areas such as extended dual running and cyber security costs over RP3.
- 142 The CAA rejects the need to get the phasing of any opex cuts right.<sup>163</sup> It dismisses the "*rate of change of opex from 2022 to 2024*" as being of "*no particular relevance*".<sup>164</sup> The CAA has taken this approach despite the fact that this is important to NERL in running its business. It also directly contradicts the CAA's approach in drawing conclusions on performance in RP2 compared to the determination for specific individual years, with no effort to look at the underlying make-up of the costs in each year.

## 6.4. Conclusion

- 143 In conclusion we do not consider that the CAA's Response provides any additional evidence or argument to change our view. This is because the CAA has not attempted to understand the underlying detail and drivers for operating costs in our business.

<sup>159</sup> CAA Response, para 5.23, p. 43.

<sup>160</sup> SoC, para 333, p. 92.

<sup>161</sup> CAA Response, para 23, p.11, commenting on SoC, para 39, p. 19.

<sup>162</sup> CAA Response, para 27, p.12.

<sup>163</sup> CAA Response, para 5.35, p. 45

<sup>164</sup> CAA Response, para 5.35, p. 45

## 7. Non-regulated Income

The CAA's Response continues to assert that NERL has not provided sufficient evidence to justify its residual cost base for reduced regulatory income. This Reply provides more analysis to demonstrate at a granular level that it is not possible to reduce costs further. This is mainly due to the nature of those costs being either:

- fixed costs which form a platform for marginal revenues where market opportunities exist for such revenues; or
- surplus NERL resources which were formerly marketed (particularly through or to NSL) but which are now required for the delivery of NERL's RP3 commitments and have therefore been redeployed, resulting in an avoidance of cost increases for NERL in RP3.

### 7.1. Overview

144 The purpose of this Chapter is to consider the contrasting views of the CAA and NERL with respect to the assumptions about the levels of non-regulated income anticipated during RP3 and the ability of NERL to make any cost savings during RP3 with respect to those non-regulated activities. We consider that the savings proposed by the CAA represent an unevidenced reduction in opex resources under the single till mechanism.

### 7.2. Introduction

145 As demonstrated in our SoC, whilst we anticipate our non-regulated income to drop during RP3 by around £19m p.a. compared to the peak RP2 year (2017), we consider that this only equates to a reduction in costs of approximately £8m p.a.<sup>165</sup> Whilst the CAA has accepted our revenue forecast, it has applied a greater additional challenge to reduce opex by £24m over five years "*reflecting [the CAA's] estimate of a reasonable cost saving to go hand in hand with the fall in revenue*".<sup>166</sup> The CAA has provided no evidence or basis for estimate beyond its assertion that it is 'reasonable'. Based on our expert knowledge of our business, we do not consider that the CAA's additional proposed opex cut of £24m is reasonable or achievable.

146 In the its Response, the CAA raises two points challenging our position:

- **Lack of evidence** to show that NERL intends to make cost savings to reflect the forecast decline in non-regulated income;<sup>167</sup> and
- **Contradictory arguments** made by NERL on the fixed nature of the costs associated with providing non-regulated services.<sup>168</sup>

<sup>165</sup> SoC, para 314, p. 87

<sup>166</sup> CAA Response, para 5.38, p. 46.

<sup>167</sup> CAA Response, paras 5.37, p. 46

<sup>168</sup> CAA Response, paras 5.39 – 5.40, p. 46

147 We respond to these individually in the sections below. We note that the CAA has not provided any additional evidence in support of its proposed opex cut.

### 7.3. Issues arising from the CAA's Response

#### 7.3.1. Evidence to support NERL's planned cost savings

148 The CAA states that *"in NERL's plans there was a lack of evidence provided by NERL that it intended to make cost savings to reflect its forecast decline in non-regulated business"*.<sup>169</sup> We disagree with this characterisation of the evidence we provided to support of our plan.

149 Contrary to the CAA's assertion, we set out evidence regarding our costs at increasingly detailed levels in our RBP,<sup>170</sup> in our response to the CAA's Draft RP3 Decision<sup>171</sup> and its final RP3 Decision,<sup>172</sup> and in our SoC.<sup>173</sup> We have provided a Non-Regulatory Income Support Pack<sup>174</sup> as part of this submission which pulls together the detail with respect to the evidence previously submitted to the CAA and its consultants. This data shows that:

- **we are making cost savings:** the costs of supporting some non-regulated activities are reducing as cost savings are made in relation to lower non-regulated activity levels in those areas.<sup>175</sup> For example, around £35m of cost savings are planned to be made over RP3 in relation to the costs of supporting the SESAR Deployment Manager which will cease in RP3;<sup>176</sup>
- **we are redeploying costs:** other costs are being redeployed to regulated activities. A key example of this is ATCO training - NERL's ATC college will be at full capacity during RP3 supporting greater internal demand with no capacity to service 3<sup>rd</sup> party training contracts. This means that whilst our non-regulated revenues will reduce, the associated costs of around £5m over RP3 will not be avoided as they will instead be incurred with respect to regulated activities;<sup>177</sup>
- **the opportunities for cost reduction are limited:** other elements are marginal in nature with no opportunity for cost reduction as a result of reduced non-regulated activities. The most noticeable of these is a £20m reduction, over RP3, in EU R&D co-funding revenues.<sup>178</sup> The activities and costs relating to these grants will continue regardless of whether the grant is available or not. In any case, any income that is received will be passed back in full to customers outside of non-regulated income, in accordance with European charging regulations.<sup>179</sup>

150 While the CAA may have *"considered it essential that this decline [in non-regulated income] be matched by a reasonable challenge to reduce operating costs"*<sup>180</sup> and for *"cost savings to go hand in hand with the fall in revenue"*<sup>181</sup> this appears to be a desk-based assessment without any analysis of the underlying cost drivers affecting these cost lines. If the CAA

<sup>169</sup> CAA Response, para 5.37, p. 45

<sup>170</sup> RP3 Business Plan, (SC0001)

<sup>171</sup> Draft UK Reference Period 3 Performance Plan proposals, CAP1758, (OSC002)

<sup>172</sup> CAA RP3 Decision, (SOC008),

<sup>173</sup> SoC, Section 9, p. 87

<sup>174</sup> Non-Regulatory Income Support Pack, Explanation of RP3 revenue projections, and the impact these have on our operating costs, December 2019, (**Non-Regulatory Income Support Pack, December 2019**), (REP036)

<sup>175</sup> Non-Regulatory Income Support Pack, December 2019, (REP036), p. 2, 4 - 8

<sup>176</sup> Non-Regulatory Income Support Pack, December 2019, (REP036), p. 2, 4 - 8

<sup>177</sup> Non-Regulatory Income Support Pack, December 2019, (REP036), p. 2, 4 - 8

<sup>178</sup> Non-Regulatory Income Support Pack, December 2019, (REP036), p. 5, 10, 12 - 13

<sup>179</sup> Non-Regulatory Income Support Pack, December 2019, (REP032), p. 26 - 30

<sup>180</sup> CAA Response, para 5.37, p. 46

<sup>181</sup> CAA Response, para 5.38, p. 46

had carried out such an analysis, or properly considered the evidence submitted by NERL, it would have clearly shown that a high-level assumption of this nature is not credible relative to the nature of our business.

- 151 We are not sure what further evidence the CAA requires to satisfy its concerns beyond that which we have already submitted, and the CAA has not been specific about the additional evidence it requires despite our requests for clarification. In fact, the CAA's reliance on the claim that there is a 'lack of evidence' appears to be a de-facto response when there is no specific rationale for the CAA's proposed cuts.
- 152 The Non-Regulated Income Support Pack<sup>182</sup> covers the evidence that has already been submitted to the CAA but also aims to drill down into the detail regarding exactly which areas of non-regulatory income are reducing, and the precise impacts these will have on our costs. For example, where certain costs are not reducing, but are instead being re-deployed to handle regulated services, which the CAA would expect to happen,<sup>183</sup> we demonstrate the precise areas of regulated work that this resource will be supporting during RP3.<sup>184</sup> One such example is our analytics team who will be supporting airspace modernisation, and specifically LAMP, rather than supporting NSL's non-regulated business activities.<sup>185</sup>

### 7.3.2. Are NERL's views with respect to the fixed nature of its costs contradictory?

- 153 The CAA asserts that NERL has provided contradictory evidence as to the fixed nature of the costs supporting non-regulated activities and that we misunderstand the concepts of fixed and common costs.<sup>186</sup>
- 154 **We have not misunderstood the difference between common and fixed costs.** We do not consider that these terms are mutually exclusive, but we also do not consider that our costs are fixed simply because they are common. Instead it is simply the case that many of the common costs shared across our regulated and non-regulated activities are also fixed in nature. For example, during RP2 the costs associated with the ATC college facilities and core instructor staff were common costs shared between both the regulated business activities, providing trainee ATCOs for en route and Oceanic airspace, and non-regulated activities, training ATCOs from other ANSPs. These costs are also fixed in that whether there is demand for 100 trainees or 200 trainees, the majority of the costs will not change as they relate to fixed infrastructure or will only go up in the event of a major step change. For instance, the combination of the skills, validations and experience that the instructors must have to effectively teach trainees means that there is a minimum requirement of instructors required regardless of how many trainees they are teaching. A reduction in income, therefore, does not automatically translate to a reduction in costs.
- 155 Secondly, the CAA asserts that "*it is up to NERL to maintain sufficient operational flexibility to make this [reduced growth of the cost base] happen*".<sup>187</sup> In many cases this is exactly what has happened – re-deploying college training resources, engineering staff and analytical expertise from non-regulated revenue generating activities in RP2 into core regulated services in RP3, reducing the need for additional resources to be added to the business. However, it is important that the CAA understands (a) exactly which elements of our cost

<sup>182</sup> Non-Regulatory Income Support Pack, December 2019 (REP036)

<sup>183</sup> CAA Response, para 5.39, p. 46

<sup>184</sup> Non-Regulatory Income Support Pack, December 2019, (REP036), p. 2, 4 - 8

<sup>185</sup> Non-Regulatory Income Support Pack, December 2019, (REP036), p. 2, 4 - 8

<sup>186</sup> CAA Response, paras 5.39 - 5.40, p. 46

<sup>187</sup> CAA Response, para 5.39, p. 46



base are affected by this and (b) the make-up of the costs in these areas. Our supporting pack<sup>188</sup> covers this and also demonstrates that in most cases, the shared (common) staff that support non-regulated activities spend only a small fraction of their time on this work. Once again, CAA do not appear to have considered the detailed make up of these costs or the activities concerned but have merely assumed a theoretical position.

- 156 An example, provided purely to illustrate this point in the clearest terms, would be if the entire cost base supporting non-regulated income were to be comprised of 100 commonly skilled engineers. In that scenario a 10% reduction in demand could reasonably be both expected and achieved by reducing the pool of engineers by 10. However, achieving a 10% reduction in demand for a team of 3 specialist surveillance engineers is virtually impossible once any overtime has been removed.
- 157 Additionally, in periods where non-regulated income was increasing, such as during RP2, we did not receive any feedback from the CAA that the relative fixity of these costs, which did not increase linearly as the revenues increased, generating greater non-regulated profits for the single till and lowering prices for airline customers as a result, lacked sufficient operational flexibility.
- 158 Finally, the CAA quotes NERL's computation that to achieve an additional £49m of regulated profit could require revenues to increase by c.£500m.<sup>189</sup> This estimate was generated by NERL in response to the CAA's Draft RP3 Decision which assumed an increase in non-regulated income.<sup>190</sup> The CAA has quoted this illustration out of context. Our SoC clearly states that the opportunities for further non-regulated income of a similar nature to the existing non-regulated activities are very scarce (i.e. opportunities which draw on resources that are highly fixed and/or common (shared) with regulated activities).<sup>191</sup> As a result, to achieve an additional £49m of non-regulated income, we would be required to pursue more conventional commercial business that would not share these features. Instead, it would likely be more typical of the type of business NSL undertakes with margins of, as an example only, 10%. The £500m revenue figure was generated as an illustration on this basis.<sup>192</sup> This illustration, as is clear from the text of the SoC, was provided to demonstrate the scale of the challenge the CAA's proposals entailed and was not an expression of the features of NERL's existing non-regulated business.

## 7.4. Conclusion

- 159 In its Response to our SoC, the CAA has provided no new rationale or evidence to support the proposed cuts to the costs linked to non-regulated income. In addition, the CAA has not acknowledged or commented on the nature of the costs drivers for these activities. We have provided additional detail to help explain the precise nature of the revenues and costs concerned. Fundamentally, this supports the rationale that we provided previously which is that the relationship between non-regulated activity income and costs, at the detailed level, is such that the level of cost proposed by the CAA is not achievable without affecting regulated activities.

<sup>188</sup> Non-Regulatory Income Support Pack, December 2019, (REP036)

<sup>189</sup> CAA Response, para 5.40, p. 46

<sup>190</sup> SoC, para 328, p. 91

<sup>191</sup> SoC, para 327, p.91

<sup>192</sup> SoC, para 328, Second bullet, p. 92

## 8. Pensions

NERL finds the CAA's approach to its pension cost allowances in its Response to be confused and lacking in evidence. It places NERL at risk from pension costs without any real justification or demonstration of benefits to customers. Therefore, NERL stands by its position in its SoC.

### 8.1. Overview

160 The purpose of this Chapter is to consider the contrasting views of the CAA and NERL with respect to pension cost allowances.

### 8.2. Introduction

161 As demonstrated in our SoC<sup>193</sup> we have concerns about the CAA's proposed cuts to our Defined Benefit (DB) deficit recovery payments. We established in the SoC that our pension costs have been found to be reasonable. As a consequence, we do not consider that the CAA's allowances, including its efficiency adjustment, are in the public interest.

162 In its Response, the CAA has restated its support for its proposed efficiency adjustment to the DB deficit repair pension costs. It has also stated that the pension pass-through mechanism should provide protection to NERL in the event that the actual efficient costs and employer contributions are higher than the allowed costs.<sup>194</sup>

163 In this Reply we address five specific issues covered in that Response:

- that Defined Benefit (DB) pension costs should not be increased to the level of NERL's business plan;
- concerns about the treatment of any future funding surplus;
- that the efficiency adjustment to deficit repair costs represents a reasonable assessment of the advice from GAD and that the DB scheme is low risk;
- the CAA's views on the application of the pension pass-through mechanism; and
- Defined Contribution (DC) pension costs.

164 We do not consider that any of the evidence or explanation provided by the CAA in the Response significantly alters the position as presented in our SoC. However, we recommend that the CMA seek further views from the CAAPS Trustees on these differences in approach to pension rights and obligations.

<sup>193</sup> SoC, Section 10, p.93

<sup>194</sup> CAA Response, Summary Box, p. 60

### 8.3. Issues arising from the CAA's Response

#### 8.3.1. Defined Benefit (DB) pension costs

165 In the CAA's Response and Decision, it has portrayed its adjustment to our DB scheme deficit repair costs to reflect the potential for lower levels of prudence at future valuations as an *"efficiency adjustment"*.<sup>195</sup> We challenge this adjustment and question the clarity of the rationale. In its Response, the CAA apparently concluded that an adjustment was justified on the basis of *"GAD's review and other relevant information that NERL's pension costs assumptions were not sufficiently stretching"*.<sup>196</sup> Yet in its RP3 Decision, the CAA's adjustment was based on *"the importance of considering users' interests directly and transparently in forming the investment strategy, the issues surrounding trapped surpluses and benefits to the scheme of a stable regulatory regime"*.<sup>197</sup>

166 **The scope for achieving efficiencies with respect to these costs is limited:** An 'efficiency adjustment' implies that these costs are within the control of NERL to make efficiency savings. NERL has no control over the scale of these contributions which, once set by the Trustees, are detailed as a schedule of contributions to which NERL is contractually committed.<sup>198</sup>

167 **The scale of the 'efficiency adjustment' is arbitrary:** The CAA has not provided any analysis on how the scale of the reduction has been derived relative to the concerns it has identified about NERL's costs and a potential trapped surplus (see Section 8.3.2 below) and, in fact, appears quite arbitrary. It is worth noting that GAD did not make any such recommendation in its review of our costs.<sup>199</sup>

168 **NERL does not need an efficiency challenge to incentivise prudent behaviour:** The CAA has also failed to offer any evidence that NERL requires incentivisation to mitigate future liabilities and pension contributions. The pension reforms made by NERL, and initiated when the scheme was in surplus, point to NERL acting as a commercially minded employer.<sup>200</sup>

#### 8.3.2. Market conditions and the trapped surplus

169 The CAA has identified the potential for a trapped surplus at the point of the 2020 valuation, and the lack of understanding as to how NERL would manage that in the interests of customers, as another reason for imposing its 'efficiency adjustment'.<sup>201</sup> We remain of the opinion that the CAA has not taken due account of market conditions in this respect, and it has also given inadequate consideration to evidence that demonstrates that we manage our pension costs, to the extent possible, in the interests of our customers.

170 **Impact of market conditions:** Ahead of the CAA's RP3 Decision, GAD advised the CAA that the required return from 31 December 2018 in order to reach full funding at the 2020 valuation had significantly increased to around gilts plus 5.5% a year, although given positive market movements in the first four months of 2019 the equivalent rate applicable

<sup>195</sup> CAA Response, Summary Box, p. 60; and CAA RP3 Decision, (SOC012), para 5.52, p. 66

<sup>196</sup> CAA Response, para 6.3, p. 61

<sup>197</sup> CAA RP3 Decision, (SOC012), para 5.63, p.63

<sup>198</sup> NATS Section of the Civil Aviation Authority Pension Scheme, Schedule of contributions covering the period to 31/12/2026, (**Schedule of contributions covering the period to 31/12/2026**), (REP074)

<sup>199</sup> GAD Report, (SOC051)

<sup>200</sup> SoC, p. 253, p. 74

<sup>201</sup> CAA Response, para 6.5, p.62

from 30 April 2019 should be lower.<sup>202</sup> This return is higher than the Scheme Actuary's expected return at the 2017 valuation of gilts plus 2.5% a year.

171 **We do manage our pension costs, to the extent possible, in the interests of customers:** NERL has evidenced how it has acted in the interests of customers through the reforms it has taken and in assessing trustee valuation assumptions and reviewing the structure of deficit repair plans.<sup>203</sup> We note that GAD recommended that the CAA engage with airline customers on the de-risking of the DB scheme in its March 2014 report.<sup>204</sup> NERL has also encouraged the CAA to do this in its conversations with them. However, the CAA has chosen not to do so.

172 **The role of the Trustees:** The CAA's RP3 Decision and its Response do not appear to take account of the duties of Trustees under pension legislation in relation to any surplus should it arise.

173 **The role of the RPS:** We suggested that the CAA uses the RPS to make explicit that it would seek evidence of customer interest in its review of NERL's pension costs.<sup>205</sup> We are not suggesting that the RPS be used to set out NERL's plan to manage pension costs.

### 8.3.3. GAD's view on the reasonableness of our pension costs

174 In the CAA's Response it has disputed our interpretation of GAD's review of the reasonableness of our pension costs and forecasts, instead suggesting that it was appropriate for the CAA to conclude, based on GAD's comments, that NERL's assumptions "*were not sufficiently stretching*".<sup>206</sup>

175 **GAD did conclude that our costs were within a reasonable range:** Whilst we acknowledge the contextual clarification that GAD has provided via the CAA's Response,<sup>207</sup> it remains the case that GAD concluded that our "*pension costs were within a reasonable range compared to wider practice...*".<sup>208</sup> Furthermore, GAD agreed that deficit contributions corresponded to the recovery plan and that it has no concerns over the cash contributions for new accrual in the DB scheme (as well as the DC scheme).<sup>209</sup> Also, as noted in NERL's response to CAA's draft proposals,<sup>210</sup> GAD's report on NERL's pension costs states that the level of prudence in the 2017 valuation was reasonable relative to wider UK practice, and that the discount rate used appeared to take account of the strength of the sponsor and the scheme's investment strategy.<sup>211</sup>

176 **NERL's DB scheme does have some unique characteristics:** It is understood that, as GAD comments in the CAA's Response, NERL's pension arrangements cannot be representative of typical UK private sector DB schemes. NERL's DB scheme has significant protections afforded by the Trust Deed & Rules and the government's undertakings at the PPP.<sup>212</sup> The GAD benchmarking analysis relies on comparisons with pension schemes from other businesses and sectors which are not directly comparable

<sup>202</sup> GAD Letter to CAA, Review of further evidence provided by NERL, 05 June 2019, (**GAD letter to CAA, 05/06/2019**) (REP057), para 34, p. 8

<sup>203</sup> Response to CAP1758, (SOC003), Section 7.3, p. 46

<sup>204</sup> GAD Report for CAA, Advice to the Civil Aviation Authority RP2 price control review for NATS (En Route) plc, Analysis of pension costs, 14 March 2014, (**GAD Report 2014**), (REP051), para 1.14, p. 2

<sup>205</sup> SoC, para, 369, p. 100

<sup>206</sup> CAA Response, para 6.3, p.61

<sup>207</sup> CAA Response, para 6.4 Box, p. 62

<sup>208</sup> CAA Response, para 6.3, p.61; and see also GAD Report, (SOC051), para 1.27, p. 6

<sup>209</sup> GAD Report 2018, paras 7.26 and 7.31, pp. 41-42.

