


Economic regulation of NATS (En Route) plc: Provisional Decision for the NR23 (2023 to 2027) price control review (London Approach and Oceanic)

CAP 2553a

A large, abstract graphic composed of overlapping blue and purple shapes, resembling a stylized 'C' or a wing, occupies the lower half of the page. It features a gradient from light blue to dark blue and purple, with a white outline on the right side.

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Chapter 8

London Approach

Introduction and context

- 8.1 The London Approach service is subject to the TA00 and regulated through a separate price control under the NERL licence. The service consists of the control and sequencing of flights by NERL's Swanwick centre between NERL's en route service and the control tower services at certain London airports. London Approach was established to realise safety and capacity benefits from centrally managing congested London terminal airspace.
- 8.2 London Approach covers Heathrow, Gatwick, Stansted, Luton, and London City airports. NERL levies a per flight charge, calculated based on aircraft weight, on flights to or from these airports. The charge is part of NERL's regulated charges that are subject to price control.
- 8.3 The London Approach service is provided from the Swanwick en route centre and uses resources and equipment that are shared with the UK en route service. We do not assess the costs and other revenues for London Approach separately from our assessment for en route charges. Instead, the London Approach charge is derived as a proportion of the total UKATS (UK en route and London Approach) Determined Costs.

Our Initial Proposals

- 8.4 In developing our Initial Proposals, we were mindful of the advantages of a stable regulatory framework and that continuing the relatively simple and straightforward approach to setting charges is proportionate to regulating the London Approach charges.
- 8.5 Consistent with our approach to the UK en route business, our Initial Proposals were based on the STATFOR October 2021 base case traffic forecast and are in Table 8.1 below.

Table 8.1 London Approach traffic forecast in Initial Proposals

'000	2023	2024	2025	2026	2027
Terminal forecast units	926	959	974	991	1,007

Source: STATFOR October 2021

- 8.6 London Approach has operational characteristics which have elements of both en route and terminal services. The service benefits aircraft overflying South-East England as well as those using London airports. In RP2 and RP3, around

one-third of London Approach costs were allocated to the London Approach charge with the remainder allocated to NERL's en route charges. In our Initial Proposals we proposed to retain the RP3 cost allocation approach.

- 8.7 For reasons set out in paragraphs 8.19 – 8.20 of our Initial Proposals, we proposed that we should use the same modified TRS for London Approach as we use for en route charges with revenue recovery due to traffic downturn above 10% spread evenly over n+3 and n+4, while revenue recovery up to 10% would continue to be recovered in n+2.
- 8.8 For the TRS revenue for 2020 to 2022, we assumed full recovery of the revenue under the efficient cost baseline that was not recovered during 2020 to 2022. This TRS revenue should be spread evenly over a ten-year period starting in 2023. This was consistent with our approach to the UK en route price control.
- 8.9 We said that NERL should continue to provide us with quarterly service quality performance information for London Approach during NR23.
- 8.10 Based on the cost allocations from total UKATS costs and revenues we proposed the London Approach Determined Costs (DUC) in Table 8.2.

Table 8.2 Initial Proposals for London Approach¹

2020 prices CPI	2023	2024	2025	2026	2027
Determined Costs (£000)	12.487	12.579	13.558	13.424	13.371
Terminal forecast units (000)	926	959	974	991	1,007
Determined Unit Costs (£)	13.49	13.12	13.92	13.54	13.28

Source: CAA for costs, STATFOR October 21 for traffic forecast

Summary of stakeholders' views

- 8.11 Only British Airways commented on our London Approach Initial Proposals. It supported our proposals to:
- retain a stable regulatory framework that is relatively simple, straightforward and proportionate;
 - keep cost allocation unchanged for NR23;
 - align the London Approach TRS with the en route TRS; and
 - require NERL to continue to report on service quality performance.

¹ The numbers for determined costs and determined unit costs in this table differ from those in Table 8.3 of our Initial Proposals, which were mistakenly shown in nominal prices instead of 2020 CPI prices.

