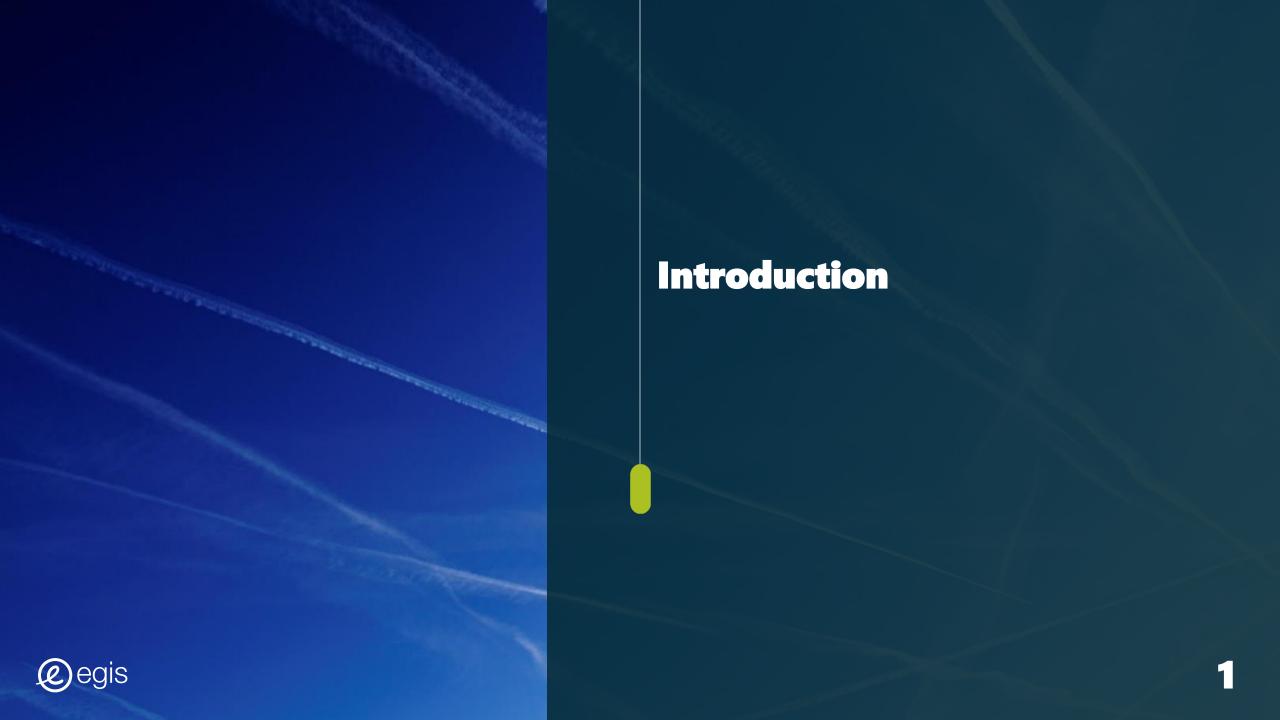


- 1 Introduction
- **2** Overall Findings and Scoring
- **3** Individual Programme Assessment
- **Annex** Scoring Guidance



# **Introduction and Scope**

#### ROLE OF THE INDEPENDENT REVIEWER

Egis has been commissioned as an Independent Reviewer (IR) by the CAA to, "assess NERL's performance from the perspective of what users of its services expect from meaningful engagement by NERL on its CAPEX plans". Appendix D CAPEX Engagement Incentive of CAP 2597b, sets out guidance for the assessment of NERL's performance in respect of their CAPEX engagement incentives as per Condition 10 of NERL's licence.

The IR will score NERL's engagement with stakeholders relating to its CAPEX programme made through:

- Published Service and Investment Plans (SIPs),
- Interim SIPs (iSIPs) published during the regulatory year/periods,
- Any other meetings, forums or other forms of engagement relating to the development of its CAPEX plan. Eg: the Technical Customer Advisory Board (TCAB) or other meetings or forums of similar purpose.

The IR will perform the exercise of review and scoring twice a year, i.e., after publication of the SIPs and iSIPs during the NR23 period.