<sup>210</sup> Response to CAP1758, (SOC003), Section 7.3, p. 46

<sup>211</sup> GAD Report, (SOC051), para 6.1, p. 26

<sup>212</sup> ToaP Deed, (SOC046); Industry Overview, Section 2.10.2.2, p. 38, Section 2.10.2.4, p. 39; and The Airline Group Limited and British Airways PLC and Others, Shareholder Agreement, 02 November 2016, (**Strategic Partnership Agreement, 02/11/2016**), (REP088), clause 11.6

to NERL's DB scheme because of the restriction on the scheme's amendment powers to reduce or stop the future accrual of benefits.

177 **NERL's DB scheme should not be characterised as low risk:** Finally, the CAA suggests that overall a "*lower level of prudence*" in the assumptions supporting NERL's DB scheme compared to the average UK DB scheme.<sup>213</sup> We do not consider, however, that this is a proper reflection of the level of risk posed by the DB scheme which is not low risk when seen in the context of: the size of the scheme's obligations; the protections provided by the Trust Deed and Rules, which includes a "no decrement" clause to staff at the time of the PPP; and the risk of changes in financial market conditions and longevity which NERL cannot control.<sup>214</sup>

#### 8.3.4. Pension pass through

178 In the SoC we expressed our concerns that it is not clear that the pension pass-through mechanism under Article 28 of the EU's performance and charging regulation would allow the pass-through of the CAA's £18m reduction to DB scheme deficit contributions that it has now characterised as an 'efficiency adjustment'.<sup>215</sup>

179 **The pass-through mechanism is subject to important caveats:** We welcome the CAA's view that the EU legislation would permit such a pass-through in principle, but note that this is subject to various new caveats which were not in force at the time of the previous example of pass-through quoted by the CAA in its Response.<sup>216</sup> In particular, the CAA's view is that "*unforeseen and significant changes' to costs efficiently incurred by NERL, which arise from such unforeseeable financial market conditions (as opposed to factors within NERL control, such as salaries and staff levels) at the 2020 valuation, should be eligible for the pension cost pass-through under the EU performance regulation*" (emphasis added).<sup>217</sup> We are concerned that the CAA and/or the European Commission might not regard the deficit contributions as 'significant' enough. The scope for further meaningful reform during RP3 is limited due to the substantial protections in place and the far-reaching reforms already undertaken by NERL.

180 **The characterisation of the CAA's reduction in costs as an efficiency adjustment risks an outcome where it is not eligible for pass-through:** There is a risk that if the CAA describes the deficit reduction as an efficiency adjustment then, by definition, it implies a controllable cost that has not been efficiently incurred which is not eligible for pension pass through. Following the CAA's logic, by definition, any deficit repair cost incurred above CAA's efficiency adjustment (see Section 8.3.1 above) would not be eligible for pension pass-through. As such, even though we dispute the basis on which this reduction is being made, and do consider that it represents efficient costs, the CAA has already taken a clear position that it considers them to be inefficient. This compromises our ability to seek recovery under the pass-through mechanism. As such, it is disingenuous of the CAA to suggest that the pass-through mechanism might apply.

181 In light of the above, we remain concerned that, in the absence of any guarantees provided by the CAA with respect to the applicability of the pension cost pass through mechanisms, the CAA's RP3 Decision exposes us to a substantial cost risk that is not justified.

<sup>213</sup> CAA Response, para 6.3, p. 61

<sup>214</sup> Industry Overview, p. 38 - 39

<sup>215</sup> SoC, paras 364-347, p.99 and SES Regulations, (SOC004)

<sup>216</sup> CAA Response, para 6.12 - 6.13, p. 64

<sup>217</sup> CAA Response, para 6.12, p. 64

### 8.3.5. Defined Contribution (DC) Pension costs

- 182 In the SoC we argued that our underlying future service DC pension costs should be restated to match the CMA's conclusions on opex.<sup>218</sup> The CAA notes that this is a "*mechanical adjustment*", but refers to the views of customers and GAD that the CAA believes support a view that the DC costs and contributions are too high.<sup>219</sup> In contrast, we consider that the position of GAD is that our costs are reasonable in and of themselves and that, to the extent that they are higher than typical, this is reasonable when seen in the context of the DC scheme being created to replace the DB scheme.
- 183 **Whilst our DC contributions may be higher than typical, they are not excessive:** GAD has previously advised the CAA that whilst NERL's contribution rates were likely to be towards the upper end of typical employers' matching contributions they did not appear excessive.<sup>220</sup> This assessment was based on the survey data reported by Incomes Data Services (IDS) in August 2009.<sup>221</sup> GAD also noted that CAA commissioned the IDS in 2014 to review employment costs and IDS concluded that NERL's DC scheme was broadly in line with general DC practice.<sup>222</sup>
- 184 **Our DC contribution rates are significantly lower than the equivalent contributions to the DB scheme that the DC scheme replaced in 2009:** On average NERL contributes 15% of pensionable pay towards the DC pension scheme.<sup>223</sup> The equivalent average contribution to the DB scheme was 31.8% (rising to 41.7% by 2020).<sup>224</sup> The closure of the DB scheme to new entrants followed very difficult and protracted negotiations with the trades unions, but was ultimately agreed without industrial action or other service disruption.<sup>225</sup> Both the lower costs of the DC scheme vs the DB scheme, and the avoidance of any service disruption as a result of industrial action, were of real benefit to customers.
- 185 **The DC contributions need to be considered as part of the whole remuneration package:** In its assessment of our pension costs GAD recognised that the DC contributions should not be looked at in isolation, but instead as part of the whole remuneration package.<sup>226</sup> In that context GAD commented "*... the level of employer contributions made towards a DC scheme needs to be considered as part of the whole remuneration package...[so] this represents a reduction in consumer costs than would have been due had the DB scheme not closed*".<sup>227</sup>
- 186 **The importance of our pension scheme as a factor in attracting and retaining our key assets – our staff:** As explained in detail in the SoC<sup>228</sup> ensuring that we have adequate staffing levels, particularly of ATCOs, is fundamentally important if we are to meet the capacity and service quality expectations of airspace users. Given the scale of investment involved in training ATCOs to the requisite standard<sup>229</sup> our ability to retain staff is also central to ensuring that our investment is recovered and efficiently incurred.

<sup>218</sup> SoC, para 371, p.100

<sup>219</sup> CAA Response, para 6.14, p. 64

<sup>220</sup> GAD Report, (SOC051), para 7.22, p. 41; and referenced in the GAD Report (SOC051) a letter from GAD to the CAA, dated 06 May para 7.22, p. 41 as follows "The use of a 2:1 matching structure was considered in GAD's letter to the CAA of 6 May 2010 which concluded that NERL's contribution rates were likely to be towards the upper end of typical employers' matching contributions but that they did not appear significantly excessive based on the survey data reported by Incomes Data Services (IDS) in August"

<sup>221</sup> Contained in IDS, Assessing the efficiency of NERL's total employment costs in RP2 - report for CAA, January 2014, (**IDS Report, January 2014**) (REP009), Section 7

<sup>222</sup> GAD Report, (SOC051), para 7.22, p. 41

<sup>223</sup> GAD Report, (SOC051), para 7.24, p. 41

<sup>224</sup> GAD Report (SOC051), para 7.24, p. 41

<sup>225</sup> SoC, para 253, p. 74

<sup>226</sup> GAD Report (SOC051), para 7.24, p. 41

<sup>227</sup> GAD Report (SOC051), para 7.24, p. 41

<sup>228</sup> SoC, Section 3.2.1.1.2, p. 25 - 27; para 252, p. 74; and Industry Overview, Section 2.2, p. 13

<sup>229</sup> SoC, Second bullet, para 38, p. 19; and in Section 3.2.1.1.1, p. 26

187 **The likely costs associated with reducing DC contributions would outweigh any efficiency savings:** NERL believes that negotiating a reduction to DC contribution rates with the trades unions would be difficult and protracted. It would pose an industrial relations risk and create a distraction for management that could deflect attention and resources from the key RP3 aims relating to our technology programme and airspace modernisation. The benefits in delivering against those objectives would far outweigh any potential gains arising from pension cost savings.

#### 8.4. Conclusion

188 In summary, in the absence of any convincing evidence or analysis to support the reduction to our DB deficit repair costs, we consider the CAA's 18% adjustment both arbitrary and unjustified and we maintain our position as set out in Section 10 of the SoC.

## 9. Capex funding / Capex governance

NERL's RP2 investment plan was refocused as a result of materially changing circumstances as agreed jointly with stakeholders resulting in a change to the NERL licence. Both the CAA and DfT were involved with NERL in every step of the discussion around the challenges of delivering airspace change during RP2. It would be inappropriate, as the CAA is seeking to do, to introduce a punitive new incentive (penalty) regime based on this agreed change and when the existing regime has proved fair and effective.

While NERL agrees that the proposed governance regime remains ex post, the proposals significantly increase asymmetric risk for NERL, with three mechanisms to drive under-recovery of capex and no opportunity to outperform. If planning in such an asymmetric regime, any business would expect to price in risk, but this was not possible for NERL as the regime was only defined after our RBP was submitted.

NERL strongly supports enhanced governance and engagement with customers through RP3. NERL has made detailed proposals to customers which have been revised and agreed on the basis of their feedback.

Instead of accepting this agreed framework, the CAA has gone beyond this, which adds additional burden to all parties with no clear benefit to customers and risks adding delay and unnecessary constraints into delivery of a complex and interconnected investment portfolio. As proposed, the new regime represents a substantial risk to NERL given the lack of clarity of how these penalties would be applied, as demonstrated by our experience in trying to satisfy the CAA's changing requirements during RP2.

NERL's preference is for the existing and effective capex governance regime to be retained, supplemented by the introduction of NERL's proposed consultation enhancements, as agreed with customers through our RP3 and SIP consultations.

### 9.1. Overview

189 The purpose of this Chapter is to consider the contrasting views of the CAA and NERL with respect to capex funding and governance.

### 9.2. Introduction

190 NERL's capital investment programme is a critical part of its overall business plan, providing the funds necessary to sustain and maintain existing equipment, enhance infrastructure, and to deploy new tools and airspace change to accommodate growth in levels of air traffic both safely and efficiently. This is a hugely complex and challenging programme. Without the right resources and the right governance to effectively deploy them NERL risks being unable to implement critical changes to both sustain and maintain the existing service and to transform both technology and airspace to meet the challenges of the future.

191 The proposed constraints to capex and the revised incentive (penalty-only) regime and governance arrangements added late in the RP3 process, post consultation, undermine



our ability to deliver the plan effectively, impacting all aspects of the programme and with the risk of depriving airspace users of the airspace change which is their priority.

- 192 NERL set out its concerns with the proposed capital funding and governance arrangements in its SoC<sup>230</sup> and in this document re-iterates why the CAA's Response does not provide any additional evidence or arguments to justify the late introduction of these unnecessary and punitive proposed licence changes.

### 9.3. Issues arising from the CAA's Response

#### 9.3.1. RP2 Delivery Performance

- 193 The CAA suggests that there is a need for it to introduce much more stringent capex governance mechanisms during RP3 because of NERL's failure to deliver during RP2. For example, the CAA states that:

*"these proposals are necessary based on the unsatisfactory experience in RP2 where NERL significantly changed its capex programmes, spending more and delivering less benefits to airspace users, without engaging satisfactorily with airspace users or wider stakeholders"*<sup>231</sup>

*"NERL seems to be ignoring why we are proposing to introduce our proposed changes in the first place."*<sup>232</sup>

- 194 However, in characterising NERL's performance in this way, the CAA entirely misrepresents the scale and scope of the consultation that NERL undertook with many stakeholders before any change to the plan. It also ignores the fact that there was widespread recognition and support for the need for change. Specifically, this led to the CAA reflecting these changes in modifications to the NERL licence.<sup>233</sup>
- 195 Recognising the evolution of the RP2 capex plan and the associated governance, NERL has produced a separate document to describe this evolution in more detail,<sup>234</sup> and this provides additional context for the summary provided below.
- 196 NERL's original plan for RP2 was to deliver a major programme of lower level airspace change in the London area known as LAMP, including a change to the (TA), with relatively limited deployment of new technical capabilities. The requirements for the LAMP and TA programmes were set out in the NERL Licence.
- 197 After the RBP was produced, there were significant changes in both the business environment and technological landscape against which the RBP was framed; for example, higher than expected traffic growth, reduced fuel prices, the EU adoption of the Pilot Common Project (PCP) Implementing Rule and progress in the development of SESAR capable systems such as iTEC. These developments led NERL to develop its thinking with regard to the most efficient use of investment funds and timescale for

<sup>230</sup> SoC, Section 11, p.101-123

<sup>231</sup> CAA Response, para 7.1, p. 66 - 67

<sup>232</sup> CAA Response, para 7.4, p. 67

<sup>233</sup> CAA Proposal to modify NATS (En Route) plc licence in respect of certain planning and reporting requirements under Conditions 10 and 10a: Notice under section 11(2) of the Transport Act 2000, CAP 1405, May 2016, (**Proposal to modify NATS licence in respect of certain planning and reporting requirements under Conditions 10 and 10a, CAP 1405**), (REP030); and

CAA Decision on modifications to NATS (En Route) plc licence in respect of certain planning and reporting requirements under Conditions 10 and 10a, CAP 1418, June 2016, (**Decision on modifications to NATS licence in respect of certain planning and reporting requirements under Conditions 10 and 10a, CAP 1418**), (REP031)

<sup>234</sup> NERL006a Capex Evolution Paper, 27/12/19

- benefit delivery. The rationale for technology change had been driven by a number of separate 'push' and 'pull' factors.<sup>235</sup>
- 198 As a result, in September 2014<sup>236</sup> and through the SIP 2015 bilateral review<sup>237</sup> NERL engaged both the CAA and customers respectively on the possibility of accelerating deployment of new technology, thereby reducing investment in existing systems and achieving "Legacy Escape" (removal / replacement of key existing systems) at an earlier date. Customers were "*supportive of the proposed earlier deployment of the advanced SESAR concepts and to the overall modernisation of the centre-based infrastructure*".<sup>238</sup>
- 199 In the same timescales, the adverse public response to initial Airspace Change Proposals (ACPs), coupled with uncertainty about new runway developments, led stakeholders to be wary about supporting changes to lower airspace during RP2. There was also further uncertainty as, in parallel, both the DfT and the CAA were reviewing their policy on airspace change, including the type and level of consultation required, a development that was not envisaged when the plans were created.
- 200 In this context, at the same SIP 2015 multi-lateral review,<sup>239</sup> NERL had to report that the first stage of the London Airspace Management Plan (LAMP1a) scheduled for January 2016 was having to be reduced in scope as a consequence of Gatwick Airport's independent decision not to support local airspace changes as anticipated in the original RP2 plan.<sup>240</sup> It was also acknowledged that there was a risk that the other airport operators might reconsider their commitment to LAMP in light of the decision by Gatwick and other political developments (such as the Airports Commission) and there was genuine concern that the Future Airspace Strategy / LAMP plans would become fragmented, driven by individual airport decisions, rather than delivered as part of a single coherent plan.
- 201 As a result of these developments, during 2015, NERL engaged extensively with the DfT and the CAA as well as consulting with airlines and airports to consider the best way to ensure success in both the technology and airspace plans and how to build consensus around creation of a revised and aligned plan. Indeed, the uncertainty around airspace change across the aviation sector led the CAA to establish a Senior Delivery Group (SDG) to discuss how best to approach this shared problem. The SDG was chaired by the CEO of the CAA and attendees included the CAA's Director of the Safety and Airspace Regulation Group, the NATS CEO, Airport CEOs, Airline CEOs and COOs, the DfT Aviation Director, as well as other officials
- 202 As a result of all of the engagement, a change to the RP2 plan was proposed which would recognise the reality of the situation and take the opportunity to put the airspace programme on a more sound footing. This was presented to the Senior Delivery Group (SDG) in September 2015 through a NATS prepared paper jointly agreed with the DfT and the CAA.<sup>241</sup>

<sup>235</sup> NERL006a Capex Evolution Paper, 27/12/19

<sup>236</sup> Deploying SESAR, Update for CAA, 15/09/2014, (SOC097)

<sup>237</sup> NERL SIP2015, NATS/Customer Multi-lateral Review, 7 October 2014, ('SIP 2015 Customer Multi-lateral Review, 07/10/14'), (REP005)

NERL SIP 2015 Service & Investment Plan: Multi-Lateral Consultation Meeting Record of Key Points, Agreements & Actions, 07 October 2014, ('SIP 2015 Customer Multi-lateral Review, 07/10/14') (REP006)

<sup>238</sup> SIP 2015 Customer Multi-lateral Review, 07/10/14, (REP006)

<sup>239</sup> SIP 2015 Multi-lateral Consultation Notes, 07/10/14 (REP006)

<sup>240</sup> Letter from Stewart Wingate of Gatwick Airport to Martin Rolfe 15 September 2014, (REP027)

<sup>241</sup> Modernising the UK's Air Transport Network - A New Way Forward, (SOC098)

- 203 In the SDG meeting<sup>242</sup> it was noted that *"there was general acknowledgement from the SDG members that a major airspace change proposal affecting several adjacent airports and many thousands of people is very unlikely to succeed until the fundamental policy issues are resolved"*<sup>243</sup> and all SDG members *"recognised that airspace changes at individual airports and at higher altitudes should still be progressed in the short term, cognisant of the challenges (like those experienced by Heathrow, Gatwick, Birmingham and Edinburgh) associated with the introduction of PBN routes."*<sup>244</sup>
- 204 NERL set out its proposed revised plan for RP2 in more detail to the CAA in September 2015 and to customers as part of the SIP 2016 consultation.<sup>245</sup> In doing so it laid out the rationale for change, the indicative timeline for the new programme and the key contents of both the revised airspace and technology programmes.
- 205 As an outcome of the consultation with the DfT, the CAA and customers through 2014 and 2015, there was recognition of the need to revise the airspace programme and a collective ambition to accelerate the deployment of new technologies, delivering earlier benefits and reducing investment in legacy systems.
- 206 As a result, the CAA amended the NERL licence to remove the requirement for delivery of LAMP2 and TA during RP2 and instead asked NERL to produce revised Airspace and Technology Plans to describe the updated programme for RP2.<sup>246 247</sup>
- 207 Following more detailed planning of the revised technology plan, NERL was able to update the scope, schedule and costs. Although this resulted in increased cost estimates, recognising that there is no benchmark across the ATM industry for a programme of this scale and complexity, it did confirm a detailed plan. During the SIP 2017 consultation NERL presented the context for this change including the options for how it could be addressed, recommending an increase in the agreed capital envelope for RP2 to allow the accelerated programme to continue. After extensive consultation undertaken during Autumn 2016 and Spring 2017 customers accepted that the proposed new approach did represent the best way forward. The revised plan was approved by the CAA as part of the Licence Condition 10 plan published in March 2017 together with its June 2017 addendum.<sup>248</sup> Since then NERL has reported transparently and openly on delivery of the revised plan as discussed in Section 9.3.3 below and has managed the portfolio to remain within the agreed capex envelope through active management of both risks and opportunities.
- 208 As would be expected of a programme of this duration, scale and complexity, there have been some changes to the plan during its implementation. In particular there have been:
- risks that have arisen leading to increased costs to mitigate or address the issue;
  - additional scope that has been identified as the programme has matured and the external threats have changed, for example additional cyber security measures or requirements for system capacity;

<sup>242</sup> Summary of SDG outcomes, September 2015, (SOC165)

<sup>243</sup> Summary of SDG outcomes, September 2015, (SOC165), para 8

<sup>244</sup> Summary of SDG outcomes, September 2015, (SOC165), para 10

<sup>245</sup> SIP 2016, (SOC053)

<sup>246</sup> CAA Proposal to modify NATS (En Route) plc licence in respect of certain planning and reporting requirements under Conditions 10 and 10a: Notice under section 11(2) of the Transport Act 2000, CAP 1405, May 2016, (**Proposal to modify NATS licence in respect of certain planning and reporting requirements under Conditions 10 and 10a, CAP 1405**)

<sup>247</sup> Decision on modifications to NATS licence in respect of certain planning and reporting requirements under Conditions 10 and 10a, CAP 1418, (REP031)

<sup>248</sup> C10 Addendum June 2017, (SOC143)

- savings that have been made through cost optimisations and simplifications of the solutions; and
- scope that has been moved between reference periods to accommodate both internal and external changes.