Our views

- 8.12 In making our Provisional Decision for London Approach charges, it is important to consider NERL's overall UKATS costs and non-regulatory revenue in the round, and set a price control that would allow NERL to maintain its current high standard of safety in providing its UK en route and London Approach services. Our Provisional Decision is also consistent with our secondary duties, including our duties to exercise our functions in the manner we consider is best calculated to further the interests of customers and consumers by setting efficient allowances for operating and capital costs.
- 8.13 In the absence of any material new evidence or information since we published our Initial Proposals and taking due account of stakeholder feedback, for the reasons set out in paragraphs 8.19 – 8.20 of our Initial Proposals we have not made any changes to our proposed broad approach to cost allocation.
- 8.14 For the reasons set out in paragraphs 8.20 and 8.22 of our Initial Proposals we have decided to use the same arrangements for the TRS mechanism and TRS debtor as we do for en route in this provisional decision.
- 8.15 For the reasons set out in paragraph 8.25 of our Initial Proposals we have decided to retain the current requirement on NERL to report on its London Approach performance in its quarterly performance reports sent to us under Condition 11 of the NERL licence.
- 8.16 For the reasons set out in paragraph 8.28 of our Initial Proposals we have decided not to introduce any new price control financial incentives on London Approach performance.
- 8.17 The effects of our Decision are to set a price control on the London Approach service that allows NERL to maintain its current high standard of safety and is consistent with our secondary duties, including to further the interests of customers and consumers, and to continue to report its operational performance to its customers.

Our Provisional Decision

- 8.18 Our Provisional Decision is to:
- retain the current cost allocation between London Approach and en route charges;
 - continue to use the same TRS mechanism as we do for en route charges;
 - use the same TRS debtor as we do for en route charges; and
 - continue to require NERL to publish its London Approach service quality performance in its quarterly performance reports.

8.19 The London Approach Determined Costs and DUCs in our Provisional Decision are in Table 8.3.

Table 8.3 Provisional Decision for London Approach²

2020 prices CPI	2023	2024	2025	2026	2027
Determined Costs (£000)	13,042	12,780	13,412	13,784	13,876
Terminal forecast units (000)	955	1,003	1,022	1,039	1,054
DUCs (£)	13.66	12.74	13.12	13.27	13.17

Source: CAA for costs, STATFOR March 23 for traffic forecast

8.20 London Approach charges are affected by adjustments for inflation, differences between actual and forecast traffic, TRS, other revenues and over- or under-recoveries from the use of a temporary unit rate as well as by Determined Costs.

Next steps and implementation

8.21 Our proposed licence modifications to the NERL licence to implement the Provisional Decision above are in appendix I.

8.22 Following consideration of any representations received in response to this Provisional Decision, we will modify Condition 21a of the NERL licence to give effect to our NR23 price control decision.

² The numbers for Determined Costs and DUCs in this table differ from those in Table 8.3 of our Initial Proposals, which were mistakenly shown in nominal prices instead of 2020 CPI prices.