This is the 4th IR report reviewing NERL's iSIP25 document and their engagement in addressing stakeholder concerns since the March 2025 SIP25, September 2024 iSIP24 and April 2024 SIP24 Independent Reviewer Reports.

#### ASSESSMENT CRITERIA

NERL's quality of engagement on each of its CAPEX programmes/projects is assessed across these four assessment criteria:

(A) User Focus

**(B)** Optioneering

**(C)** Responsiveness

**(D)** Mitigating/Corrective Actions

### SCORING GUIDANCE

NERL's performance for each of its CAPEX programmes/projects will be scored against the above assessment criteria using a points-based scoring system on a scale of 1 to 4, where:

**1** = Poor

**2** = Below expectations

**3** = Baseline expectations

**4** = Excellent

### **OVERALL CAPEX ENGAGEMENT SCORE**

The average final score for each CAPEX programme/project is calculated using an average of the individual scores under each assessment criterion.

The calculation of the overall CAPEX engagement score takes the average programme/project scores and subsequently weights them according to their forecast CAPEX spend.

The CAA is responsible for making the final decision on NERL's performance, considering the findings of the IR report and representations from stakeholders (including NERL) in forming their assessment.



# **Scoring Criteria**

Scoring guidance is provided in CAP 2597b, repeated in the Annex, and summarised below.

### **USER FOCUS**

Includes timeliness of information, traceability and proportionality. NERL should provide information to users, the IR and the CAA:

- a. In forms, and through mechanisms, that reflect user priorities and resource constraints and that are clear and accessible;
- b. In a timely manner, including through providing early warning and explanation of factors that may put planned delivery timelines at risk;
- c. That enables specific elements of projects or programmes that have moved between programmes (such as the scope, costs, delivery timescales and benefits accruing from those changes, and any impacts on OPEX) to be traced from one consultation to another; and
- d. The level of substantiation NERL provides should reflect the materiality of the change under consideration.

### **OPTIONEERING**

NERL should seek to identify a range of different responses that might be adopted where practicable, explain the need for the programme and the outcomes and benefits it is seeking to deliver, and to provide opportunities for engagement and scrutiny of those options by users and the IR. In addition, NERL should be transparent about the OPEX impacts and delivery risks of different options presented.