209 The CAA appears to see these changes as “*spending more to deliver less*”<sup>249</sup> whereas in practice they are normal activities performed in management of a complex programme to ensure the most efficient and effective delivery of the programme. NERL has reported openly on all of these changes through the Service and Investment (SIP) process and has provided evidence of the reduction in risk over time as these changes have been managed.<sup>250</sup> In particular, the programme may have cost more than the first estimates suggested, but that expenditure was still efficient. Purely targeting RP2 forecasts rather than balancing the programme efficiently across the RP2/RP3 boundary would have inevitably been sub-optimal and increased total overall build costs.

210 Hence, NERL contends that, rather than failing to deliver, it responded appropriately to a change in circumstance, consulted extensively and gained agreement for a necessary and sensible changes to the plan over a 7-year period. Further, NERL considers that, rather than requiring a radical change to capex governance, the circumstances of RP2 demonstrate the robustness of the existing mechanisms, and the flexibility of these mechanisms to accommodate change when this is required and agreed. As a result, we do not agree with the CAA’s view that we would have delivered more of LAMP during RP2 had our incentive arrangements been different.

### 9.3.2. Ex ante or ex post governance?

211 The CAA suggests that NERL has stated that the new governance measures are a change from ex post to ex ante regulation.<sup>251</sup> This is not correct. NERL is clear that the proposed governance measures are ex post. However, it is the nature and context of the proposed new incentive (penalty) mechanism which causes NERL to perceive a change in the CAA’s intended approach to regulation. This change in approach undermines NERL’s confidence in its ability to secure the capex investment it needs as well as representing an asymmetric increase in risk to the business. Specifically, there are three separate penalties which can be applied to prevent NERL from receiving remuneration for its investment but no opportunity for NERL to gain benefit should it outperform the plan.

212 As discussed in Section 9.3.1 the CAA is clear that the new governance is being applied because of a perception of poor performance in delivery during RP2. As explained in that section NERL disputes the CAA’s interpretation of events – the changes which took place were extensively consulted and agreed and the CAA was involved in every step of the process. Nevertheless, this perhaps explains the rationale behind the CAA’s new governance proposals which appear not primarily intended to improve governance or deliver better safety, capacity or efficiency outcomes, but are instead an implied consequence for the CAA’s perception of NERL’s conduct during RP2.

213 The introduction of not one but three new incentive (penalty) mechanisms after NERL had completed its planning creates the risk of changing the nature of the existing capex pass-through regime to one where full pass through could be liable to be the exception rather

<sup>249</sup> C10 Addendum June 2017, (SOC143), p. 13

<sup>250</sup> Draft SIP 2020, (SOC089)

<sup>251</sup> CAA Response, para 7.2, p. 67; para 7.6, p.67 - 68

than the rule. If we had been made aware of this earlier, we would have materially changed our plan to reflect this regime.

- 214 NERL perceives specific risks against all three of the proposed incentives (penalties) given our experience during RP2 which are explained below. In each case the risk is particularly profound given that no clarity has been provided as to the criteria that will be applied to make the assessments, leaving the CAA with a significant amount of discretion. This is contrary to the principles of good governance and at odds with all previous incentive mechanisms applied under the NERL Licence which are clearly defined so that all parties can see that they have been applied accurately and fairly. This penalty-based approach is made all the more concerning through the clear demonstration in the RP3 process that the CAA is prepared to reinterpret the history of decisions made in RP2 in which it was an active participant.

### 9.3.2.2. Delivery Incentive

- 215 The CAA has proposed a delivery incentive designed to encourage timely delivery noting that *"this focuses on whether NERL meets project milestones"*.<sup>252</sup> The CAA states that *"we will not force NERL to deliver a project that turns out to be no longer required, or if circumstances arise such that the project should be rescope into something different. However, this will need to be communicated to, and agreed with, airspace users in an appropriate manner."*<sup>253</sup>

- 216 In describing the application of the incentive in the draft licence condition set out in the RP3 Decision, the CAA states that:

*"The CAA will set a financial incentive on the Licensee's delivery of its capital expenditure programme set out in the Business Plan. On the basis of the CAA's assessment, a penalty of up to £36 million (in 2017 CPI prices) may be applied in the next reference period. The incentive shall be based on both:*

*i) A general assessment by the CAA of the Licensee's delivery of its programme during a calendar year; and*

*ii) Delivery of specific milestones in its programme;"*<sup>254</sup>

- 217 This draft condition represents a material risk to NERL in terms of a penalty of up to £36m with no clarity being provided on the basis for the criteria on which the decision would be taken or how the penalty would be applied.

- 218 As has been indicated previously, NERL undertakes its planning on a most likely (P50) basis which underpins both the costs and timescales for delivery.<sup>255 256 257</sup> This is an appropriate approach to planning and estimating for operation in a capex pass-through environment, and avoids the need for customers to pay up front for risk provision which would be required if NERL planned on a more certain P90 basis. This is consistent with how NERL has planned and been regulated since PPP and aligns with the CAA's own statements. For example, in its decision document on the change to NERL's licence the CAA stated that *"aside from those deliverables required by law, as in the case of the SESAR*

<sup>252</sup> CAA Response, para 7.6, p. 68

<sup>253</sup> CAA Response, para 7.6, p. 68

<sup>254</sup> CAA RP3 Decision Appendices, (SOC041), Appendix H, Condition 10, para 6, p. 92

<sup>255</sup> SIP 2017 Final, (SOC076)

<sup>256</sup> CAPEX consultant's Questions, iBP Clarifications, (SOC078)

<sup>257</sup> SoC, para 412, p.110

*Pilot Common Project, it is not appropriate for us to set deadlines for delivery of individual projects, and therefore place obligations in the Licence, unless those obligations are wholly within the control of the Licensee to deliver. Where there are external factors, which may substantially impact on the Licensee's ability to meet obligations placed upon it, we consider it more appropriate to require the Licensee to set out clearly defined plans and programmes and report progress and delivery against significant milestones".*<sup>258</sup>

- 219 This also reflects the fact that the regulatory regime takes primarily an output rather than input-based approach. This allows NERL to manage benefit delivery at the portfolio level to ensure that the required outcomes are delivered to realise the agreed performance outcomes.
- 220 NERL is happy to be held to account for delivery of our investment programme. Where planning has been undertaken on a P50 basis, consistent with previous precedent, this accountability should be on the basis of setting out "*clearly defined plans and programmes and report progress and delivery against significant milestones*"<sup>259</sup> in line with CAP1418, rather than a delivery penalty regime consistent with a fixed price regime based on P90 planning.
- 221 Were such a penalty regime to be retained NERL would expect to be able to revise its plans in the light of the condition (imposed after original planning took place) and would expect the increased level of business risk to be fully reflected in the overall settlement.

### 9.3.2.3. Efficiency Incentive

- 222 The CAA has proposed an ex post efficiency incentive (penalty) which it describes in its Response as follows: "*Whereas the incentive above focuses on whether NERL delivered the benefits of its projects in a timely way, this incentive focuses on whether that delivery was efficient. Before RP4, we will commission an independent review of the cost efficiency of NERL's RP2 capex and early RP3 capex. Due to the timing of the RP reviews, we would review the efficiency of late RP3 capex at RP5, rather than RP4. If the review identifies any expenditure as inefficient, we may decide to disallow some or all of the inefficient spend. This could be implemented by a downwards adjustment to NERL's starting RAB for RP4 (or RP5 for late RP3 capex).*"<sup>260</sup>
- 223 NERL is committed to ensuring that its spend is made efficiently and has provided evidence to demonstrate this through regular reporting and through specific presentations and documents shared with customers, consultants and the CAA.<sup>261 262 263</sup> A requirement for efficient spend has always been part of the regulatory regime. However, the proposed ex post efficiency incentive goes significantly beyond this, with regular reviews by the IR proposed as part of an annual assessment process.
- 224 This approach creates a material risk of a 'benefit of hindsight' review of programme delivery, rather than an assessment of the appropriateness and effectiveness of the

<sup>258</sup> Decision on modifications to NATS licence in respect of certain planning and reporting requirements under Conditions 10 and 10a, CAP 1418, (REP031), para 2.3, p. 6

<sup>259</sup> Decision on modifications to NATS licence in respect of certain planning and reporting requirements under Conditions 10 and 10a, CAP 1418, (REP031), para 2.3, p. 6

<sup>260</sup> CAA Response, Fifth bullet, para 7.6, p. 68

<sup>261</sup> Deep Dive Slide Pack, (SOC160)

<sup>262</sup> RP2 Evolution to CAA Consultants – Full, (SOC151)

<sup>263</sup> VfM Letter to CAA, (SOC077)

programme management approach to deliver the required efficiency which has been the prior approach.

- 225 This approach is already evident in the language of the CAA and the IR where there is an assertion made that NERL were “*spending more and delivering less*”<sup>264</sup> rather than reflecting on the realities of managing risk in delivering a large and complex programme – the largest and most challenging NERL has ever delivered and unique across the ATM industry. This experience puts into question the intentions behind the efficiency incentive and raises concerns about how the test will be applied in practice.
- 226 NERL’s recommendation is that the existing regime for assessment of efficiency is sufficient and that no new efficiency incentive (penalty) is required.

#### 9.3.2.4. Information Incentive

- 227 On the information incentive, the CAA states that “*In the event of any capex overspend during RP3, we will assess the quality of the information that NERL provided to airspace users as the project was developing. If NERL has failed to appropriately explain or justify the overspend to airspace users, we will impose a penalty whereby, NERL will only remunerated at the cost of new debt rather than the full WACC on the level of the overspend*”.<sup>265</sup>
- 228 NERL is keen to provide transparent and open reporting of its capex programme and this can be evidenced through our responsive approach through RP2. This is documented in detail in our Capex Evolution Paper<sup>266</sup> with key points summarised here:
- as part of consultation ahead of RP2 NERL proposed improvements to SIP governance and reporting arrangements and these were implemented from the start of RP2, with some being trialled during the later stages of RP1;
  - NERL embraced the role of the IR working to enable them to understand NERLs approach to programme management and governance; and
  - based on feedback from customers and the IR during RP2 NERL significantly revised and enhanced the form and level of detail of reporting receiving positive feedback from both.
- 229 SIP 2019 represented the culmination of this improvement process with NERL reporting on its plans in a consistent and open way in line with the previously agreed enhancements. In their review report for SIP 2019, the IR stated that:

*“The submitted SIP19 is in a considerably improved format against previous SIPs. The layout and commentary make the report more effective and takes the reader through a logical evolution of the SIP in explaining the latest status and also plans for the future. There is a marked improvement in the depth of analysis in SIP19 than previous SIP submissions, with clear explanation in either the main text or appropriate Appendices. The inclusion of the People Plan and the Service Transformation plans, which are not within the SIP but are critical enabling activities, are particularly helpful. The Lessons Learned section in the SIP19 is also a very welcome addition that gives confidence in NERL’s ability to be a learning organisation that can adapt for the future.”*<sup>267</sup>

<sup>264</sup> CAA Response para 7.1, p. 66 - 67

<sup>265</sup> CAA Response, para 7.6, p. 68

<sup>266</sup> NERL006a Capex Evolution Paper, 27/12/19

<sup>267</sup> SIP 2019 Independent Reviewers Report, (SOC079), p. 13

*"The SIP submission has evolved a great deal through RP2. This latest format, with a clear scope and level of detail is now helpful and more easily accessible. With some further development of the planned actions needed/taken to ameliorate any further slippages and contain cost growth, the SIP is in a format that should be maintained through into RP3."<sup>268</sup>*

- 230 Notwithstanding these comments from the IR, the CAA considered that its concerns over the effectiveness of the document remained and surprisingly declined to approve the form, scope and level of detail.
- 231 In early 2019 the CAA and NERL identified Trax International as the preferred supplier to support NERL in developing the new model SIP document. Trax consulted extensively with the CAA, airlines, airports as well as NERL to gather views on the scope purpose and ideal format for the future model SIP.<sup>269</sup> As a result NERL published the SIP<sup>270</sup> using this revised format. Overall customers were positive about the new format and appeared to find the document more accessible, as well as providing some suggestions for enhancement. As of December 2019 NERL, has not received feedback from the CAA on interim SIP 2019 or on the revised document created at the CAA's request.
- 232 While NERL is committed to clear and transparent reporting of its investment programme through the SIP process, it remains concerned about the 'moving goalposts' in terms of reporting requirements, and the difficulty in securing CAA approval even when agreed approaches have been applied.
- 233 While it is right that NERL should continue to work with customers, the IR and the CAA to ensure the effectiveness of reporting, we believe that the information incentive is an inappropriate lever to support this process. Specifically, there is no information provided to suggest what is the required standard against which NERL would be judged, and previous experience does not provide confidence that a consistent standard would be applied.

#### 9.3.2.5. Summary of incentive proposals

- 234 NERL does not claim that the CAA is proposing a change from ex post to ex ante regulation. However, the CAA's proposals do move away from a pure cost pass-through mechanism to a hybrid with the potential for NERL's capex-related cash flows to be adjusted ex post in a retrospective way. These proposed incentives significantly increase asymmetric risk for NERL in a manner not recognised elsewhere in the CAA's decision and undermine confidence in the capex pass through mechanism, given that there is no clarity provided about the criteria used to assess these incentives or how they would be applied in practice.
- 235 NERL's preference is for the existing governance regime which has been successfully applied during four control/reference periods to date, and that was the basis for our RP3 proposals, to be retained.

<sup>268</sup> SIP 2019 Independent Reviewers Report, (SOC079), p. 13

<sup>269</sup> Trax Report, July 2019, (SOC022)

<sup>270</sup> NERL Interim 2019 Service and Investment Plan, Final for CAA Approval, 28 June 2019, (**Interim SIP 2019**), (REP024)



### 9.3.3. NERL acceptance of the need for additional/enhanced governance

- 236 The CAA has suggested that NERL is opposing the introduction of additional governance, noting that it was *"disappointed by NERL's response to our proposals for greater engagement with airspace users"*.<sup>271</sup>
- 237 In stating this the CAA has again chosen to mischaracterise our position. We support enhanced governance arrangements for RP3, and we have proposed, consulted on and agreed such revised arrangements with customers through RP3 and subsequent SIP consultation. We are concerned that the CAA is proposing additional governance beyond that which our customers had agreed without any clear statement of the envisaged benefit or assessment of the additional burden implied both for customers and NERL.
- 238 During the RP3 consultation process NERL proposed revised governance arrangements building on the SIP, including enhanced transparency, consultation on options and an agreed escalation mechanism developed in line with the CAA guidance and based on feedback from customers and the IR. NERL consulted on these proposals extensively during and since the Customer Consultation Working Group (CCWG) process<sup>272</sup> evolving and enhancing these proposals as a result.
- 239 Key elements of the final proposals included:
- standard bi-annual SIP reporting with quarterly performance dashboard;
  - standard SIP structure and outline dashboard formats, including forecasts, actual costs and benefits;
  - approach to agreeing and tracking key milestones of importance to customers;
  - methodology for managing change within the portfolio, including identification of options; thresholds for different levels of engagement and involvement of customers in the decisions;
  - proposals for escalation and resolution where agreement cannot be achieved; and
  - annual review to identify process improvements.<sup>273</sup>
- 240 In the final CCWG meeting in September 2018, NERL committed to consult customers further on the specifics of the planned governance arrangements for RP3. This additional consultation was organised as a Deep Dive workshop alongside the SIP 2019 multi-lateral meeting. Feedback from customers at this workshop was positive and the conclusions of the meeting noted that:
- "IATA advised that stability of format across the RP is key, with a focus up front on performance (not process). The amount of detail currently presented in the SIP is good. NATS advised that we are very supportive of having a consistent format and that*

<sup>271</sup> CAA Response, para7.5, p. 67

<sup>272</sup> 20180523 CCWG RP3 customer consultation evolving the service slides, 23 May 2018, ('CCWG RP3 customer consultation evolving the service slides, 23/05/2018'), (REP078);

CCWG Customer Consultation, 18/07/2018, (REP059);

20180913 CCWG RP3 customer consultation close workshop slides, 13 September 2018, ('CCWG RP3 close workshop slides, 13/09/2018'), (REP077);

20180725 RP3 customer consultation airports follow up slides, ('CCWG RP3 follow up slides, 25/07/2018'), (REP076)

SIP 2019, (SOC0144); and Interim SIP 2019, (REP024)

<sup>273</sup> Interim SIP 2019, (REP024), para 10, p. 53

*previous SIPs have included a dashboard type view of programmes to track performance.*

*Virgin Atlantic expressed support for an Executive Summary with the core messages supported by more detailed information in appendices (as for the rBP). Early publication of the materials, including the slide-pack, is also welcomed.*

*Chase Partners commented that the SIP19 was the best done so far. The executive summary made it accessible to those who wanted the high-level content while there was real detail in the rest of the document for those who needed that.*

### Summary

*NATS asked if there was support for the SIP process improvement proposals. Customers and IATA said they were supportive of the concept and intent of the proposals which were fine, subject to some refinement and improvement for suggestions made during the meeting and with a particular focus on the proposed escalation path mechanism."<sup>274</sup>*

241 Through its proposals NERL has demonstrated it is committed to transparent and open reporting and in involving customer in options analysis and decision making where material changes to the planned portfolio are required. This approach to change is consistent with the outcomes of the TRAX review mentioned earlier which among its recommendations concluded that:

*"Recommendation 9: Ensure that the SIP document and related material offer sufficient information about the options available to modify the plan, enabling stakeholders to provide meaningful inputs to the decision-making process when changes are required."<sup>275</sup>*

242 NERL's proposals are already sufficient to achieve the aims of the CAA in its RP3 Decision. NERL's concern is that the CAA's proposals go far beyond the proposals laid out and supported by customers through its proposal to involve airlines in the direct approval process for every project over £10m in size, even where these are part of a previously agreed programme reported through the SIP process.

243 Under NERL's proposed governance these projects would be reported as part of the major programmes that they form part of, in line with the RP3 Business Plan. Where material changes are required NERL would consult customers based on the principles in the agreed process.

244 Under the CAA proposals, in addition to this agreed approach, NERL would be required to consult customers prior to the launch of any project over £10m. The CAA has proposed a five-stage process, accepting that there is scope to adjust this, which covers: initiation; optioneering; decision; implementation; and close out. The CAA provides details of how each of these stages would operate.<sup>276</sup>

245 NERL agrees with the need to engage with customers over options where there is a requirement to change the plan. However, this level of additional engagement for every

<sup>274</sup> SIP 2019, Multilateral minutes, NATS/Customer Deep Dive session on SIP format and process for RP3, 8 November 2018, ('SIP2019 Deep Dive minutes, 08/11/2018'), (REP099), p. 2

<sup>275</sup> Trax Report, July 2019, (SOC022), para 6.3d, p. 12

<sup>276</sup> CAA RP3 Decision Appendices, (SOC041), para I29, p. 131

project over £10m represents a significant overhead for both NERL in producing material to support these multiple engagement and for customers in terms of reviewing and engaging in meaningful engagement about each of them, particularly given the technical nature of many of the projects. We estimate that there could be c.20 projects over £10m during RP3, which amounts to around 100 individual engagements necessary to cover this requirement.