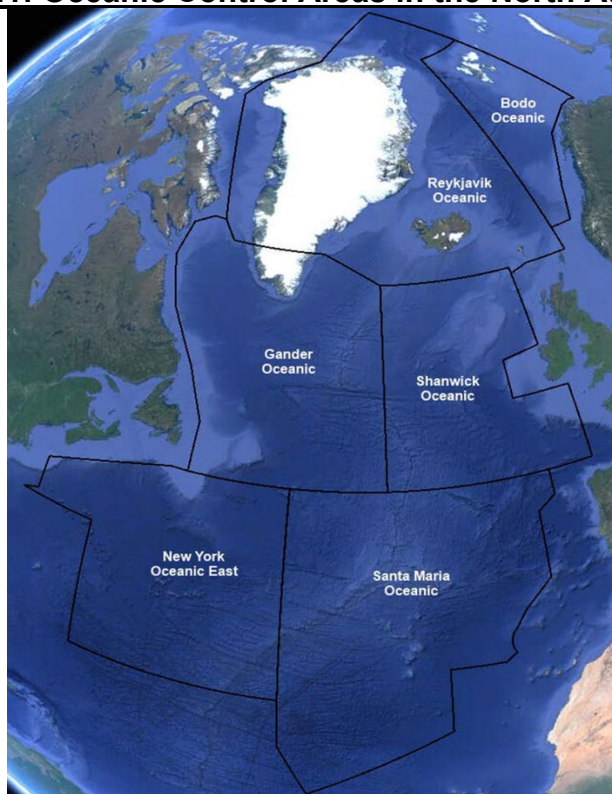
Chapter 9

Oceanic

Introduction and context

- 9.1 NERL's Oceanic service is subject to the TA00 and regulated through a separate price control under the NERL licence, but is not part of the UK performance plan required under the Eurocontrol Principles. Having considered our statutory duties, in general, our method for calculating the Oceanic price control mirrors the method for calculating NERL's UK en route price control. We are mindful of the advantages of a stable regulatory framework and that a relatively simple and straightforward approach to setting charges is a proportionate approach to regulating the Oceanic service.
- 9.2 There are five Oceanic Control Areas across the North Atlantic. The management and development of this airspace is governed by the International Civil Aviation Organisation (ICAO) through the North Atlantic System Planning Group and subgroups. The management of the Shanwick area of Oceanic airspace is delegated to the UK and Ireland by ICAO. Around 80% of North Atlantic flights are handled by NERL's service in the Shanwick area and the service provided by NavCanada in the Gander area (see Figure 9.1).

Figure 9.1: Oceanic Control Areas in the North Atlantic



Source: NERL

- 9.3 NERL's Oceanic service provides air traffic services and datalink communications, while Ireland is responsible for high frequency communications. In 2019 NERL introduced a space-based automatic dependent surveillance broadcast (ADS-B) system to its Oceanic service, using satellites to provide more accurate and timely aircraft positioning information compared to the existing procedural approach.
- 9.4 NERL's Oceanic service provides air traffic services and datalink communications, while Ireland is responsible for high frequency communications. In 2019 NERL introduced a space-based automatic dependent surveillance broadcast (ADS-B) system to its Oceanic service, using satellites to provide more accurate and timely aircraft positioning information compared to the existing procedural approach.
- 9.5 The Oceanic service is a relatively small part of NERL's overall business, consisting of about 7% of NERL's opex costs in NR23, and 6% of total costs (which include capex). The Oceanic RAB represents about 2% of NERL's total RAB.
- 9.6 This chapter sets out our provisional decision for NERL's Oceanic service for NR23.

Our Initial Proposals

- 9.7 Our Initial Proposals considered each regulatory building block that makes up the maximum allowed charge for the Oceanic service in NR23, and largely reflected our approach for setting the efficient cost baseline for the UKATS building blocks. These building blocks include:
- staff, non-staff and pensions opex;
 - capex;
 - non-regulatory revenues;
 - allowed return on the RAB (WACC); and
 - regulatory depreciation.
- 9.8 As STATFOR does not publish a specific Oceanic traffic forecast, NERL publishes its own, based on STATFOR assumptions. NERL's business plan forecast was based on STATFOR's October 2021 forecast. As set out in paragraphs 9.9 to 9.11 of our Initial Proposals we explored the availability of other forecasts for the Oceanic service, however we considered NERL's forecast to be the most appropriate approach for our Initial Proposals.

- 9.9 A significant proportion of NERL's non-staff opex forecasts (about 75% over NR23) relate to the costs of ADS-B satellite data which NERL uses to support its Oceanic service, but does not use for its UK en route and London Approach activities. These data charges are driven by the number of Oceanic flights using the technology. NERL's business plan included ADS-B costs of about £15 million per year, which we used for our Initial Proposals.
- 9.10 We did not accept NERL's proposal to extend the UKATS TRS mechanism to Oceanic for our Initial Proposals, because we considered it might introduce unnecessary complexity with limited benefits for customers, and because a substantial portion of the Oceanic service costs (the ADS-B data charge) is already protected from traffic risk under NERL's contractual arrangements with Aireon, the ADS-B data provider.
- 9.11 The CMA determination agreed it was appropriate for NERL to include an uplift to its Oceanic charges to recover the costs associated with the introduction of ADS-B, but that the CAA could reconsider the regulatory allowance for ADS-B and any efficiency adjustments following an independent review on the costs and benefits of the service. In May 2022 we published a working paper providing an update on this review, identifying early thinking and proposing next steps in relation to the review.³ We anticipated that the review would commence at an appropriate time in NR23 once suitable data is available and metrics have been developed, with appropriate input from stakeholders.
- 9.12 We said it would be appropriate for NERL to continue to recover ADS-B costs, but noted the RP3 commitment to review the regulatory allowance further following an independent review of the costs and benefits of the service. This activity will be conducted outside of the NR23 review process.
- 9.13 NERL's business plan proposed service level targets for two aspects of its performance: (i) the measurement of the percentage of flights being provided with the requested clearance (or operationally equivalent profile); and (ii) percentage of flights being cleared for variable speeds. We said we would consider our approach for our final decision in light of NERL's planned engagement with airlines on its proposed service measures.
- 9.14 We assessed financeability for the whole regulated company, including the UKATS and Oceanic services.