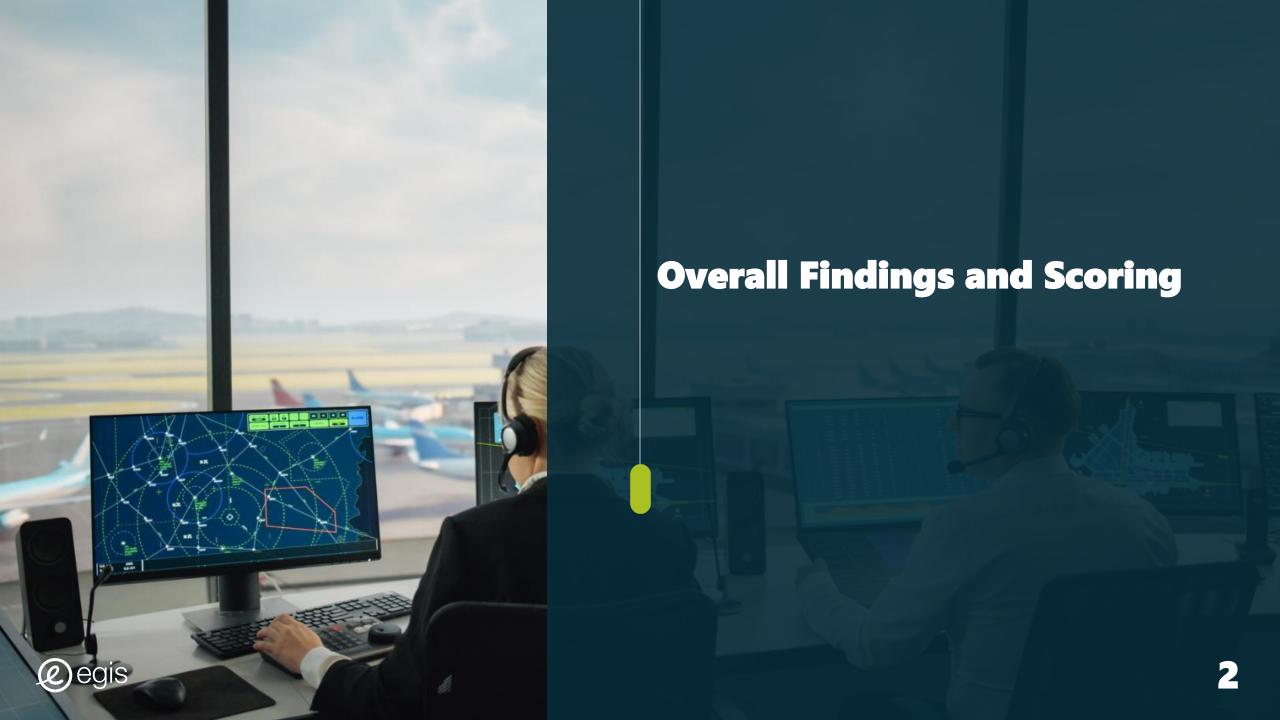
#### RESPONSIVENESS

NERL should respond constructively, meaningfully and in a timely manner to submissions by users, the IR and the CAA, and explain clearly how it has considered and taken account of those submissions.

#### MITIGATING & CORRECTIVE ACTIONS

NERL's engagement with its customers should include appropriate mitigating and/or corrective actions in the light of submissions by users, the IR and the CAA, and it should communicate those actions to stakeholders in a timely manner.





# **Overall CAPEX Engagement Assessment (1/4)**

CRITERIA	OVERARCHING IR OPINION
	1. The IR welcomes NERL's efforts to engage with stakeholders, including through the Technical Customer Advisory Board (TCAB) held on 27 <sup>th</sup> February 2025 and iSIP25 consultation held on 6 <sup>th</sup> June 2025.
	2. The IR acknowledges NERL's continued efforts to enhance the document's readability and coherence. Improvements such as the increased use of referencing (e.g. to sections and milestones), the logical structure, and the use of bold text have notably improved the document's accessibility. An example of improvements to the presentation of information is the graphics retained from SIP25 on pages 4, 5, which provide readers with a concise, visually engaging format for signposting key information.
	3. The document continues to be text-heavy, and its length has increased compared to earlier versions (88 pages versus 84 in SIP25, 61 in iSIP24, and 59 in SIP24). While the IR recognises the trade-offs in balancing detail with overall length, the density of text remains a concern from an accessibility perspective.
User Focus	4. In relation to certain programme changes, the level of substantiation provided in the document does not appear commensurate with the materiality of the change or the scale of CAPEX involved. Some significant changes are accompanied with relatively limited explanation, while relatively minor adjustments receive extensive justification. This inconsistency may hinder the reader's ability to effectively assess the relative importance of and rationale for changes to NERL's programmes.
	5. NERL has made progress reporting the benefits delivered by its programmes in recent iterations, including the provision of more detailed information in Appendix B. However, this information would be further contextualised with a comparison of benefits delivered relative to NR23 baseline expectations.
	6. iSIP25 includes a section on preparing for NR28 in which the lessons learned from NR23 and priorities for NR28 are discussed. It is promising to see NERL pro-actively reflecting and engaging with airspace users in a timely and proportionate way as preparations start for the next price control period.



# Overall CAPEX Engagement Assessment (2/4)

CRITERIA	OVERARCHING IR OPINION
User Focus (cont.)	<ol> <li>NERL's risk reporting has improved in transparency and detail compared to previous iterations, enabling easier identification of the specific nature of various risks.</li> <li>NERL acknowledges that it has been "over optimistic" in its planning and forecasting [pg7] and notes that, ahead of NR28, "We will improve the realism and accuracy of our forecasting by mitigating the impact of excessive optimism bias" [pg8]. In SIP25, NERL introduced Reference Class Forecasting (RCF) to improve the accuracy of programme planning and forecasting. NERL states it is now applying this approach "to all Moderate to Very High complexity projects as they bring forward business case investment requests, and customers will see this reflected in cost and milestone forecasts" [pg50].</li> <li>The interdependency between NERL's FDP evolution and FF-ICE compliance is explained inconsistently. The iSIP25 customer consultation material provides a clear assessment matrix which includes the link between FF-ICE compliance and NERL's FDP plans, however such clarity is not provided within the iSIP25 document itself [pg21].</li> <li>Within the DP En Route &amp; Voice programme, NERL has revealed a recovery plan for PCUA FOS (D2) which involves an interim step to deploy the iTEC V2 platform with the current conflict detection rather than Foursight [pg56]. This constitutes a £69.4m increase in budget and a ~4 year delay to the project, for which NERL has provided only limited explanation. The resultant impact on the delivery of customer benefits and the planned timeline for each stage of the revised two-step deployment approach are not clear.</li> </ol>