- 246 The CAA has not suggested any specific additional benefit for this additional consultation process and we believe that it would distract from the prior focus of improving the overall SIP process to ensure that customers understand the performance and outcomes delivered by the whole portfolio in line with feedback from customers and IATA as noted in paragraph 240 above. In considering this it is also worth reflecting on feedback NERL has received from SIP consultations. For example, interim SIP 2018 was published in the newly agreed Word document format supplemented by a slide pack to support the meeting. While some appreciated the additional level of detail this was not the universal view. One airline commented in their response that:

*"Firstly, we felt that there was simply too much detail to digest, both sensibly before and during the WebEx."*<sup>277</sup>

*"Although the level of detail provided might demonstrate the NATS (NERL) commitment to the task under the licence conditions, we don't believe that the airspace users require quite so much detail in order to provide an appropriate update."*<sup>278</sup>

- 247 In addition to the overhead of this additional consultation, NERL is concerned that this level of engagement which includes three stages before a decision to proceed would inhibit agile decision making and is likely to lead to delay to the capex programme.

#### 9.3.4. Sharing of business cases with CAA and customers

- 248 The CAA has challenged the potential burden of additional governance arrangements. For example, in its Response it states that *"NERL has commented that our proposals will be costly and burdensome to implement. However, as NERL mentions itself, it already carries out a large volume of work internally which could be shared with us and airspace users"*.<sup>279</sup>
- 249 In response to this, firstly, it is worth noting that the CAA has misrepresented our overall point, as expressed in the SoC, that *"the proposed reporting mechanisms represent a significant burden to all parties to little clear benefit"*.<sup>280</sup>
- 250 As discussed in Section 9.3.3 above, we believe that a significant level of the burden here would be on airlines, rather than on NERL, in terms of the time required to review and properly engage on multiple business cases through a multiple stage process. Further, as discussed, it is not clear what additional benefit the CAA is seeking to generate through this additional consultation process for projects that are already part of the agreed programmes and portfolio.
- 251 The CAA also considers whether NERL could share existing business case and related governance documents with customers as part of the consultation process.<sup>281</sup> First of all it is worth noting that such documents would need to be revised or redacted prior to

<sup>277</sup> Letter to Andy Shand from Geoff Clark, Virgin Response to NERL interim SIP18, June 2018, (**Virgin Response to Interim SIP18, June 2018**), (REP019)

<sup>278</sup> Virgin Response to Interim SIP18, June 2018, (REP019)

<sup>279</sup> CAA Response, para 7.10, p. 69

<sup>280</sup> SoC, Table 11, p. 103

<sup>281</sup> CAA Response, paras. 7.10 - 7.11, p. 69

publication in order to remove commercially sensitive information, especially in relation NERL's suppliers. However, NERL does not believe that the direct sharing of internal documents would add to the quality of consultation and engagement.

- 252 One of the key areas of feedback NERL receives from customers is to remember that they are not engrossed in NERL's programmes all of the time and only address them a couple of times a year through the SIP. Therefore, they stress the importance of careful use of language and explanations to ensure that they can be read by a non-expert reader on an occasional basis. NERL's internal business cases are entirely designed for their intended internal audience and are correspondingly technically and operationally detailed. This is entirely appropriate and contributes to good governance.
- 253 NERL puts a lot of effort into its customer engagement through the SIP and other processes. Therefore, we believe that material intended for customer engagement should be developed and tailored specifically for the purpose required. Presentation of business cases to customers would require significant additional effort to ensure that they were described in a way which enabled them to appreciate and meaningfully engage with.
- 254 This fact is particularly relevant to some of the less tangible investments (e.g. in relation to specialist IT projects).<sup>282</sup> Here we do not believe that the customers have an interest in understanding the details of these projects. Putting together tailored business cases for these to meet the needs of an airline audience could be disproportionate and unhelpful.
- 255 Hence NERL believes that it is in the best interests of both NERL and customers to agree the level of engagement that will ensure the right transparent and open reporting (in line with Section 9.3.3 above) and for NERL to prepare material specifically to support the required purpose. During our consultations airlines have always made it clear that their priority is the programme outcomes.

### 9.3.5. Role of the independent reviewer

- 256 The CAA has stated that NERL does not support an enhanced role for the IR: "*NERL does not approve of our plans to enhance the role of the Independent Reviewer. It says it is doubtful that the IR will be well placed to evaluate and advise on technical matters, such as capex efficiency*".<sup>283</sup>
- 257 However, NERL does not disagree with a strengthened role for the IR. We previously stated that "we also support an enhanced role for the independent reviewer".<sup>284</sup> Indeed, we proposed "an enhanced role for the independent reviewer, with regular quarterly review meetings based around our portfolio dashboard, and continued engagement with the planning and SIP process."<sup>285</sup> The CAA recognised this in the RP3 Decision: "*NERL's RP3 business plan supported an enhanced role for the IR*".<sup>286</sup>
- 258 Our objective is not to oppose extension to the role of the IR, but rather to ensure that there is agreed clarity on the future of the role and that the role is undertaken in a fair and consistent way. Experience during RP2 has been that the IR has operated well beyond the originally agreed remit, something which the CAA has accepted and embraced, rather than addressed and managed. Further, the proposed involvement of the IR in assessment of

<sup>282</sup> CAA Response, para 7.15, p. 70

<sup>283</sup> CAA Response, para 7.14, p. 69

<sup>284</sup> RP3 Business Plan, (SOC001) p.74

<sup>285</sup> RP3 Business Plan, (SOC001) p.75

<sup>286</sup> CAA RP3 Decision Appendices, (SOC041), Paragraph i16

the planned efficiency incentive puts significant power beyond simple reviewing in the hands of the IR, again without clarity of the remit and accountability of the role.

259 We note the CAA's statement in the Response that *"the IR will be made up of multiple individuals with a mix of skills to ensure that the role will be fulfilled"*<sup>287</sup>

260 This appears to be a new development, inconsistent with the CAA's RP3 Decision. The CAA previously stated that *"the CAA shall appoint a person (the Independent Reviewer) to report on the Licensee's progress on delivering its capital investment programme"*.<sup>288</sup>

261 NERL remains concerned about the practical application of this role given the lack of clarity of the criteria and accountability and the material impact of the assessments which the IR may be asked to undertake.

### 9.3.6. Detail in NERL plans to support Steer/Helios analysis

262 The CAA claims that NERL's plans were not of sufficient detail to support Steer/Helios' analysis: *"we note that the details in NERL's business plan were so high level that such an assessment was simply not possible"*.<sup>289</sup>

263 NERL disputes this claim given that the level of detail provided was consistent with the level previously agreed by CAA as *'setting the bar'* for future plans and reporting, and that NERL responded to all Steer/Helios' requests for detail to support their analysis.

264 In 2017 NERL developed and published detailed Airspace and Technology plans for RP2, in line with the NERL Licence, Condition 10 (the C10 Plan). In the letter providing conditional approval of the form scope and level of detail of the C10 Plan, the CAA stated that *"for the avoidance of doubt, having set this bar for 'level of detail', this will be the basis for reporting going forward as we assess delivery and progress against these programmes"*.<sup>290</sup>

265 The NERL capex plan for RP3 was included as a separate appendix to the business plan (Appendix L) and provided context, rationale and explanation of the portfolio and constituent programmes including costs and benefits.<sup>291</sup> This document was created using the same style and level of detail as the C10 plan. This was supplemented by publication of an additional document providing further context to the plan in June 2018 in line with the C10 requirement for publication of the Airspace and Technology plans for RP3.<sup>292</sup>

266 During the RP3 customer consultation and during engagement with Steer we received requests for additional information including further cost breakdown and additional clarity on benefits. This information was presented to customers for example on 18<sup>th</sup> July 2018<sup>293</sup> and provided in response to Steer/Helios questions.<sup>294 295</sup>

<sup>287</sup> CAA Response, para 7.14, p. 69

<sup>288</sup> CAA RP3 Decision Appendices, (SOC041), Appendix H, Condition 10, para 7.

<sup>289</sup> CAA Response, para 7.17, p. 70

<sup>290</sup> CAA Conditional Approval Letter on Airspace and Technology Programmes, May 2017, (SOC093).

<sup>291</sup> RP3 RBP Appendices, (SOC021), Appendix L

<sup>292</sup> Airspace and technology plans June 2018, ('airspace and technology plans June 2018'), (REP058)

<sup>293</sup> NATS (En Route) plc RP3 initial Business Plan Customer consultation: Summary and next steps, 18 July 2018, ('CCWG Customer Consultation, 18/07/2018'), (REP059)

<sup>294</sup> Consultants Portfolio Question, Final, (SOC152)

<sup>295</sup> Consultants Portfolio Question, Final, (SOC152)

- 267 When NERL came to publish its RBP in October 2018 this had been enhanced to include important additional information, particularly on benefits, that had been developed and shared with customers as a result of the consultation process.
- 268 During this process NERL was meticulous in ensuring that all customer and consultant questions had been answered. However, it is noteworthy that Steer/Helios was less willing to engage with NERL in terms of reviewing detailed material than we had experienced with previous consultants, e.g. Arup/Helios who conducted similar studies ahead of RP3.<sup>296</sup> Nevertheless it is surprising that Steer/Helios claimed that it was unable to complete its analysis.

#### 9.4. Conclusion

- 269 The CAA is clear that the primary reason for its introduction of revised capex arrangements for RP3 is on the basis of perceived under performance by NERL during RP2. However, as has been explained in this chapter and in the accompanying Capex Evolution Paper, the CAA has chosen to misrepresent the nature and rationale for changes during RP2, its role in the process, and as a result, has proposed punitive last minute changes to governance which significantly increase asymmetric risk to NERL as well as limiting its ability to adjust in an agile way to changing circumstances in the RP. Additionally, the CAA has proposed additional consultation arrangements beyond those agreed by NERL with customers through the consultation process – arrangements which it is far from clear would add value to the customers.
- 270 NERL believes that the governance arrangements have demonstrated that they are fair and effective during RP2 and should be retained.
- 271 NERL has proposed clear and enhanced consultation arrangements and agreed these with customers in line with the original guidance from the CAA that NERL should “*propose well designed plans for shared governance and assurance for NERL’s capital programme*”.<sup>297</sup> NERL believes that these arrangements should be implemented.

<sup>296</sup> Arup and Helios Phase 1 Report, 06/01/14, (REP004)

<sup>297</sup> Guidance for NERL in Preparing its Business Plan for RP3, 2018, (SOC030), para 4.14, p.38

# 10. Oceanic

The CAA's Response to NERL's concerns about the unlawful cross subsidy of the Oceanic business unit continues the incorrect presumption that there will be no losses since all of the CAA's efficiency challenges can be met.

Nothing in the CAA's Response has changed the clear position that the CAA has fully accepted the safety necessity of introducing ADS-B surveillance over the North Atlantic but then not provided the efficient costs for NERL to supply that safer service.

## 10.1. Overview

272 The purpose of this Chapter is to consider the contrasting views of the CAA and NERL with respect to the cost allowances for the Oceanic service.

## 10.2. Introduction

273 As we set out in our SoC<sup>298</sup> we consider that the CAA's efficiency challenge to our Oceanic costs is unsupported.<sup>299</sup>

274 In the CAA's Response the CAA makes three main points in support of its proposition that its "*modest efficiency assumptions*" are achievable:

- **ADS-B charges can be reduced** – the CAA believes that NERL has adequate buyer power to be able to secure a lower price for the ADS-B data charges;
- **Opex cuts are justified** – the CAA considers that it is reasonable and legitimate for it to assume that there is "*scope for efficiencies to be made across the business, as there has been in previous price control periods*"; and
- **Financeability should only be assessed at the level of the Licenced entity** – the CAA believes that financeability tests should be undertaken for the organisation as a whole, at the level of NERL, and not for the separate businesses within it (e.g. en route and Oceanic).<sup>300</sup>

275 We respond to each of these points in the sections below.

## 10.3. Issues arising from the CMA's Response

### 10.3.1. Is there scope to reduce the ADS-B charges?

276 The CAA's position is that its "*proposal to apply a 5% efficiency target to the data charges is in the public interest given NERL's buyer power and the risk that absent intervention, monopoly prices could be passed through to airspace users while still benefiting NERL shareholders*".<sup>301</sup> We have unpicked this assertion by reference to its component parts:

<sup>298</sup> SoC, p.124

<sup>299</sup> SoC, para 481. p.124

<sup>300</sup> CAA Response, Summary Box, p. 72

<sup>301</sup> CAA Response, para 8.8, p. 74

- Does NERL have buyer power?
- Is Aireon charging monopoly prices?
- Would NERL shareholders benefit to the detriment of customers?
- Is the setting of NERL's price control the appropriate mechanism for tackling any perceived anti-competitive conduct by Aireon?
- In light of the above, is the application of a 5% efficiency challenge reasonable?

#### 10.3.1.2. Does NERL have buyer power?

- 277 The CAA's basis for claiming that NERL has "*significant buyer power*" is that we can terminate our contract with Aireon "*seemingly without penalty*" which would result in Aireon losing revenue not only from NERL but also from neighbouring ANSPs. The CAA believes that this "*would potentially put NERL in a relatively strong negotiating position with Aireon*".<sup>302</sup>
- 278 Aireon charges for its ADS-B data on the basis of global tariffs that have been applied consistently for the last four years since it commenced trading, which predates the NSL investment.<sup>303</sup> Whilst tiered according to how the ADS-B service would be used in different types of airspace, with different availability of competing surveillance options (e.g. land based radar), the rates are applied consistently to all users in those airspaces. Those rates are transparent and have been agreed contractually with multiple ANSPs including: NavCanada, IAA (Ireland), Naviair (Denmark), ENAV (Italy), COCESNA (Central America), AESCNA (Cameroon), PNGASL (Papua New Guinea), SCAA (Seychelles), DC-ANSP (Dutch-Caribbean), CAAS (Singapore), ISAVIA (Iceland), ATNS (South Africa), AAI (India) and NERL.
- 279 The negotiations between NERL and Aireon took place over a period of three years, including various rounds of negotiations led independently by NERL's Director of Supply Chain to refine NERL's position as the service offering became clearer, drawing on independent advice about Aireon's pricing.<sup>304</sup> NERL did manage to negotiate free use of ADS-B data for the trial period when the system was in 'shadow' mode. However, despite our best efforts, our use of the ADS-B data within the Oceanic region is on the basis of the global tariffs, demonstrating that a theoretical possibility of buyer power relative to other customers has not materialised in reality.
- 280 Indeed, our understanding of Aireon's actual and potential customer base is that NERL is not a large customer compared to other larger ANSPs that are also charged on the basis of the global tariff structure (most noticeably NavCanada, the FAA, and ATMB, but also AAI, Air Services Australia, and JANS). As such, we believe the prospects of NERL being able to exert buyer power to achieve a 'special' lower price, as proposed by the CAA, are over-stated and not supported by our experience to date.

#### 10.3.1.3. Is Aireon charging monopoly prices?

- 281 The CAA suggests that the application of its 5% efficiency challenge is, in part, to protect customers against the risk of pass-through of monopoly pricing by Aireon.<sup>305</sup> This is an

<sup>302</sup> CAA Response, para 8.7, p. 74

<sup>303</sup> Euroconsult Report, (SOC024)

<sup>304</sup> SoC, para 504, p. 130

<sup>305</sup> CAA Response, para 8.4, p. 73



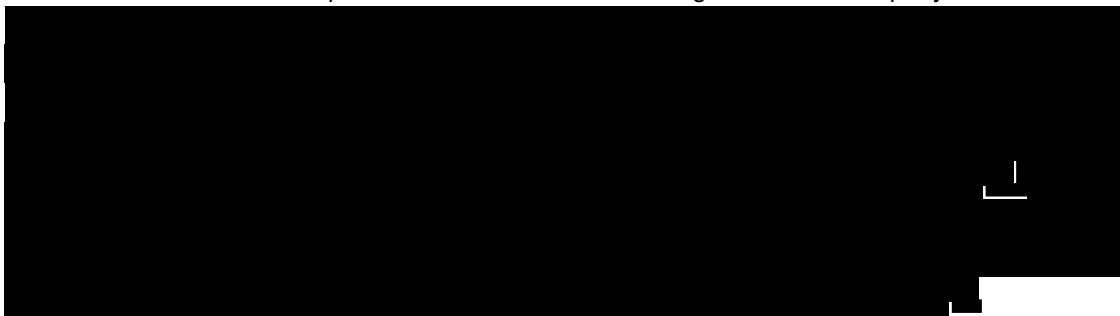
unsubstantiated risk and the CAA has provided no evidence to support a conclusion that Aireon's pricing is "above the efficient competitive level".<sup>306</sup>

282 As we explained in the SoC, NERL carried out due diligence to assess the reasonableness of the Aireon prices by commissioning an independent review by Euroconsult.<sup>307</sup> Euroconsult concluded that Aireon's pricing was commensurate with the company's underlying cost and risk profile.<sup>308</sup> The CAA has declined to assess this as relevant evidence "given the information asymmetries between us and Aireon and the lack of benchmark comparators".<sup>309</sup> Whilst we consider that these 'difficulties' are exactly the type of challenges that economic regulators are put in place to manage, the CAA's apparent refusal to give the Euroconsult Report any consideration, or commission equivalent work of their own, is puzzling.

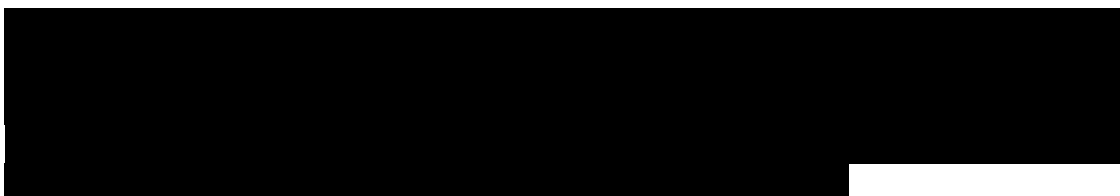
283 The CAA also suggests that the risk of monopoly pricing is exacerbated by what it assumes to be a 'most favoured nation' (MFN) clause in NERL's contract with Aireon, based on our description in the SoC.<sup>310</sup> The CAA, however, has misunderstood the SoC in this respect. The reference in the SoC is not to the contract between Aireon and NERL, but to the governance arrangements in place relating to NSL's role as a shareholder of Aireon LLC.<sup>311</sup>

[The redacted text states the relevant provisions from the Aireon LLP Agreement re third party contracts and voting rights]

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285



286 As a result, this provision should not be misinterpreted as an MFN provision and it does not have the incentive properties asserted by the CAA in its Response.<sup>314</sup>

#### 10.3.1.4. Would NERL shareholders benefit to the detriment of customers?

287 The CAA's views, as expressed in its Response and its Notice of Reference, indicate that its challenge to the ADS-B data costs may have been motivated by the CAA's concern that NATS shareholders may be benefiting from excessive monopoly pricing by Aireon at the expense of NERL's customers.<sup>315</sup> We note that the CAA did not raise any such

<sup>306</sup> CAA Response, para 8.4, p. 73

<sup>307</sup> SoC, para 513, p. 132; Euroconsult Report (SOC024); and Euroconsult Presentation (SOC025).

<sup>308</sup> SoC, para 513, p. 132; Euroconsult Report (SOC024); and Euroconsult Presentation (SOC025).