³ Economic Regulation of NATS (En Route) plc: working paper on the review of the costs and benefits of space-based ADS-B in the North Atlantic CAP2351. See www.caa.co.uk/CAP2351

Summary of stakeholders' views

- 9.15 NERL disagreed with parts of our Initial Proposals for the Determined Cost building blocks, which are discussed in other chapters of this provisional decision. For example, it said that our staff opex proposals would not allow it to meet higher expected traffic levels or deliver planned capex, and that any reduction in capex in our low case would lead to delays in programmes designed to improve service performance and operational efficiencies. NERL's views on opex, pensions and capex are considered and set out in chapter 4.
- 9.16 For Oceanic, NERL said it had identified inconsistencies between the text and tables in our Initial Proposals and our policy decision to make no adjustments to NERL's Oceanic capex.
- 9.17 NERL said we should revise the allowance for ADS-B unit cost to reflect new evidence which had emerged since its business plan and the pass-through nature of these costs.
- 9.18 NERL said it proposed to engage with airlines during quarter 1 2023 and seek their endorsement on performance measures and targets over NR23.
- 9.19 British Airways supported maintaining a proportionate approach to the regulatory framework for Oceanic, keeping it stable, simple and straightforward while also mirroring the method for calculating NERL's UK en route price control.
- 9.20 British Airways said that airlines were generally sceptical of the savings ANSPs said would flow from the use of ADS-B, were reluctant to incur the significant increase in their cost base and would welcome a better understanding of how ADS-B charges are determined. It also said that, as the impact of the pandemic on traffic had delayed a meaningful review on any consistent basis of the impact of the introduction of ADS-B on airline costs, the review can take place during NR23. British Airways argued that important measures of value delivery to airlines would be: the truncation and eventual dismantling of the Organised Track System⁴, the improved percentage performance of flights provided with the requested clearance and flights being cleared for variable speeds.
- 9.21 IATA encouraged us to separate the regulation of Oceanic services from domestic services in due course, as they operated under different regulatory frameworks under different jurisdictions and to provide greater transparency on the process for concluding the regulation of Oceanic services.

⁴ The Organised Track System is a structured set of transatlantic flight routes that stretch from the northeast of North America to western Europe across the Atlantic Ocean.

- 9.22 IATA and Virgin Atlantic supported the cost/benefit review of the introduction of ADS-B as well as targets to ensure full value from the technology for users of Oceanic services.
- 9.23 IATA and Virgin Atlantic also supported the development of appropriate metrics to measure NERL's performance.
- 9.24 Stakeholder views (from NERL, British Airways, IATA and Virgin Atlantic) on traffic forecasts are considered and set out in chapter 1.
- 9.25 British Airways argued that the reduced volume forecast for Tango routes results in a significantly increased ADS-B data cost in NR23.
- 9.26 Stakeholder views (from NERL, Aer Lingus, British Airways, IATA and Virgin Atlantic) on TRS are considered and set out in chapter 7.

Our views

- 9.27 In line with our primary duty to exercise our functions so as to maintain a high standard of safety in the provision of ATS, our highest priority when setting the NR23 Oceanic price control is to ensure that NERL is able to employ sufficient resources (such as staff, equipment and systems) to enable it to maintain the high standard of safety it currently provides. Our provisional decision on Oceanic is also consistent with our secondary duties, including to exercise our functions in the manner we consider is best calculated to further the interests of customers and consumers by only allowing efficient levels of costs.
- 9.28 Having considered our statutory duties, which apply to the regulation of all NERL's regulated services, our approach for calculating the Oceanic price control mirrors the approach for calculating NERL's UK en route price control.
- 9.29 NERL said that our proposed reduction in staff opex was not supported by evidence, in light of the greater productivity which its workforce will need to deliver over the NR23 to meet the higher levels of traffic and to ensure sufficient resources are available to deliver the planned Oceanic capex. In chapter 4, we discuss staff opex, including the relationship of productivity to traffic levels and the numbers of staff required in NERL's business plan. We do not consider that NERL's specific response on Oceanic staff opex requires us to make different productivity assumptions, or to take a different approach to any other aspect of NERL's costs, to those we have used for UKATS costs.
- 9.30 In considering NERL's comment about inconsistencies between the text and tables in our Initial Proposals and our decision to allow all of NERL's Oceanic capex we found that we did not include the correct numbers for depreciation in the tables. We are allowing all of NERL's Oceanic capex in our provisional decision

and the amount for regulatory depreciation in Table 11.1 is consistent with that decision.