<sup>309</sup> CAA Response, para 8.6, p. 74

<sup>310</sup> CAA Response, para 8.5, p. 73, referring to SoC para 514, p.132

<sup>311</sup> Aireon Holdings LLC – Amended and Restated Limited Liability Company Agreement, Dated 28 December 2018, (**Aireon Holdings LLC - A&R LLC Agreement, December 2018**), (REP008)

<sup>312</sup> Aireon Holdings LLC - A&R LLC Agreement, December 2018, (REP008), Clause 6.12.6.1

<sup>313</sup> Aireon Holdings LLC - A&R LLC Agreement, December 2018, (REP008), Clause 6.12.6.1

<sup>314</sup> CAA Response, para 8.5, p. 73

<sup>315</sup> CAA Response, para 8.4, p. 73; and CAA Notice of Reference, para 2.77, p.45.

concerns in its RP3 Decision, or during its formal interactions with NERL prior to that, despite the details of the NSL investment in Aireon being transparently disclosed on NATS website and known to the CAA.<sup>316</sup>

288 As we explained in the SoC, the purpose of the investment by NSL into Aireon was to have a voice in a business that will provide leading-edge technology that has a safety critical role.<sup>317</sup> It was not to benefit from monopoly pricing to the detriment of our customers.

289 In any event, it is worth noting that the advice on pricing reasonableness from Euroconsult was received, and the pricing negotiations with Aireon concluded, prior to NSL's investment being made. As such, at the time that the prices were agreed NSL, and therefore NATS, did not have any stake in the outcome of those negotiations.

#### 10.3.1.5. Is the setting of NERL's price control the appropriate mechanism for tackling any anti-competitive conduct by Aireon?

290 To the extent that there is any validity in the CAA's concerns that Aireon might be charging monopoly prices, we do not consider that imposing an efficiency challenge on NERL's costs is the appropriate way for the CAA to mitigate that risk. There are well-established tools available under the Competition Act 1998 to tackle abusive pricing by dominant companies. Unless the CAA is willing to instigate such an investigation to test out its concerns, we consider that it is inappropriate to side-step the issue in this way and that such an approach is not in the public interest.

#### 10.3.1.6. Is the application of a 5% efficiency challenge reasonable?

291 In light of the factors set out above, the imposition of the 5% efficiency challenge is clearly unreasonable. Although the CAA characterises it as "*modest efficiency assumptions*",<sup>318</sup> if there is no scope for negotiating a discount on the ADS-B data charges then the scale of the challenge is irrelevant. In any event, the 5% challenge appears to be an arbitrary number picked by the CAA without any evidence or impact assessment to support it.

292 We also note that this 5% cut to data costs is about the same as the CAA's proposed equity return for the Oceanic business. When combined with the 4% opex cut (see para. 302 below), it makes the Oceanic business loss-making, as illustrated in Figure 1 and described below.<sup>319</sup>

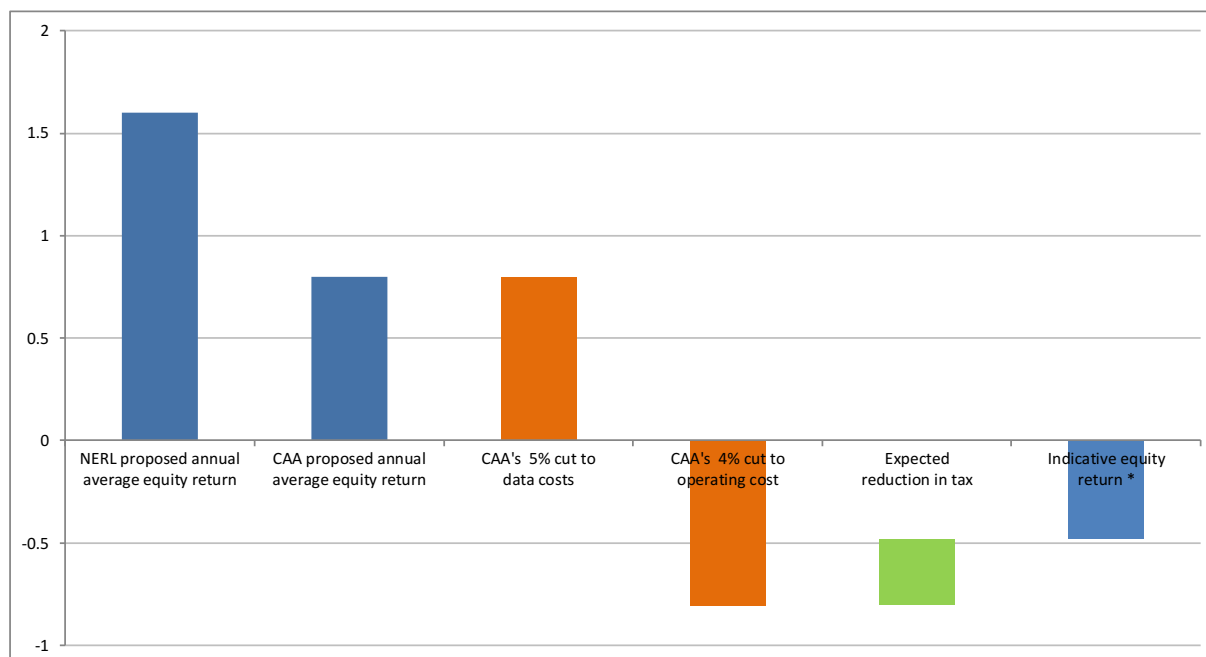
<sup>316</sup> There was a public announcement by NATS about NSL's investment in Aireon on 16 May 2018 (NATS takes equity stake in Aireon to help accelerate technology revolution in global aviation surveillance article, 16 May 2018, ('**NATS takes equity stake in Aireon article, 16/05/2018**'), (REP087)), which was picked up on in electronic media. However, no mention was made of it by the CAA in its letter of September 2018 (Letter to Martin Rolfe re NERL's RP3 business plan, 25/09/2018, (SOC130)), that provided guidance on areas that NERL should provide further information and clarity CAA,

<sup>317</sup> SoC, para 497, p. 129

<sup>318</sup> CAA Response, para 8.9, p. 74.

<sup>319</sup> See also SoC, para 517, p.133

Figure 1 Expected Oceanic equity return in RP3 under CAA proposals



### 10.3.2. Opex cuts

293 The CAA asserts that contrary to our position in the SoC "*efficiencies are possible, as has been the case in previous control periods*".<sup>320</sup> On that basis the CAA has "*applied modest efficiency stretch factors to these costs, in line with decisions made elsewhere for the en route business*".<sup>321</sup> In the following sections we consider the CAA's arguments with respect to historic performance and the comparison with the en route business.

#### 10.3.2.2. Historic performance

294 The CAA's Response provides Figure 8.1 which looks at Oceanic operating cost since 2011, but has focused its analysis on the level of costs achieved in 2017.<sup>322</sup> The CAA concludes that its "*efficiency assumptions are in line with historical levels of outperformance*".<sup>323</sup> As we explained above with respect to opex costs in general, we consider that there can be risks in focusing on a single year without taking due account of the circumstances that influenced costs in that year (see para. 134 above).

295 In 2017 Oceanic unit costs were materially lower by c.11% than in any other year in Oceanic history, and 17% lower than the level of cost incurred in the most recent audited regulatory accounts for 2018.<sup>324</sup> This unusual drop in costs was due to lower levels of ATCO training and reduced Oceanic LTIP activity.<sup>325</sup>

296 Costs in 2018 (£17.3m in 2017 prices) reflect corresponding increases relating to technical support costs associated with the upgrade to the Oceanic ATC system (GAATS+) and an increase in ATC training costs to start the process of training additional ATCOs to support the new SB ADS-B method of operation, as well as higher costs for

<sup>320</sup> CAA Response, para 8.11, p. 75; and SoC Chapter 12, p. 124.

<sup>321</sup> CAA Response, para 8.13, p. 76

<sup>322</sup> CAA Response, Figure 8.1, p. 75 and para 8.12, p. 75

<sup>323</sup> CAA Response, para 8.13, Fourth bullet, p.76

<sup>324</sup> Regulatory Accounts 2018, (SOC071)

<sup>325</sup> RP3 Business Plan, (SOC001), p. 69

supporting the HMU function.<sup>326</sup> Despite this we still have a lower cost per flight in 2018 than nearly every year since 2011 apart from 2017.<sup>327</sup>

297 Looking to RP3, NERL's RBP proposed average costs of £18.2m.<sup>328</sup> The main cost driver behind the c.£1m increase in Oceanic costs between the existing cost base (2018) and costs during RP3 is the recruitment of 10 additional Oceanic controllers that are required to deliver the enhanced satellite based service in the future.<sup>329</sup> The additional costs add c.6% to average operating costs (between 2018 and RP3), at a time when average traffic levels are expected to be on average 10% higher during RP3 (based on the NATS May 2019 traffic forecast) compared to 2018 leading to a reduction in unit operating costs, which represents a productivity improvement.<sup>330</sup>

### 10.3.2.3. Alignment of Oceanic opex with en route opex

298 The CAA's Response concludes that it is appropriate to make efficiency challenges to Oceanic opex in line with similar challenges made to en route opex on the basis that the *"shared costs [mean that] it makes sense that the targets are commensurate"*<sup>331</sup> and a full study on the remaining Oceanic-only costs would be disproportionate given that *"the Oceanic service is a relatively small part of NERL's business"*.<sup>332</sup>

299 We consider, however, that as a general principle the CAA should be considering the particularities of the Oceanic business in assessing opex, rather than just reading across from its assessment of the en route business.

300 **Although there are shared costs, the en route efficiency drivers tend to relate to savings in other areas:** of the 50% of Oceanic costs that are shared with en route, they relate mainly to fixed infrastructure costs such as buildings and common (shared) engineering and technical resources. These costs are estimated to remain relatively flat during the RP3 period for the Oceanic business, as evidenced from the fact that apart from the additional 10 ATCO FTEs, costs are not materially changing.<sup>333</sup> As CAA rightly identifies,<sup>334</sup> that airspace modernisation costs do not affect the Oceanic business, and the same applies to other costs driving En Route cost increases (e.g. SESAR deployment, new scope for costs such as drones) – i.e. these do not affect the Oceanic cost base. For this reason, it is not appropriate for Oceanic to simply be allocated a 'share' of the wider cost efficiencies proposed by the CAA for the en route business.

301 **It is inappropriate to apply the en route assumptions to the totality of the Oceanic operating costs:** as we explained in the SoC, Oceanic costs that are not shared with the en route service mainly relate to front line operational staff, as well as the costs of operating the new satellite technology.<sup>335</sup> These costs were highlighted in NERL's RP3 Business Plan, including the proposed increase in the Oceanic operational headcount, so the CAA had full visibility.<sup>336</sup> By not undertaking any analysis of the Oceanic cost base, the drivers of cost, and how shared and infrastructure costs are or not changing during RP3, the CAA has put an unachievable cost efficiency target onto the Oceanic business which

<sup>326</sup> Oceanic Opex per flight for CMA, 27 December 2019, ('Oceanic Opex per flight, 27/12/2019'), (REP086)

<sup>327</sup> Oceanic Opex per flight, 27/12/2019, (REP086)

<sup>328</sup> RP3 Business Plan, (SOC001)

<sup>329</sup> RP3 Business Plan, (SOC001), 'Oceanic ATCOs' and 'Bridge' figure, p. 69

<sup>330</sup> RP3 Business Plan, (SOC001), p. 14 and Oceanic Opex per flight, 27/12/2019, (REP086)

<sup>331</sup> CAA Response, para 8.13, First bullet, p. 76

<sup>332</sup> CAA Response, para 8.13, Second bullet, p. 76

<sup>333</sup> RP3 Business Plan, (SOC001)

<sup>334</sup> CAA Response, para 8.13, p.76

<sup>335</sup> SoC, para 515, p. 132

<sup>336</sup> RP3 Business Plan, (SOC001), 'Oceanic ATCOs' and 'Bridge' figure, p. 69

will have a negative operational impact. It might be 'in-line' with cost efficiencies originally applied to the en route business but it is removing costs that are simply not in the Oceanic cost base in the first place.

- 302 **The targets the CAA has applied are not commensurate:** despite the CAA's assertion that it has applied the same challenge to en route and Oceanic, the opex cuts in the CAA's decision are twice as large for Oceanic as those proposed for en route (4% and 2% respectively compared to NERL's RP3 Business Plan).<sup>337</sup>
- 303 **The opex cuts will disproportionately impact our ability to deliver against our business plan:** without sufficient resources to fund additional operational ATCOs, it will not be possible for NERL to deliver benefits enabled by ADS-B that were put forward in our business case for the investment. They include facilitating User Preferred Routings (free route in Oceanic airspace) and so improving the level of fuel efficiency and reducing the footprint of the current Oceanic track structure. It is inappropriate for the CAA to require a benefits review of ADS-B in 2022 and impede NERL's success in meeting this assessment by not allowing us the staff resources that would enable these full benefits to be realised.

### 10.3.3. Financeability

- 304 The CAA states that "*a full financeability assessment is something to be undertaken at the level of the licenced entity*" rather than with respect to "*each separate business unit*".<sup>338</sup> We agree that this is a practical approach that reflects the reality of how we finance our business. We have not suggested that the level of cuts proposed by the CAA for Oceanic are such that they threaten NERL as a going concern.<sup>339</sup>
- 305 As stated in the SoC, our issue is not with the financeability test as a theoretical or practical exercise, but with the fact that the opex cuts proposed by the CAA will cause the Oceanic business unit to be loss making which will therefore require it to be subsidised by the en route business.<sup>340</sup> We proposed that a financeability test is used as a method to assess this cross subsidy, for which the Licence requirements were strengthened following the CAA's review of governance and ring-fencing arrangements that concluded in 2016.<sup>341</sup>
- 306 In any event, even if this did not amount to a cross-subsidy within the meaning of the Licence, the impact of the CAA's RP3 Decision is that the Oceanic business will be a continuous loss-making business. In the normal competitive market, which the CAA is attempting to replicate through its economic regulation, such a business would be unsustainable. That is clearly not a desirable outcome for a regulatory process.
- 307 The CAA has chosen not to address the risk of the cross-subsidy in its Response.

## 10.4. Conclusions

- 308 We do not consider that the CAA has provided any evidence or arguments to change our position with respect to the Oceanic business as set out in the SoC.

<sup>337</sup> CAA Response, para 8.13, p. 76

<sup>338</sup> CAA Response, paras 8.14 - 8.15, p. 76

<sup>339</sup> Contrary to the CAA's comment in para 8.14, p. 76 of its Response, the profitability (or otherwise in this case) of the Oceanic business is clearly shown in NERL's financial model.

<sup>340</sup> SoC, p. 124

<sup>341</sup> SoC, para 521, p. 134; and Decision on Licence Modifications in Respect of Governance and Ring-Fencing, (SOC015)

# 11. Cost of capital and financeability

NERL and the CAA have come to very different views on the cost of capital for RP3. We consider that the CAA has taken an aggressive stance on a number of parameters and the overall level of the cost of capital.

Its final WACC estimate does not adequately reflect equity market returns as a whole or NERL's individual risk characteristics. It therefore materially understates the cost of equity over the RP3 period (with a reduction of 20% relative to RP2).

The CAA has made no adjustment for our shorter licence termination notice period and its allowance for issuance fees and liquidity costs is at the lower end of precedent, which are relevant for the estimation of the cost of debt.

The CAA's Response has not addressed our concerns in these areas and we continue to believe its approach does not provide a fair rate of return for RP3.

## 11.1. Overview

309 This Chapter addresses the difference in position of NERL and the CAA with respect to the cost of capital and the assessment of financeability.

## 11.2. Introduction

310 The SoC set out NERL's position that the CAA's WACC estimate is too low and does not provide a fair rate of return for investors given the risks NERL faces (see Chapter 13, SoC).

311 The difference between the CAA's estimate (2.68% real, vanilla) and NERL's (4.21% real, vanilla) is large. This is the result of several methodological issues that underpin the CAA's WACC determination and markedly different interpretations of the risk facing NERL. In particular, we have invited the CMA to consider the robustness of the CAA's estimate in terms of:

- **the reduction in the asset beta from 0.505 to 0.46**, which we do not think appropriately reflects differences in the risk of NERL's business relative to other regulated sectors. In particular, the capital structure of NERL means that returns are inherently more sensitive to revenue and cost risks. In terms of consistency over time, the CAA's beta estimate does not reflect that the price control settlement is objectively more risky than RP2;
- **the substantial reduction in the total market return (TMR) of 85 basis points relative to RP2**. This is inconsistent with economic evidence and the change from one price control to the next is unfeasibly large, given the body of evidence that shows equity market returns are relatively stable over time; and
- **on the cost of debt**, whether it would be appropriate to include an adjustment for NERL's licence termination notice period and whether the allowance for issuance and liquidity fees is sufficient.

312 We also made representations on the debt beta and risk-free rate.<sup>342</sup> However, our assessment of these parameters is closer to that of the CAA.

313 NERL considers that the purpose of the CAA's financeability duty is to ensure that NERL is set an allowed rate of return that properly reflects the risks we face and the opportunity cost of capital for NERL's investors.<sup>343</sup> The substantial cuts to the allowed rate of return proposed by the CAA will not be in the public interest if it does not allow NERL to recover its efficiently incurred costs, or it deters future investment.

### 11.3. Issues arising from the CAA's Response

#### 11.3.1. Key themes from the CAA's Response

314 This section focuses on four overarching themes that emerge from the CAA's Response:

- **interpretation of the financeability duty:** the CAA appears to have taken a narrow interpretation of its financeability duty and implies that a market average equity return needs to be earned through exceptional performance.<sup>344</sup> It has seemingly placed limited weight on the very real potential for customer harm that arises if returns are set below their efficient level. This perspective results in the CAA taking an overly aggressive stance on the regulatory return;
- **consistency with economic drivers and the RP2 decision:** the CAA has not directly addressed our concerns that elements of its WACC estimate are inconsistent with observed economic drivers and that there are implausibly large or directionally illogical changes since RP2. The CAA's response to these concerns is that it has not explicitly considered these factors in producing its WACC estimate;<sup>345</sup>
- **generous equity beta:** the CAA seeks to argue that an equity beta of 1 is generous as a statutory monopoly with regulatory protections is unlikely to face above market average risk.<sup>346</sup> This ignores other key determinants of NERL's equity beta, including financial and operational gearing, and the impact of a long-term regulatory contract; and
- **aiming up:** the CAA mischaracterises our position by suggesting that we have asked the CMA to 'aim up' on the WACC.<sup>347</sup>

315 We address each of themes in turn, before setting out our reply in relation to the individual WACC parameters in Section 11.4.

#### 11.3.2. Interpretation of the financeability duty

316 We consider that the CAA has adopted an aggressive stance on required returns based on a seemingly narrow interpretation of its financeability duty.

317 Both the content and tone of the CAA's Response on the cost of capital and financeability suggest the CAA is considering these issues through the lens of a concern that shareholders might earn 'excess' returns. For example, the CAA states that:

<sup>342</sup> SoC, Sections 13.3.3, p. 149 and 13.3.4, p. 150

<sup>343</sup> S12(8)(d) TA00

<sup>344</sup> CAA Response, para 13, p. 8

<sup>345</sup> CAA Response, para 9.9, p. 80

<sup>346</sup> CAA Response, Summary Box, p. 77

<sup>347</sup> CAA Response, Summary Box, p. 78

- shareholder returns are *"the reward for a business that stretches itself to meet efficiency targets and deliver for its customers across a full range of circumstances – not an entitlement for delivering a business plan that is based on significant increases in costs and the softening of service standards."*<sup>348</sup>
- the WACC should be significantly lower in RP3 than in RP2;<sup>349</sup>
- NERL's approach exaggerates the WACC and places too much weight on unnecessary support for NERL's financeability;<sup>350</sup> and
- NERL's concerns about shareholder returns *"inappropriately colour its evidence on the cost of capital"*.<sup>351</sup>

318 We are concerned that this perspective is a mischaracterisation and fails to recognise the essential role the financeability duty plays in protecting our customers. Specifically, if a regulator inadvertently sets the allowed rate of return below the level an efficient firm should 'expect' to earn on its capital investment, customers can be harmed through under-investment. This harm is just as 'real' as the harm that arises if the rate of return is inadvertently set above the level an efficient firm would expect. Whilst, as we subsequently explain (see Section 11.3.5 below), we are not arguing that the CAA should 'aim up' on the WACC, historic precedent has been to recognise that the extent of harm to customers can be greater if an efficient firm is not financeable (compared to returns being set 'too high').