9.31 All stakeholders agreed that we should use the most up to date traffic forecast for Oceanic, including for Tango routes. We have assessed NERL's most recent forecasts, which are based on STATFOR's March 2023 forecasts, and consider them to be reasonable and appropriate for our provisional decision. Our assessment on NERL's forecasts is set out in chapter 1.

9.32 Table 9.1 below summarises our Provisional Decision for the Oceanic building blocks for NR23.

Table 9.1 Oceanic building blocks

£m, 2020 prices	2023	2024	2025	2026	2027
Operating costs (staff and non-staff)	19.2	18.1	15.7	16.1	15.0
Exceptional items ⁵	0.1	0.1	0.1	0.1	0.1
Pensions	5.7	5.5	3.5	3.2	3.0
Regulatory depreciation	6.6	6.9	4.5	4.8	4.9
Return on RAB	1.2	1.1	1.0	1.0	1.0
Tax	1.1	1.3	0.4	0.9	1.1
Other Oceanic revenue	-0.5	-0.5	-0.5	-0.5	-0.5
Total core costs	33.4	32.5	24.8	25.7	24.7
Traffic forecasts North Atlantic (000s)	483	519	528	535	542
Traffic forecast Tango (000s)	24	26	27	27	27
Unprofiled core charge per flight (£)	65.9	59.7	44.7	45.8	43.4
ADS-B data costs North Atlantic (NA)	14.9	15.8	16.9	17.1	17.8
ADS-D data costs Tango	0.04	0.14	0.15	0.14	0.15

⁵ Includes: exceptional costs and spare cash provisions.

Unprofiled ADS-B data charge per NA crossing	30.9	30.5	32.0	31.9	32.9
Unprofiled ADS-B data charge per Tango area crossing	1.5	5.2	5.4	5.3	5.5

Source: CAA calculations

- 9.33 Since our Initial Proposals, NERL has forecast an increase in ADS-B costs of £20 million for North Atlantic flights and a decrease of £5 million for Tango flights over NR23 (the March 2023 Submission). NERL said the increase was largely due to increased flight hours for North Atlantic flights, material changes in exchange rates and different traffic forecasts. The decrease for Tango flights is due to NERL negotiating a lower rate for 2023 with Aireon.
- 9.34 We assessed each of the reasons for the increase in North Atlantic costs and summarise our views below:
- NERL submitted that there were several reasons which might explain why average flight times across the North Atlantic increased in the 12 months to July 2022, including: post-pandemic changes to airline operations resulting in different traffic flows; airlines choosing to fly at lower speeds due to higher fuel prices or their environmental goals; and changes in fleet mix as different aircraft fly at different speeds. But as it did not provide any clear evidence to support its submissions as to which if any of these factors were causing the increased costs, nor convincing reasons why average flight hours in this 12 month period would be sustained over NR23, we do not consider there is sufficient justification to assume that increased flight times would be sustained over NR23;
 - we checked NERL's exchange rate figures and found that they were broadly aligned with recent market information provided by our advisors; and
 - we found that NERL had not used the latest, March 2023, traffic and inflation forecasts that we have used in our Provisional Decision. It is unclear why NERL did not use the latest forecasts. In the absence of convincing reasons why NERL used different forecasts and to maintain consistency with the rest of our financial modelling we have based our Decision on ADS-B costs using the same traffic and inflation forecasts we have used for other cost items
- 9.35 Having considered this new information provided by NERL, we have adopted the same exchange rate as NERL, but removed the proposed increase in average flight hours and updated costs for the traffic and inflation forecasts from our Provisional Decisions. This leads to an increase in ADS-B costs of £10 million over NR23 compared with NERL's business plan and our Initial Proposals, but

£10 million below its March 2023 Submission. These costs are shown in Table 9.2.