319 The result of the CAA adopting this 'narrow' perspective is that it has taken an aggressive view on a number of parameters, particularly relating to the cost of equity, despite evidence to suggest that a more cautious approach is warranted. For example:

- the CAA has taken an aggressive stance on the asset beta, making cuts for the second successive price control, despite the inherent subjectivity in the comparator-based approach and the lack of evidence to explain why NERL is now a lower risk business. Indeed, there are several reasons why the risk should be considered to be higher;
- the CAA has used a point estimate at the bottom end of its estimated TMR range, which compounds the reduction in its range relative to RP2, even though this is an area of considerable debate across regulated sectors;
- taken together, this results in a 20% reduction in the cost of equity between RP2 and RP3.<sup>352</sup> This scale of change is not obviously reflected in wider equity markets and its impact is amplified for NERL given we already have a very thin equity return as a proportion of revenue; and
- in terms of the cost of debt, the CAA has made no adjustment for NERL's shorter licence notice period on the basis of concerns that its advisers' 50bps estimate was overstated.<sup>353</sup> A more balanced approach might have been to include a premium smaller than 50bps to balance: i) the broadly recognised need for some upwards adjustment; and ii) the concerns around the validity of the 50bps figure.

<sup>348</sup> CAA Response, para 13, p. 8

<sup>349</sup> CAA Response, Summary Box, p. 77

<sup>350</sup> CAA Response, Summary Box, p. 77

<sup>351</sup> CAA Response, para 13, p. 8

<sup>352</sup> Based on a post-tax cost of equity of 5.40% in RP3 compared to 6.87% in RP2.

<sup>353</sup> CAA, Draft NPP Appendices for RP3 (2020-204) for consultation, CAP1758A, 13/02/19, ('CAA Draft NPP Appendices for RP3, CAP1758A, 13/02/19') (REP069) para D90, p. 50.



320 We believe that our approach to estimating the WACC places appropriate emphasis on financeability. Our expectation is that the allowed rate of return is set at a level that fully reflects the risk of the business. Our cost of capital estimate draws on a detailed bottom-up analysis of each of the parameters provided by expert advisers taking account of market conditions, over which we have no control, and an understanding of the risks we face as a business. The CAA's view that average equity returns are not an 'entitlement' and should be reserved for stretch performance seems to run counter to this and could create an expectation that investors will not be able to recover efficiently incurred financing costs.

321 In this context, we note the CMA's previous statement in the Bristol Water redetermination that the allowed rate of return should be set on *"the reasonable expectation that investors will, on average, be able to recover their efficiently-incurred financing costs. This suggests the need for caution prior to making any assumptions which might imply that, taken in the round, investors in the sector would not be expected to recover their financing costs"*.<sup>354</sup>

### 11.3.3. Consistency with observed economic drivers, other aspects of the price control and the RP2 determination

322 A key argument in our SoC is that the proposed RP3 cost of capital parameters should be consistent with assumptions used in deriving other price control parameters and that changes in the parameters since RP2 should have grounding in observed economic drivers.<sup>355</sup> There are multiple dimensions to this, but key aspects include:

- to the extent that certain WACC parameters, such as TMR, are in part a function of wider economic performance, it is important that the proposals are evaluated against a clearly described economic context for RP3;
- where other price control parameters (e.g. efficiency) rely on a view of macroeconomic performance, it is important that the position (implicitly or explicitly) taken by the CAA is consistent across the different elements of the price control; and
- the size and direction of changes over time should be intuitively justified, absent evidence of a clear error at the previous review.

323 The CAA's Response fails to address our fundamental concerns about the extent to which its decision accords with these principles.

324 The CAA makes it clear that in relation to TMR, it has not taken any particular view on the UK economy, nor on the rate or extent of change in productivity: *"the difference in TMR estimates from our RP2 decision to our RP3 decision also does not (as NERL and EI state) infer a CAA view on the changes in the outlook for the UK economy between RP2 and RP3, or that we have now taken a 'short term' view. Instead, it reflects refinements to the methodologies applied by the CAA."*<sup>356</sup> Here, we are not suggesting, as the CAA implies, that it has articulated a view on the outlook for the UK economy. Our point is that it hasn't considered the consistency of its determination with the outlook for the UK economy at all, and that, as a result, it has not assessed whether its proposals are consistent with observed economic drivers.

<sup>354</sup> Bristol Water Final Determination, (SOC111) para 10.5, p.295

<sup>355</sup> SoC, Sections 13.3.1.2, p. 142 and Section 13.3.2.1, p.145 in particular.

<sup>356</sup> CAA Response, para 9.10, p. 80

- 325 In terms of consistency over time, the CAA's view is that the estimation of the cost of capital for RP3 should be seen as a "fresh exercise"<sup>357</sup> which should not be "unduly constrained" by the approach or parameter estimates adopted in RP2.<sup>358</sup> Generally, the CAA seems to believe that little weight should be placed on the implied changes in the WACC parameters relative to its RP2 determination.
- 326 NERL understands the CAA's position to the extent that we acknowledge there should clearly be scope for an economic regulator, in undertaking a cost of capital assessment, to take account of new evidence, make methodological changes and to revise parameter estimates from one period to the next where there is robust evidence to support these changes. For example, it is appropriate to update the beta methodology to take account of a publicly listed air navigation service provider (ENAV).
- 327 However, regulated companies typically make investment decisions and are remunerated for the investments they undertake over multiple price control periods. Given the relatively long-term nature of financing, there are benefits to applying a stable and predictable methodology for assessing the cost of capital, limiting volatility in allowed returns from one price control period to the next.
- 328 We note that the CMA made a statement to this effect as part of the 2015 Bristol Water redetermination:
- "An important part of this analysis is the application of a consistent approach to setting the assumptions which form the basis of the calculation of the cost of capital. Both debt and equity investors make long-term financing decisions, including debt financing of up to 30 years' maturity. This reflects investors' expectations not just in respect of the immediate regulatory period, but of a consistent approach over the longer term. This is reflected in the estimated scale of returns for regulated networks, which are relatively low in comparison to many commercial businesses. We understand, for example, drawing on statements from credit rating agencies, that this reflects the stable regulatory environment. In particular, the financing environment is influenced by the stable approach to the estimation of the cost of capital, applied by both sector regulators and in previous CC/CMA decisions."<sup>359</sup>*
- 329 Inevitably capital markets and a company's level of risk relative to the market as a whole will change over time. These changes will impact the required rate of return and therefore should rightly be taken into account in a regulatory cost of capital assessment. However, we believe it is important to consider whether the size and direction of any changes relative to the previous determination are reasonable and well justified, particularly for parameters that are generally deemed to be stable or where evidence is mixed.
- 330 An approach that allows for large shifts in stable parameters or leads to directional changes that are inconsistent with economic theory and intuition, risks undermining the faith that investors have in the regulatory model, leading to outcomes that are not in the public interest.
- 331 In terms of regulatory consistency, our main challenges to the CAA's RP3 Decision are:
- **The direction of the movement in asset beta.** On the asset beta, we have provided supporting evidence for why risk has increased materially since the last review. This

<sup>357</sup> CAA Response, Summary Box, p. 77

<sup>358</sup> CAA Response, para 9.5, p. 79

<sup>359</sup> Bristol Water Final Determination, (SOC111) paras 10.6-10.7, pp. 295-6.

includes a number of endemic factors that mean we face increased business risk in RP3 (e.g. higher operating leverage, Brexit-related risk and the RP3 capital programme) and additional risk introduced by the CAA's proposed changes to the regulatory framework (e.g. the introduction of asymmetric risk under the proposed capex governance approach, asymmetric service quality incentives).<sup>360</sup> The CAA has not sought to justify why NERL would face lower risk exposure in RP3 than in RP2, and instead argues that *"the change in beta should not be interpreted solely as our estimate of the change in the true risk of NERL from RP2 to RP3"*.<sup>361</sup> There have been significant reductions in the asset beta across the last two regulatory periods (from 0.60 to 0.505 to 0.46), which are not obviously justified by evidence on changes in risk.

- **The size of the movement in TMR.** We would expect a high degree of stability in the TMR from one regulatory period to the next. Indeed, the rationale underpinning the use of the TMR approach to estimating the cost of equity is that the TMR is broadly stable over time. This is undermined when there are substantial revisions from one period to the next—in this case there is an 85bps reduction relative to RP2 and a 110bps reduction relative to the CMA's contemporaneous view of the TMR for the Bristol Water redetermination.

#### 11.3.4. Does an equity beta of 1 indicate a generous allowance?

332 The CAA states that an equity beta of 1 *'appears to be generous and it is unlikely that NERL would have an equity beta higher than the market average given NERL is a statutory monopoly with significant regulatory protections against key business risks'*.<sup>362</sup> It further argues that *"the broader equity market contains firms in predominantly competitive markets without regulated prices or pensions protections [that are] exposed to a broad range of price, volume, technology and policy risks"*.<sup>363</sup>

333 We do not think that this conclusion is robust for the following reasons.

- the equity beta is a function of financial risk, as well as operational risk. That is, a company can have a higher beta than another if it operates in a more cyclical industry, or if it has more debt in its capital structure. Indeed, the reason why regulators typically make comparisons based on asset betas rather than equity betas is that this abstracts from differences in capital structure. Relative to the market average, NERL is a highly geared business with 60% notional gearing built into the regulatory WACC estimate.<sup>364</sup> The CAA has not accounted for differences in financial structure in arriving at its view that the equity beta should be no greater than 1;
- NERL is tied into five-year regulatory contracts. While there are protections built into these regulatory contracts, by design they reduce our flexibility to respond to changing economic circumstances in the same way as unregulated companies (e.g. by raising prices in response to increases in input costs). The regulatory framework also subjects NERL to potential 'penalties' linked to service quality and, for RP3, timely delivery of investment projects; and
- NERL is relatively asset light, as discussed in our SoC,<sup>365</sup> which means our profits are particularly sensitive to small changes in volumes, input costs, and pensions despite

<sup>360</sup> As summarised in SoC, paras 599 - 600, p. 152

<sup>361</sup> CAA Response, para 9.19, p. 82

<sup>362</sup> CAA Response, Summary Box, p. 77

<sup>363</sup> CAA Response, para 9.32, p. 86

<sup>364</sup> Analysis by LINK Asset Services based on balance sheet data from 440 UK listed companies shows an average debt/asset ratio of 27% in 2017/18. Link Asset Services, UK plc Debt Monitor, July 2018, (**UK plc Debt Monitor, July 2018**), (REP070), p. 11.

<sup>365</sup> SoC, para 536, p. 137

the protections in place. Consequently, NERL is also exposed to a broad range of price, volume, technology and policy risks.

334 For these reasons, we consider that it is incorrect to state, as a matter of principle, that a regulated monopoly is necessarily lower risk and justifies a lower return than the market average.<sup>366</sup> Therefore, we do not consider that NERL's equity beta should be capped at 1.0. We note that the CAA has previously estimated equity betas higher than 1.0 for NERL in RP2 and CP3, as well as for Heathrow in Q6.<sup>367</sup>

335 Moreover, the CMA recognised in its 2017 SONI decision that *"there is no reason why a very highly geared monopoly might not be taking above average market risk, if it is tied into a long-term regulatory contract with material financing risk or input cost inflation risk."*<sup>368</sup>

### 11.3.5. Erroneous suggestion that NERL wants the CMA to 'aim up'

336 The CAA frames paragraph 602 of NERL's SoC as a request for the CMA to aim up in setting the allowed rate of return.<sup>369</sup> For ease of reference, we had asked the CMA to consider the following issues in its redetermination:

- *"What is an efficient rate of return, consistent with the characteristics of our business, including the important differences between NERL and regulated networks, and the risks we face over RP3; and*
- *What would be the negative implications of setting the allowed rate of return too low for NERL, especially in combination with other aspects of the CAA's RP3 Decision."*<sup>370</sup>

337 This is not a request for the CMA to aim up on the WACC, and nor was it our intention to argue for an explicit aiming up allowance. NERL's concern is to ensure that the rate of return accurately reflects risk over the RP3 period.

338 In practice, there is inevitably some degree of judgement in estimating the cost of capital and we believe that it is pertinent for a regulatory authority to consider the costs of setting the rate of return too low when coming to a view on the cost of capital. This is particularly relevant for NERL given our thin capital structure and the significant programme of capital investment in RP3.

## 11.4. Cost of capital parameters

### 11.4.1. Total market return

339 The CAA has reiterated its view that its estimates for the total market return are in line with recent analysis for the UK Regulators Network and UK utility regulators' most recent consultations and determinations.<sup>371</sup>

340 We agree that the CAA's range for the TMR is in line with the UKRN study (6-7%, CPI deflated) and other regulators. However, we reiterate that:

<sup>366</sup> CAA Response, Summary Box, p. 77

<sup>367</sup> CAA and Irish Aviation Authority, UK-Ireland FAB RP2 Performance Plan – Supporting Document, 3 June 2104 (**UK-Ireland FAB RP2 Performance Plan – Supporting Document, 03/06/2104**), (REP063), Figure 6.11, p. 92; and Estimating the Cost of Capital: Technical Appendix for the Economic Regulation of Heathrow and Gatwick from April 2014: Notices Granting the Licences, CAP 1155, 2014, (**Estimating the Cost of Capital, Technical Appendix, CAP1155**), (REP062), Figure 7, p. 44.

<sup>368</sup> Final Determination - SONI Limited v Northern Ireland Authority for Utility Regulation, (SOC114), para 7.197, p. 186 - 7

<sup>369</sup> CAA Response, Summary Box, p. 78

<sup>370</sup> SoC, para 602, p. 152

<sup>371</sup> CAA Response, Summary Box, p. 77

- **the CAA's final TMR point estimate is, to our knowledge, unprecedently low in UK regulatory determinations.**<sup>372</sup> Its point estimate of 5.4% is marginally lower than Ofwat's PR19 final determination (5.47%, RPI-linked) and the mid-point of the range in Ofgem's sector-specific methodologies.<sup>373</sup> It is around 40bps below Ofcom's determination in June 2019.<sup>374</sup> This is partly driven by the CAA's decision to select a point estimate towards the bottom end of its range;
- **the recent UK consultations and determinations that the CAA draws on are affected by the same issues as the CAA's analysis.** The UK regulators' reliance on the UKRN study has been challenged by companies across multiple sectors and by recognised cost of capital experts.<sup>375</sup> There is considerable disagreement over the robustness of the UKRN findings and the interpretation of these findings by regulators. In particular, multiple studies have discussed detailed technical issues relating to the approach to deflating long-run historical average returns. The UKRN deflated historical returns using estimates of historical CPI inflation from a Bank of England publication, which have been developed for research purposes and do not constitute official national statistics.<sup>376</sup> Alternative approaches to the treatment of historical inflation result in higher TMR estimates. In addition to NERA's analysis on behalf of NERL, recent reports by Frontier Economics for water companies, and Oxera for the Energy Networks Association, have considered the impact of using different inflation series. Frontier Economics conclude on a TMR range roughly equivalent to 5.5-6.2% on an RPI-real basis, while Oxera support a higher range of 6.0-6.5% RPI-real;<sup>377</sup>
- **The CAA has placed little weight on alternative sources of evidence that point to higher TMR estimates,** including evidence on TMR consistent with the Bank of England's Dividend Growth Model.<sup>378</sup> These sources of evidence can be useful cross-checks to historical returns and, at minimum, suggest that it may be inappropriate to select a point estimate at the bottom end of the CAA's TMR range; and
- As discussed above, when considered in the context of the RP2 estimate of 6.25% (which was already lower than the CMA's 2015 TMR estimate of 6.50%), it represents a significant revision to expectations regarding equity market returns.

341 We therefore maintain our view that there is a high likelihood that the CAA's TMR estimate of 5.4% RPI-real understates the equity market return over RP3.

#### 11.4.2. Asset beta

342 The asset beta is a key difference between our cost of capital estimate and the CAA's. Given its importance, we have commissioned additional evidence on the appropriate RP3 asset beta from Economic Insight, which is provided alongside this document.<sup>379</sup>

<sup>372</sup> Asset Beta Report, December 2019, (REP064), Figure 3, p. 5

<sup>373</sup> Ofwat, PR19 final determinations: Allowed return on capital technical appendix, December 2019, (**PR19 final determinations: Allowed return on capital technical appendix**), (REP070)

<sup>374</sup> NERA, Cost of Equity for RP3, (SOC110), p. 59.

<sup>375</sup> For example, see the reports prepared by Frontier Economics, NERA and Oxera referenced below.

<sup>376</sup> Bank of England, A millennium of macroeconomic data for the UK, 30 April 2017, (**A millennium of macroeconomic data for the UK, 30/04/2017**), (REP072)

<sup>377</sup> Frontier Economics, Cost of capital for PR19 - Report for Thames Water, 2019, (**Cost of Capital for PR19, Report for Thames Water**), (REP065); and Oxera, The cost of equity for RII0-2, A review of the evidence, Prepared for Energy Networks Association, 28 February 2018. (**Oxera, The Cost of Equity for RII0-2**), (REP066)

<sup>378</sup> NERA found that forward-looking evidence on the TMR based on the Bank of England's DGM, consistent with the CMA's approach in its 2014 NIE determination, supported a real TMR estimate of 7.2-8.1% (RPI-deflated). Updated Weighted Average Cost of Capital for NATS (En-Route) plc at RP3, (SOC087), section 4.2.1.4, p. 33.

<sup>379</sup> Economic Insights, Beta for RP3, Asset Beta Report, December 2019, (**Asset Beta Report**), (REP064)

343 In general, the CAA's Response does not address many of the issues raised in our SoC as to the important differences between NERL and the comparators that have been used to estimate the asset beta.<sup>380</sup>

344 We therefore continue to believe that there are methodological issues in the approach adopted by the CAA and its consultants to estimating our asset beta. These are each addressed in turn.

#### 11.4.2.2. Recognition of the important differences between NERL and network utilities

345 In the SoC we set out a number of differences between NERL and network utilities that we consider have important implications for the assessment of a risk reflective rate of return.<sup>381</sup> The CAA has not addressed these in its Response and continues to hold the view that *"it is reasonable to use utilities as a lower bound reference point and the European Commission's ANSP report (2014) stated 'that revenue and cost risks for ANSPs are broadly similar as for electricity, gas and water utilities.'* This reflects that *NERL and UK regulated utilities have some common risk features, such as being largely statutory monopolies under UK RAB-based regulation*".<sup>382</sup>

346 We note for clarity that the quote referenced by the CAA as being from the European Commission's ANSP report is from a consultancy study by Steer Davies Gleave, rather than the expressed view of the European Commission.<sup>383</sup>

347 The fact that NERL and network utilities are statutory monopolies and are regulated using similar regulatory models does not mean that the underlying risks facing these business are the same, or that they should have similar betas.

348 The CAA itself has previously recognised that NERL has a number of characteristics that mean it is different from regulated utilities. The box below contains a direct quote from the CAA on key differences. These are similar in nature to some of the factors outlined by NERL in our SoC.

<sup>380</sup> SoC, Section 13.3.2, p. 144

<sup>381</sup> SoC, paras 536, p. 137 and 575, p. 146

<sup>382</sup> CAA Response, para 9.22, p. 83

<sup>383</sup> Steer, Davies and Gleave, Study on Cost of Capital, Return on Equity and Pension Costs of Air Navigation Service Providers, 24 March 2014, (**Study on Cost of Capital, Return on Equity and Pension Costs of Air Navigation Service Providers, 24/03/2014**), (REP072)

Table 4 CAA's previous views on the differences between NERL and the typical network utilities

*'NERL has only some of the characteristics of a typical network utility. It has an obligation to supply and, in practical if not legal terms, exclusive rights to provide services over a network under licence. Its monopoly power is therefore relatively strong for en route services. However, it has certain characteristics which make it far less like a water, gas, or electricity network company. For example:*

- *It is relatively labour intensive;*
- *Its asset base consists primarily of systems and equipment rather than built infrastructure. The average economic lives of its assets are therefore significantly lower than most utilities; and*
- *It is subject to changing technology and possibly changing institution arrangements – subject to strong direction from the EU.*

*In some respects, the average life of its assets and a need for future flexibility have more in common with a public broadcasting or Lottery franchise (although of course NERL is subject to a paramount safety imperative not present in those other industries)."*

Source: CAA (2016), 'Section 16 advice to the Secretary of State for Transport on extending the length of the notice provisions for termination in the Air Traffic Services licence', CAP 1467, p. 29, paras 4.6 and 4.7.