Table 9.2 ADS-B costs

£m, 2020 prices	2023	2024	2025	2026	2027	Total
NERL business plan Feb-22	15	15	14	14	15	73
NERL submission Mar-23	17	18	19	19	20	93
CAA Provisional Decision	15	16	17	17	18	83
Differences						
23 vs 22 submission	2	3	5	5	6	20
CAA vs 23 submission	-2	-2	-2	-2	-2	-10
CAA vs 22 submission	0	1	3	3	3	10

Source: NERL and CAA

- 9.36 We have provisionally accepted NERL's revised Tango ADS-B costs as they reflect its revised negotiated price with Aireon.
- 9.37 As mentioned in paragraph 9.1, we are mindful of the advantages of a stable regulatory framework and that a relatively simple and straightforward approach to setting charges is a proportionate approach to regulating the Oceanic service. Because of this we have not introduced a TRS mechanism for Oceanic charges in our Provisional Decision, and this is discussed further in chapter 7.
- 9.38 All stakeholders agreed in response to our Initial Proposals that a review of the costs and benefits of ADS-B should take place during the NR23 period. NERL is currently engaging with us and airlines on the approach to the review, with a view to appointing an independent consultant around September 2023 who will use 2023 data for the review which NERL expects to be completed around July 2024. Once the review is complete, we will consider whether it is appropriate to reconsider the regulatory allowance for ADS-B and any efficiency adjustments. Where appropriate and consistent with our statutory duties, we may propose changes to the NERL licence using the provisions under section 11 and 11A of the TA00.
- 9.39 NERL is consulting with airlines on service quality targets and metrics as part of its consultation on the terms of reference for the ADS-B review. In our Initial Proposals we said we would consider our approach to NERL's proposed service quality targets for our final performance plan decision. We have decided that while NERL is still discussing these targets with airlines it would be premature to

take a decision on them now. Therefore, the targets and metrics will not be included in the Oceanic price control condition now, but when the review has been completed we will consider whether they should be included in NERL's quarterly performance reports produced under Condition 11 of the NERL licence.

- 9.40 While we note IATA's position on separating the regulation of NERL's Oceanic charges from that of its domestic charges, it would not be practical nor appropriate to consider at this stage of the NR23 review. As appropriate we will consider the approach and form of regulation for NERL's Oceanic services as part of the NR28 review, or before.

Our Provisional Decision

- 9.41 Our Provisional Decision on the charges under the Oceanic price control is shown in Table 9.3.

Table 9.3 Provisional Oceanic Price Control

£ 2020 CPI prices	2023	2024	2025	2026	2027
Base charge					
Initial Proposals	57.6	60.7	53.9	54.0	51.3
Provisional Decision	<u>65.9</u>	<u>59.7</u>	<u>44.7</u>	<u>45.8</u>	<u>43.4</u>
Atlantic ADS-B charge					
Initial Proposals	31.6	31.5	30.0	29.9	29.9
Provisional Decision	<u>30.9</u>	<u>30.5</u>	<u>32.0</u>	<u>31.9</u>	<u>32.9</u>
Tango ADS-B charge					
Initial Proposals	6.3	5.7	4.9	4.7	4.5
Provisional Decision	<u>1.5</u>	<u>5.2</u>	<u>5.4</u>	<u>5.3</u>	<u>5.5</u>

Source: CAA calculations

- 9.42 The forecast charges during NR23 will also include adjustments to Oceanic revenue for inflation, traffic variations and variance in the 2023 unit rate, which we have set to be recovered over the NR23 period to smooth the impact on the charge in 2024, which are not reflected in the charges in Table 9.3.
- 9.43 For reasons mentioned in chapter 7, we are not introducing a traffic risk sharing mechanism for Oceanic.
- 9.44 We support the review of the costs and benefits of ADS-B described at paragraph 9.38, above, and once the review is complete, we will consider

whether it is appropriate and consistent with our statutory duties to reconsider the regulatory allowance for ADS-B and any efficiency adjustments.

Next steps and implementation

- 9.1 Our proposed licence modifications are in appendix H.
- 9.2 Following consideration of any representations received in response to this provisional Decision, we will modify Condition 22 of the NERL licence to:
- give effect to our NR23 price control Decision; and
 - amend the date of the ADS-B review to a date determined by the CAA after reasonable consultation with NERL and other interested parties and with the terms of reference being agreed with the CAA.