349 Our view that network utilities are not a good comparator for estimating NERL's asset beta is further supported by new analysis undertaken by Economic Insight.<sup>384</sup> EI's Asset Beta Report introduces a risk assessment framework that compares risk across regulated sectors.<sup>385</sup> The Report concludes that there is evidence that the characteristics of an ANSP are very different from a traditional network company.<sup>386</sup> In particular, EI find that energy and water companies face significantly lower revenue risk than NERL: they are essential services with much lower income elasticities than air travel; and are subject to total revenue caps, which provide greater protection from volume risk than NERL's regulatory framework.<sup>387</sup>

350 Most importantly, NERL is much less capital intensive than network utilities and therefore cost and demand shocks have a much greater impact on profitability. Therefore, even if the risks to revenue and costs were similar to network utilities, the asset beta would be substantially greater.

#### 11.4.2.3. The CAA considers UK airports represent an upper bound on NERL's beta

351 The upper bound of the CAA's beta range is based on UK airports and the CAA has restated its view that ANSPs should be lower risk than airports.<sup>388</sup> This view is not supported by evidence:

<sup>384</sup> Asset Beta Report, December 2019 (REP064).

<sup>385</sup> As summarised in Asset Beta Report, December 2019 (REP064), Figure 5, p. 13

<sup>386</sup> Asset Beta Report, December 2019 (REP064), p. 41

<sup>387</sup> Asset Beta Report, December 2019 (REP064), p. 38

<sup>388</sup> CAA Response, para 9.23, p. 83

- the asset betas of Heathrow and Gatwick cannot be directly observed. The upper bound is based on judgement regarding these airports' betas, which introduces additional estimation error;
- Heathrow's capacity constraints dampen volume risk as excess demand means that volumes are more resilient to economic downturns. Analysis undertaken by PwC on behalf of the CAA highlights the resilience of Heathrow to the financial crisis and the low sensitivity of changes in passenger traffic to domestic and EU GDP growth.<sup>389</sup> NERA examined peak-to-trough changes in TSU movements for NERL, Heathrow and Gatwick following the financial crisis, and found that NERL experienced a larger decline in peak-to-trough volumes than the airports.<sup>390</sup> This indicates that Heathrow and Gatwick are exposed to lower underlying traffic volatility than NERL; and
- NERA showed that, despite the traffic risk sharing mechanisms that are in place, NERL is exposed to greater cash-flow volatility for a given demand shock than Heathrow and Gatwick, due to our greater operating leverage.<sup>391</sup> We refer the CMA to Table 2.7 of NERA's 'Cost of Equity for RP3' report. Additional analysis by EI shows the responsiveness of NERL's total realised returns, and the return on regulated equity, to movements in traffic volumes.<sup>392</sup>

352 There are therefore strong grounds for NERL having a higher asset beta than Heathrow, in particular due to the material difference in capital intensity. We note that EI has undertaken further analysis of airport comparators and concludes, like NERA, that Aéroports de Paris is the most relevant airport comparator for NERL.<sup>393</sup>

#### 11.4.2.4. The CAA's analysis does not sufficiently reflect NERL's high operating leverage

353 Europe Economics includes an adjustment for operating leverage in relation to ENAV's beta. However, for the utility and airport comparators, it has not explicitly adjusted for operating leverage and has instead "*made an in the round assessment of the point estimate within the range with knowledge of the differences between comparators*".<sup>394</sup> It is widely recognised that higher levels of operating leverage can have a material impact on systematic risk, as reflected in previous CMA decisions. The decision by Europe Economics and the CAA not to make an uplift for operating leverage on the basis of an "*in the round*" view is not robust.

#### 11.4.2.5. A reduction in the beta is inconsistent with increasing risk in RP3

354 In our SoC we set out our view that we are exposed to higher levels of systematic risk in RP3 than in RP2.<sup>395</sup> Additional analysis undertaken by EI supports the conclusion that systematic risk has increased since RP2.<sup>396</sup> The main factors leading to increased systematic risk are as follows:

- **higher operating leverage.** The average annual allowed return has roughly halved from approximately £61m in RP2 to around £30m in RP3. Consequently, our ability to earn our baseline return is even more sensitive to variance around regulatory forecasts than in RP2. EI find that a 2% change in volumes would lead to an 18% change in

<sup>389</sup> Estimating the cost of capital for H7, (SOC118), p. 49 - 50

<sup>390</sup> NERA, Cost of Equity for RP3, (SOC110), p. 27, Table 2.6

<sup>391</sup> NERA, Cost of Equity for RP3, (SOC110), p. 30, Table 2.7

<sup>392</sup> Asset Beta Report, December 2019 (REP064)

<sup>393</sup> Asset Beta Report, December 2019 (REP064), section 3.2

<sup>394</sup> CAA Response, para 9.30, p. 86

<sup>395</sup> SoC, para 572, p. 145

<sup>396</sup> Asset Beta Report, December 2019 (REP064), section 4.2



realised returns under the RP2 revenue structure, but a 36% change in realised returns under the RP3 structure.<sup>397</sup> In terms of the return on regulated equity, the impact of a 2% change in volumes has increased from 38% in RP2 to 49% in RP3 under the CAA's RP3 Decision.<sup>398</sup> This highlights our meaningful exposure to changes in volumes of traffic despite the traffic risk sharing mechanism that is in place;

- **Brexit-related uncertainty.** We continue to see a greater risk to the downside than upside in relation to traffic forecasts as a result of Brexit. Moreover, there remains uncertainty about the extent to which NERL will remain subject to SES regulations over RP3 and importantly the extent to which the treatment of important regulatory protections could be weakened as a result of the diminished (or lack of) voice of the UK in the development of EU-wide regulatory policy. For example, there could be longer-term risk to existing pension pass-through arrangements;
- **asymmetric performance incentives.** The CAA has recalibrated the service quality measures such that the potential penalties are greater in value than the potential rewards. This creates asymmetric risk; and
- **asymmetric capex governance proposals.** The CAA's capex governance proposals also create asymmetric risk that the CAA has not captured in its assessment of the cost of capital, or directly allowed for in cost allowances. We note that the CMA recognised in the 2017 SONI appeal that ex post efficiency assessments, where there is no scope for outperformance but some probability that the regulator will disallow expenditure, create asymmetric risk that needs to be remunerated in order to ensure that the expected return is in line with the cost of capital.<sup>399</sup>

355 As discussed above, we consider that it is important that the direction of change in the asset beta should be consistent with evidence on changes in systematic risk. The CAA's decision to decrease the beta is inconsistent with this evidence.

#### 11.4.2.6. The CAA's comparison to the market as a whole is flawed

356 As set out above, we do not consider there is any relevance in comparing NERL's equity beta to the market average equity beta of 1. This should not act as an upper ceiling on the equity beta as our (financial and operational) leverage, combined with price regulation, may mean that we take above average market risk, despite being a statutory monopoly.

#### 11.4.2.7. The combination of these factors results in an asset beta that does not reflect NERL's relative risk

357 Our view is that, for the reasons outlined above, the CAA has used inappropriate benchmarks for NERL's beta and has applied an approach that does not take account of how NERL's exposure to systematic risk has evolved over time.

358 The additional analysis provided by EI supports this conclusion.<sup>400</sup> EI's Asset Beta Report considers the appropriate comparator set for estimating NERL's beta and potential adjustments to account for observable differences in risk. It outlines a framework for assessing systematic risk based on consideration of revenue risk, cost risk and the structure of cost and revenue (including operating leverage). The application of this framework to a long list of potential comparators leads EI to conclude that Aéroports de

<sup>397</sup> Asset Beta Report, December 2019 (REP064), p. 19.

<sup>398</sup> Asset Beta Report, December 2019 (REP064), Figure 3, p. 5

<sup>399</sup> Final Determination - SONI Limited v Northern Ireland Authority for Utility Regulation, (SOC114), para 7.360 - 7.371.

<sup>400</sup> Asset Beta Report, December 2019 (REP064)

Paris and ENAV are the most relevant benchmarks for NERL. This results in an asset beta range of 0.53 to 0.63, with a point estimate of 0.60, which is well above the CAA's estimate of 0.46.

#### 11.4.3. Risk-free rate

359 In our SoC we noted that the CAA's RFR estimate does not have a big impact on the allowed cost of equity while the equity beta estimate is set at, or very close to, 1.<sup>401</sup> This would no longer be the case were the CMA to take a different view on the equity beta. Moreover, expectations around the future evolution of the risk-free rate may affect expectations around the cost of raising new debt in RP3. Therefore, we consider that it is important that the RFR estimate is robust and takes account of expected future developments in bond markets.

360 The SoC outlined our view that the CAA should have used evidence on the yields on deflated nominal gilts, as well as analysing index-linked gilts.<sup>402</sup> This built on evidence provided by EI on the support for such an approach empirically and from regulatory precedent. We note the CAA's Response in this area, which is consistent with its approach throughout the RP3 process.<sup>403</sup> This remains an area in which our proposed approaches differ. We direct the CMA to Section 2.2.3.1 of EI's assurance review for further discussion.<sup>404</sup>

361 The CAA also refers to spot yields and implied forward rates on index-linked gilts tracking below the levels baked in to its final decision, which it believes could suggest the RFR is lower than its -1.7% estimate.<sup>405</sup> We further note the recent Ofwat PR19 final determination, which uses an RFR figure of -2.2%.<sup>406</sup>

362 Estimating the RFR in current market conditions is challenging. We recognise that historically low sovereign bond yields (with strongly negative, real values) have sustained for longer than originally anticipated. However, we consider that considerable caution is needed to avoid acting opportunistically and locking in an RFR when the market is at its lowest point given the high levels of uncertainty around future developments in bond markets.

#### 11.4.4. Debt beta

363 The CAA and NERL have different positions on the debt beta based on placing different weight on direct and indirect estimation techniques. Our debt beta estimate of 0.05 took account of:

- direct econometric evidence specifically relating to the NATS bond presented by Professor Zalewska.<sup>407</sup> The author concluded that in relation to the NATS bond, the evidence suggest the debt beta was "*statistically significantly negative for most of the investigative period, and statistically insignificant from zero in the last few years.*"<sup>408</sup> This analysis incorporated multiple econometric methods and market indices. As a cross-

<sup>401</sup> SoC, para 588, p. 150

<sup>402</sup> SoC, para 587, p. 149

<sup>403</sup> CAA Response, para 9.37, p. 88

<sup>404</sup> Assurance Review and Assessment of the Evidence on the WAAC at RP3, (SOC113), section 2.2.3.1, p. 15

<sup>405</sup> CAA Response, para 9.38, p. 88

<sup>406</sup> PR19 final determinations: Allowed return on capital technical appendix, December 2019, (REP071)

<sup>407</sup> Estimation of the Debt Beta of the Bond Issued by NATS (En-Route) plc, (SOC117)

<sup>408</sup> Estimation of the Debt Beta of the Bond Issued by NATS (En-Route) plc, (SOC117) p. 1

check, estimates were derived for six Heathrow Airport bonds, which were consistent with the finding;

- indirect estimates of the debt beta prepared by NERA;<sup>409</sup> and
- regulatory precedent which implied a small, non-zero debt beta.<sup>410</sup>

364 In coming to its own view on the appropriate debt beta, we refer the CMA to the evidence provided by Professor Zalewska, NERA and Economic Insight on this parameter.<sup>411</sup>

#### 11.4.5. Cost of debt

365 The two main issues relating to the cost of debt that are covered in our SoC and the CAA's Response are the application of a premium for our licence termination notice period and the allowances for: i) issuance fees; and ii) liquidity fees. We discuss these in turn.

##### 11.4.5.2. Licence termination period allowance

366 In our SoC we referenced the CAA's decision not to provide an additional allowance for the discrepancy between the expected term of NERL's new debt issuances and the licence termination period,<sup>412</sup> despite evidence from the CAA's advisers that this would result in a premium when raising new debt.<sup>413</sup>

367 The CAA references our response to the RP3 Draft Proposals in which we accepted the CAA's decision not to make a notice period adjustment.<sup>414</sup> Pragmatically, given the scale of our differences with the CAA on other WACC parameters, we were prepared at that stage to soft pedal this element. However, the CMA's fresh review is the opportunity to consider this again definitively, given the strong in principle arguments for such an adjustment.

368 We note that Europe Economics maintained a 50bps adjustment to the cost of new debt in its updated report which followed the draft proposals.<sup>415</sup> In the RP3 Decision, the CAA chose not to move in a meaningful way from its position on the asset beta and TMR, while continuing to exclude any notice period premium.

369 We commissioned an independent assurance review by Economic Insight of the cost of capital methodologies adopted by NERL, the CAA and our respective advisers.<sup>416</sup> This assurance review highlighted the 'clear 'in-principle' need' for an adjustment reflecting the shorter licence termination notice period and provided relevant supporting evidence from other sectors.<sup>417</sup> As such, we have raised it as an issue for the CMA to review.

370 For the purposes of the CMA's redetermination, we consider that the following is relevant.

<sup>409</sup> NERA, Cost of Equity for RP3, (SOC110), Section 3.

<sup>410</sup> SoC, Section 13.3.4, p.150

<sup>411</sup> Assurance Review and Assessment of the Evidence on the WAAC at RP3, (SOC113), Section 2.7.

<sup>412</sup> From 2021, NERL can be served notice that its licence will be terminated with a notice period of 10 years. We expect to raise date with maturity dates that extend beyond the minimum notice period.

<sup>413</sup> SoC, Section 13.3, para 597, p. 151

<sup>414</sup> CAA Response, para 9.45, p. 90

<sup>415</sup> Comments on NERA/NERL critiques of Europe Economics, (SOC115).

<sup>416</sup> Assurance Review and Assessment of the Evidence on the WAAC at RP3 (SOC113).

<sup>417</sup> Assurance Review and Assessment of the Evidence on the WAAC at RP3 (SOC113), p. 109 - 112.

- intuition and anecdotal evidence suggest some premium is required for raising debt beyond the notice period for licence termination;<sup>418</sup>
- NERL does not currently hold any debt that matures beyond 2031, and therefore it is not possible to directly estimate the premium by analysing NERL's debt portfolio;
- empirical evidence from Europe Economics estimated a 'statistically significant and material' premium on bond yields when the bond maturity date falls outside the licence notice period.<sup>419</sup> The CAA used the findings of this study in its response to the DfT's consultation on the duration of NERL's licence in 2016.<sup>420</sup> Europe Economics included an allowance of 50bps in all of its cost of debt estimates over the duration of the price review;
- the robustness of Europe Economics' regression analysis, and the 50bps allowance, has been challenged and the CAA has subsequently expressed concerns that it is overstated;<sup>421</sup> and
- regardless of the robustness of the 50bps number, there are strong theoretical grounds for allowing a non-zero premium. The CAA's decision not to make any allowance may be seen as an example of the CAA taking the most aggressive stance open to it.

371 We therefore propose that there is an allowance for the licence termination notice period, with an upper bound of 50bps.

#### 11.4.5.3. Issuance and liquidity fees

372 The CAA has allowed 10 bps for issuance and liquidity fees in its cost of debt estimate for RP3. This is based on an analysis of liquidity and issuance costs for utilities conducted by Europe Economics and its interpretation of regulatory precedent. This is below the RP2 allowance of 15 bps. Our view is that the CAA has understated our issuance and liquidity costs.

373 First, Europe Economics' estimates are inferred from 'rules of thumb' from the water sector that reflect the credit facilities of water companies. Economic Insight shows that NERL's credit facilities are larger as a proportion of debt than figures Europe Economics relies on from the water industry.<sup>422</sup> There is also evidence that smaller companies tend to need to hold additional cash and/or incur higher costs for holding said cash.<sup>423</sup> This implies that NERL may need a greater allowance than the average water company.

374 Second, the cost of debt estimate should include an allowance for both: i) efficient issuance costs; and ii) efficient liquidity costs. The regulatory precedent that the CAA draws upon often only addresses one of these. For example, the CAA implies in its Response that a 10 bps allowance for issuance and liquidity fees combined is in line with

<sup>418</sup> We note the Europe Economics report on debt-raising and the cost of debt, 2015, (REP067) referenced a letter from Bank of America Merrill Lynch, which stated that NERL's shorter licence period 'increases the cost of debt capital'.

<sup>419</sup> Europe Economics, Implications for debt-raising and the cost of debt of changing the minimum termination notice period for NERL's licence, September 2015, (**Europe Economics report on debt-raising and the cost of debt, 2015**), (REP067), p. 15.

<sup>420</sup> Section 16 advice to the Secretary of State for Transport on extending the length of the notice provisions for termination in the Air Traffic Services licence, CAP 1467, December 2016, (**Extending the length of the notice provisions for termination in the Air Traffic Services licence, CAP 1467, December 2016**), (REP068), p. 37 - 38.

<sup>421</sup> CAA, Draft NPP Appendices for RP3 (2020-204) for consultation, CAP1758A, 13/02/19, (**CAA Draft NPP Appendices for RP3, CAP1758A, 13/02/19**) (REP069) p. 50, para D90.

<sup>422</sup> Assurance Review and Assessment of the Evidence on the WAAC at RP3, (SOC113), p. 115.

<sup>423</sup> Assurance Review and Assessment of the Evidence on the WAAC at RP3, (SOC113), p. 115 - 116

CMA precedent.<sup>424</sup> However we note that the 10-bps allowance referred to in the Bristol Water redetermination in 2015 only covered issuance costs and an additional allowance of 10-20 bps was provided for cash holding costs. Therefore, the CMA found that issuance and liquidity costs combined amounted to an uplift of 20-30 bps.<sup>425</sup>

375 Finally, the CAA provides no evidence to justify why combined issuance and liquidity costs should have fallen since RP2.

## 11.5. Conclusion

376 For the reasons outlined above, we maintain our view that the CAA's WACC estimate is too low and does not provide a fair rate of return for investors given the risks NERL faces in RP3.

<sup>424</sup> CAA Response, para 9.49, p. 91

<sup>425</sup> Bristol Water Final Determination, (SOC111) para 10.100, p. 316.

## 12. Annex A: NERL customer engagement – a broader perspective

- 377 NERL has a history of innovation in customer engagement which started in 2003 with the creation of a Customer Affairs department, focused on developing the relationship with Airline and Business Aviation customers and representing their interests within NERL. Most ANSPs and regulators refer to airlines as 'airspace users' which is in line with ICAO. As a business, however, NERL recognises the fact that as paying customers, airlines and business aviation should be treated as such, having a real say in the service that they receive. Despite the fact that other ANSPs have now started to follow-suit, NERL is still recognised by IATA and many customers as having best in class customer engagement.
- 378 This strategy of putting the customers at the heart of NERL business has gone much further than required by our Licence. It has resulted in many innovations over a number of years, driving customer value and making the customer more prominent within NERL's business. Some examples of this are discussed in the following sections.

### 12.2. Operational Partnership Agreement

#### 12.2.1. Activities under the Operational Partnership Agreement

- 379 The Operational Partnership Agreement (**OPA**) was established in 2003 in response to NERL's desire to work with our customers to maximise airspace capacity and improve service delivery. The objective of the OPA is to develop a long-term partnership where NERL and our customers work together to resolve demand and capacity issues to maximise the use of UK airspace.
- 380 Each year, using real time airline schedules and commercial intelligence, the OPA produces a capacity and service forecast designed to inform airline customers of the expected network constraints. The OPA Working Group then works to deliver real service improvements in the form of reduced delay through innovative traffic management initiatives developed jointly by NERL and its customers.
- 381 The OPA also includes the Airspace and Flight Efficiency Partnership, a forum for discussion on NERL and Airline activities/proposals for improving efficiency and environmental performance within UK airspace.
- 382 Whilst the Licence now refers to the OPA, it was NERL's decision to create the forum and develop it.

#### 12.2.2. OPA Priorities for Service Delivery

- 383 NERL introduced more detailed OPA Priorities for Service Delivery which went to a more detailed level than the performance targets within the Licence. This was intended to focus on specific areas of service delivery such as: early morning delays; enhancing flexible use of airspace; reporting; and more detailed metrics for service delivery than required by CAA. Using the experience from the OPA, NERL worked with customers to define licence metrics that better represented customers' needs in the regulatory regime.
- 384 Notably, working with customers NERL also developed the Airspace Efficiency Group (**AEG**) and the concept of 3Di measurement of flight efficiency, which was a world first. NERL was the first ANSP to set a voluntary strategic target of ATM CO<sub>2</sub> reduction (10%)

against which we have delivered c.6.7% as of end of 2018. Whilst the CAA has since included 3Di as a target from CP3, it began as a voluntary target based on NERL working closely with our customers.

385 These activities were focused on many factors outside of NERL's control but which we knew to be of interest to airlines, such as weather delays. We considered that working together in this area could offer real value to customers, outside of what is required under NERL's Licence. This included developing an annual target for fuel savings through the AEG and Flight Efficiency Partnership.

386 OPA priorities are not visible to, or incentivised by, the CAA but can be incentivised inside NERL through their use as internal KPIs for the business and management.

### 12.2.3. OPA Hotspots

387 Whilst the Licence sets the strategic direction for NERL investment and service delivery, NERL recognises that customers may have specific issues which we may be able to help resolve by working together. The concept of hotspots was created by NERL to deliver changes over and above the LTIP commitments, typically requiring delivery within less than a 12 month period and focused on specific issues agreed with the airlines at the OPA. They can be to address issues for a single operator or for the OPA as a whole. Hotspots are allocated to a NERL senior manager to progress and often include benefits which are outside of the performance regime. Typically there would be 4-5 hotspots per annum. Examples include:

- adoption of NERL voluntary targets for Short Term ATFCM (**STAM**) measures which have been embedded in procedures;
- Operational Customer Information Gateway (**OCIG**) on the customer website providing real-time information on regulations and more recently a rolling pre-tactical plan and real-time visibility of STAM measures;
- improved access to routes through managed danger areas reducing route mileage and fuel burn including: delivery of 80% reduction in delays due to military airspace activation in Belgium and France; and work with the airlines and military to increase availability and usage of conditional routes through managed danger areas;
- London TMA Weather Resilience hotspot working with UK Met Office to provide a more granular forecast of thunderstorm activity to allow re-routing of departures to reduce start-up and taxi delay;
- introduction of RNAV navigation approach procedures to Bristol Airport at the request of easyJet;
- Enhanced Resilience and Recovery through creation of pre-planned routes to avoid airspace affected by a technical or operational issue;
- Oceanic flight efficiency hotspot including improved information exchange, collaborative planning and efficient utilisation of Oceanic planned and random routes shared via the customer website; and
- changing the Low Visibility Procedures (LVPs) criteria to reduce delays in foggy conditions.

### 12.3. Other Forums

388 Other customer engagement which has been created by NERL and which goes over and above our licence requirements includes:

- the Safety Partnership Agreement which meets four times a year and consists of a broad cross section of the NERL customer base, focused on working together to improve flight and runway safety;
- the Lead Operator Group and Carrier Panel meets four times a year and is a forum allowing airlines and industry to be directly involved in detailed aspects of airspace and route design. It has been instrumental in changing technical policy for airspace design;
- project or subject matter forums including queue management stakeholder forum and project specific forums; and
- NERL also runs the Industry Coordination for Airspace Modernisation Strategy (ICAMS) on behalf of the whole industry which provides a forum to collaborate on implementation of the AMS.



## 13. Index of Supporting Documents

	Short Name:	Full Name:
REP001	SIP 2015, Minutes of IATA Bi-lateral Review, 27/11/2014	SIP 2015 - NERL 2015 Service & Investment Plan – Draft for Customer Consultation Record of Bi-Lateral Review: IATA, 27th November 2014
REP002	RP2 Initial Business Plan for Customer Consultation	NERL RP2 Initial Business Plan (2015-2019) for Customer Consultation, 10 May 2013
REP003	RP2 Capital Investment Plan for Customer Consultation, July 2013	NERL RP2 Capital Investment Plan (2015-2019) for Customer Consultation, 03 July 2013
REP004	Arup and Helios Phase 1 Report, 06/01/14	NERL RP2 Capex Review Arup and Helios Phase 1 Report, 06 January 2014
REP005	SIP 2015 Customer Multi-lateral Review, 07/10/14	NERL Service and Investment Plan 2015, Customer Multi-lateral Review Presentation, 7 October 2014
REP006	SIP 2015 Multi-lateral Consultation Notes, 07/10/14	NERL SIP 2015 Service & Investment Plan: Multi-Lateral Consultation Meeting Record of Key Points, Agreements & Actions, 07 October 2014
REP007	Letter from Grant Shapps Transport Secretary to Deirdre Hutton CAA, regarding ACOG, 04/11/2019	Letter from Grant Shapps Transport Secretary to Deirdre Hutton CAA, regarding ACOG, 04 November 2019
REP008	Aireon Holdings LLC - A&R LLC Agreement, December 2018	Aireon Holdings LLC, Amended and Restated Limited Liability Company Agreement, Dated 28 December 2018
REP009	IDS Report, January 2014	IDS, Assessing the efficiency of NERL's total employment costs in RP2 - report for CAA, January 2014
REP010	CAA Approval of Condition 10, 2013	CAA, NATS En Route plc Licence Condition 10: Service and Investment Plan 2013, April 2013
REP011	CAA Approval of SIP 2015	SIP 2015, CAA Approval of Service and Investment Plan, 18 September 2015
REP012	Deep Dive Workshop Minutes, March 2017	Meeting: Airline Customer Deep Dive Workshop on RP2 Capital Plan Minutes, 01 March 2017
REP013	CAA Conditional Approval of SIP 2017	CAA Letter of Conditional Approval of SIP17, 26 May 2017
REP014	Update on RP2 Capital Investment Plan for Condition 10	Update on RP2 Capital Investment Plan (2015-2019) for Condition 10, 29 June 2017
REP015	Update on RP2 Capital Investment Plan for Condition 10 – Addendum	Update on RP2 Capital Investment Plan (2015-2019) for Condition 10 – Addendum (Benefits and Risks), 29 June 2017
REP016	CAA Approval of SIP 2018	CAA Approval of the SIP 2018, 15 March 2018
REP017	Interim SIP 2018 Webex, June 2018	NERL Interim SIP 2018, Interim Service and Investment Plan 2018, Final, Webex Presentation, 13 June 2018
REP018	Interim SIP 2018, Multilateral Review by Webex, 13/06/2018	NERL Interim SIP 2018 Interim Service & Investment Plan –Multilateral Webex Review Minutes, 13 June 2018
REP019	Virgin Response to Interim SIP18, June 2018	Letter to Andy Shand from Geoff Clark, Virgin Response to NERL interim SIP18, June 2018

REP020	Interim SIP 2018	NERL 2018 Interim Service and Investment Plan for CAA Approval
REP021	CAA Letter - overhaul of SIP 2019, 03/10/2018	CAA Letter, NERL's interim SIP 2018 and outline RP3 Airspace and Technology programmes, 03 October 2018
REP022	Prospect response to CAP1758, 12/04/2019	Draft UK Reference Period 3 Performance Plan Proposals CAP1758, Response Submission by Prospect, 12 April 2019
REP023	Deploying SESAR Update Minutes, 28/02/2019	Deploying SESAR Update Customer Webex Minutes, 28 February 2019
REP024	Interim SIP 2019	NERL Interim 2019 Service and Investment Plan, Final for CAA Approval, 28 June 2019
REP025	SIP 2019, Customer Consultation Webex Presentation, 08/11/2019	Service and Investment Plan 2019 Draft for Customer Consultation Webex Presentation, 08 November 2019
REP026	SIP 2019, Customer Consultation Webex Minutes, 08/11/2019	Service and Investment Plan 2019 Draft for Customer Consultation, Webex minutes, 08 November 2019
REP027	Letter from Stewart Wingate to Martin Rolfe, 15/09/2014	Letter from Stewart Wingate of Gatwick Airport to Martin Rolfe 15 September 2014
REP028	Letter from Martin Rolfe to Stewart Wingate, 24/09/2014	Letter from Martin Rolfe to Stewart Wingate of Gatwick Airport 24 September 2014
REP029	IATA response to SIP 2018	Letter from Giancarlo Buono, IATA to Martin Rolfe on IATA response to NERL Service and Investment Plan (SIP) 2018, 08 December 2017
REP030	Proposal to modify NATS licence in respect of certain planning and reporting requirements under Conditions 10 and 10a, CAP 1405	CAA Proposal to modify NATS (En Route) plc licence in respect of certain planning and reporting requirements under Conditions 10 and 10a: Notice under section 11(2) of the Transport Act 2000, CAP 1405, May 2016
REP031	Decision on modifications to NATS licence in respect of certain planning and reporting requirements under Conditions 10 and 10a, CAP 1418	CAA Decision on modifications to NATS (En Route) plc licence in respect of certain planning and reporting requirements under Conditions 10 and 10a, CAP 1418, June 2016
REP032	Traffic Forecast Support Pack, 19/12/19	Traffic Forecast Support Pack for Response, 19 December 2019
REP033	Forecast Report, 19/12/19	NATS December 2019 Base Forecast Report, 19/12/19
REP034	Base Forecast, 19/12/19	NATS December 19 Base Forecast, 19/12/19
REP035	Forecast Executive Summary, 19/12/19	NATS Overview of NATS December 2019 Forecast, 19/12/19
REP036	Non-Regulatory Income Support Pack, December 2019	Non-Regulatory Income Support Pack, Explanation of RP3 revenue projections, and the impact these have on our operating costs, December 2019
REP037	ACE Benchmarking Report, 2015	ATM Cost-Effectiveness (ACE) 2015 Benchmarking Report with 2016-2020 outlook, May 2017
REP038	RP2 CCWG Kick Off Meeting	RP2: Customer Consultation Working Group Foundations for constructive engagement kick-off meeting Teleconference , 01 May 2013
REP039	Draft CCWG Working Arrangements, 01/05/2013	Draft Customer Consultation Working Group (CCWG) Working Arrangements 01 May 2013

REP040	IATA response to CAP1758	Draft UK Reference Period 3 Performance Plan Proposals CAP1758, Response Submission by IATA, 2019
REP041	Independent Enquiry System Failure Report, 13/05/2015	NATS System Failure 12 December 2014 – Final Report, Independent Enquiry, 13 May 2015
REP042	IAG response to CAP1758	Draft UK Reference Period 3 Performance Plan Proposals CAP1758, Response Submission by IAG, 2019
REP043	SIP 2011	NATS, Draft Service Investment Plan (SIP), 2011
REP044	CAA letter on SIP 2017, Not Approved, 26/01/2017	Letter from CAA to Martin Rolfe, Service and Investment Plan (SIP) 2017, Not Approved, 26 January 2017
REP045	SIP 2017 Draft for Customer Consultation, 25/10/2016	NATS, Service and Investment Plan (SIP) 2017, Draft for Customer Consultation, 25/10/2016
REP046	SIP 2017, Capex Multi-Lateral, 01/12/2016	NATS SIP 2017, Capex Multi-Lateral, 01 December 2016
REP047	SIP 2017, Review of Revised Capex and INEA Co-Funding, 13/12/2016	NATS SIP 2017, Review of Revised Capex and INEA Co-Funding, 13 December 2016
REP048	SIP 2017, IATA Bilateral Meeting, 25/11/2016	NATS SIP 2017, Main Points of NATS/IATA Domestic SIP Bilateral Meeting, 25 November 2016
REP049	SIP 2017, easyJet Bilateral Meeting, 08/12/2016	NATS SIP 2017, Main points of NATS/EZY Bilateral on Domestic SIP 2017 Draft, 8 December 2016
REP050	SIP 2017, BA Bilateral Meeting, 08/12/2016	NATS SIP 2017, British Airways Bilateral Review, 08 December 2016
REP051	GAD Report 2014	GAD Report for CAA, Advice to the Civil Aviation Authority RP2 price control review for NATS (En Route) plc, Analysis of pension costs, 14 March 2014
REP052	RP3 CAA NATS Traffic Forecast Meeting, 25/03/2019	RP3 CAA NATS Traffic Forecast Meeting, 25 March 2019
REP053	A mandate for Customer Consultation between NERL and airspace users: CAP1019, April 2013	CAA, Process Update for the Economic Regulation of NERL: A mandate for Customer Consultation between NERL and airspace users: CAP1019, April 2013
REP054	Heathrow third runway 'delayed for 12 months', 20/12/2019	BBC News, Heathrow third runway 'delayed for 12 months', 20 December 2019
REP055	Airspace Modernisation Coordination Paper	Airspace Modernisation Coordination Paper, for 14 December trilateral meeting
REP056	Paper on Mechanisms for Enacting Airspace Change	Paper on Mechanisms for Enacting Airspace Change, for 14 December trilateral meeting
REP057	GAD letter to CAA, 05/06/2019	GAD Letter to CAA, Review of further evidence provided by NERL, 05 June 2019
REP058	Airspace and Technology Plans, June 2018	Airspace and Technology Plans, June 2018
REP059	CCWG Customer Consultation, 18/07/2018	NATS (En Route) plc RP3 initial Business Plan Customer consultation: Summary and next steps, 18 July 2018
REP060	Proposal to modify the NATS licence in respect of governance and ringfencing: Notice under section 11(2) of the Transport Act 2000, CAP 1386	CAA, Proposal to modify the NATS (En Route) plc licence in respect of governance and ringfencing: Notice under section 11(2) of the Transport Act 2000, CAP 1386, February 2016

REP061	PRB report on setting of Union-wide Performance Targets for RP2, 27/09/2013	PRB Advice to the Commission in the Setting of Union-wide Performance Targets for RP2, 27 September 2013
REP062	Estimating the Cost of Capital, Technical Appendix, CAP1155	Estimating the Cost of Capital: Technical Appendix for the Economic Regulation of Heathrow and Gatwick from April 2014: Notices Granting the Licences, CAP 1155, February 2014
REP063	UK-Ireland FAB RP2 Performance Plan – Supporting Document, 03/06/2104	CAA and Irish Aviation Authority, UK-Ireland FAB RP2 Performance Plan – Supporting Document, 3 June 2104
REP064	Asset Beta Report, December 2019	Economic Insights, Beta for RP3, Asset Beta Report, December 2019
REP065	Cost of Capital for PR19, Report for Thames Water	Frontier Economics, Cost of Capital for PR19, Report for Thames Water, March 2019
REP066	Oxera, The Cost of Equity for RIIO-2, 28/02/2018	Oxera, The cost of equity for RIIO-2, A review of the evidence, Prepared for Energy Networks Association, 28 February 2018
REP067	Europe Economics report on debt-raising and the cost of debt, 2015	Europe Economics, Implications for debt-raising and the cost of debt of changing the minimum termination notice period for NERL's licence, September 2015
REP068	Extending the length of the notice provisions for termination in the Air Traffic Services licence, CAP 1467, December 2016	Section 16 advice to the Secretary of State for Transport on extending the length of the notice provisions for termination in the Air Traffic Services licence, CAP 1467, December 2016
REP069	CAA Draft NPP Appendices for RP3, CAP1758A, 13/02/19	CAA Draft NPP Appendices for RP3 (2020-204) for consultation, CAP1758A, 13/02/19
REP070	UK plc Debt Monitor, July 2018	Link Asset Services, UK plc Debt Monitor, July 2018
REP071	PR19 final determinations: Allowed return on capital technical appendix, December 2019	Ofwat, PR19 final determinations: Allowed return on capital technical appendix, December 2019
REP072	A millennium of macroeconomic data for the UK, 30/04/2017	Bank of England, A millennium of macroeconomic data for the UK, 30 April 2017
REP073	Study on Cost of Capital, Return on Equity and Pension Costs of Air Navigation Service Providers, 24/03/2014	Steer, Davies and Gleeve, Study on Cost of Capital, Return on Equity and Pension Costs of Air Navigation Service Providers, 24 March 2014
REP074	Schedule of contributions covering the period to 31/12/2026	NATS Section of the Civil Aviation Authority Pension Scheme, Schedule of contributions covering the period to 31/12/2026
REP075	Calculations for CMA Efficiency	Calculations for CMA Efficiency, 27 December 2019
REP076	CCWG RP3 follow up slides, 25/07/2018	20180725 CCWG RP3 customer consultation airports follow up slides, 27 July 2018
REP077	CCWG RP3 close workshop slides, 13/09/2018	20180913 CCWG RP3 customer consultation close workshop slides, 13 September 2018
REP078	CCWG RP3 customer consultation evolving the service slides, 23/05/2018	20180523 CCWG RP3 customer consultation evolving the service slides, 13 23 May 2018
REP079	Airports Commission Final Report, July 2015	Airports Commission Final Report, July 2015
REP080	Outcome of the CAA consultation on proposals for a revised airspace change process, CAP 1465	CAA, Outcome of the CAA consultation on proposals for a revised airspace change process, CAP 1465, October 2016

REP081	Executive Summary, UK Airspace Policy Consultation, January 2017	Executive Summary, UK Airspace Policy Consultation, Moving Britain Ahead, January 2017
REP082	Airports Commission: Interim Report	Airports Commission: Interim Report, December 2013
REP083	Flight path changes and trials articles from airportwatch website	Flight path changes and trials articles from airportwatch website, 27 December 2019
REP084	Interim SIP 2017	NERL Interim SIP - Interim Service and Investment Plan, June 2017
REP085	NATS Interim SIP 2017 Consultation Minutes Draft B, 08/06/2017	NATS Interim 2017 Service Investment Plan Consultation Minutes Draft B, 8th June 2017
REP086	Oceanic Opex per flight, 27/12/2019	Oceanic Opex per flight for CMA, 27 December 2019
REP087	NATS takes equity stake in Aireon article, 16/05/2018	NATS takes equity stake in Aireon to help accelerate technology revolution in global aviation surveillance article, 16 May 2018
REP088	Strategic Partnership Agreement, 02/11/2016	The Airline Group Limited and British Airways PLC and Others, Shareholder Agreement, Strategic Partnership Agreement, 02 November 2016
REP089	ACE Benchmarking Report 2006	ATM Cost-Effectiveness (ACE) 2006 Benchmarking Report, Prepared by the Performance Review Unit (PRU) with the ACE Working Group, May 2008
REP090	CANSO Global Air Navigation Services Performance Report 2016	CANSO, Global Air Navigation Services Performance Report 2016, 2011 – 2015 ANSP Performance Results, The ANSP View, December 2016
REP091	Severn Trent Water final determination	Ofwat, PR19 final determinations: Severn Trent Water final determination, 16 December 2019
REP092	South West Water final determination	Ofwat, PR19 final determinations: South West Water final determination, 16 December 2019
REP093	United Utilities final determination	Ofwat, PR19 final determinations: United Utilities final determination, 16 December 2019
REP094	NAT Traffic and Fleet Forecast	ICAO North Atlantic Economic, Finance and Forecasting traffic forecast NAT EFFG/37 November 2019 working paper 2, NAT Traffic and Fleet Forecast
REP095	Virgin Atlantic Response to CAP1758	Virgin Atlantic, Response to CAA Draft UK Reference Period 3 Performance Plan proposals (CAP1758), 12 April 2019
REP096	Emirates Response to CAP1758	Emirates, Response to CAA Draft UK Reference Period 3 Performance Plan proposals (CAP1758), 11 April 2019
REP097	PCS Response to CAP1758	PCS Aviation Group, Response to CAA Draft UK Reference Period 3 Performance Plan proposals (CAP1758), 12 April 2019
REP098	Ryanair Response to CAP1758	Ryanair, Response to CAA Draft UK Reference Period 3 Performance Plan proposals (CAP1758), 12 April 2019
REP099	SIP2019 Deep Dive minutes, 08/11/2018	SIP 2019, Multilateral minutes, NATS/Customer Deep Dive session on SIP format and process for RP3, 8 November 2018

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