# Overall CAPEX Engagement Assessment (3/4)

CRITERIA	OVERARCHING IR OPINION				
	1. NERL's TCAB held on 27 <sup>th</sup> February 2025 provided additional detail on the various options considered and assessed for the 'FDP Evolution'. The optioneering presented is an improvement on SIP25 as it contains a clear description of each option and a uniform assessment matrix. However, the materiality of the proposed change would mandate the provision of further detail, particularly related to delivery timescales, costs and risks.				
Optioneering	2. In contrast, NERL has undertaken an extensive optioneering exercise for the decarbonisation of the Prestwick Centre, focused on replacing its five gas boilers [pg31]. The need for the replacement was explained in detail, with a wide range of options identified and assessed comprehensively including quantified cost and benefit ranges. While the optioneering itself is good, the level of detail included in iSIP25 seems disproportionate to the relatively small scale of CAPEX involved and its relevance to customers' priorities when compared to other programmes.				
	3. The optioneering approach taken in relation to the removal of Interim XMAN HMI (A6) from the Airspace & Operational Enhancements programme is considered proportionate given the low levels of CAPEX involved (<£0.5m) and the reliance on the readiness of neighbouring ANSPs [pg30]. NERL's approach relating to this milestone has been consistently explained across prior SIPs/iSIPs, with the rationale for its removal clearly articulated.				
Responsiveness	1. Draft iSIP25 was published on 28 <sup>th</sup> May 2025 for Customer Consultation, which was followed up by a consultation meeting on 6 <sup>th</sup> June 2025. NERL set out questions to customers within Draft iSIP25 [pg9] to enhance its engagement and the IR recognises this as a proactive initiative to understand customers' needs.				
Responsiveness	2. A review of the evidence pack shows NERL has responded to a customer letter relating to iSIP25 in a constructive, comprehensive and timely manner.				



# Overall CAPEX Engagement Assessment (4/4)

CRITERIA	OVERARCHING IR OPINION
Mitigating & Corrective Actions	<ol> <li>iSIP25 displays improved traceability of interdependencies between milestones across different programmes following an IR opinion on SIP25. A noteworthy example of this is the addition of dependencies in the portfolio Gannt chart [pg36].</li> <li>NERL has included a view of the RAB within iSIP25 [pg33], in response to previous customer requests [customer letter, 1st Jul 2024] [customer letter, 28th Dec 2024] and the SIP25 IR opinion that "The inclusion of the RAB for increased transparency is expected to be made in iSIP25". The IR appreciates the clarity and transparency of the table illustrating the RAB and the associated explanation. The customer has placed on record their appreciation for NERL's efforts in including this information and for holding a bilateral meeting with them on the topic in May 2025 [customer letter, 30th June 2025].</li> </ol>



# **iSIP25 CAPEX Engagement Score**

Programme	CAPEX value (weight)	User Focus	Optioneering	Responsiveness	Mitigating & corrective actions	Overall score
Sustainment & Surveillance	£231m	2.5	2.5	3	2.5	2.63
DP En Route & Voice	£186m	2.5	-	-	3	2.75
Airspace & Operations Enhancements	£80m	3.5	-	-	3	3.25
Information Solutions	£56m	3.5	-	3	-	3.25
Common platform	£31m	2.5	-	2.5	-	2.50
Property & Facilities Management	£19m	3	4	-	2.5	3.17
Oceanic	£24m	3	-	-	2.5	2.75
ATC Training Transformation*	£8m	3	-	2.5	2.5	2.67

**CAPEX ENGAGEMENT SCORE** 

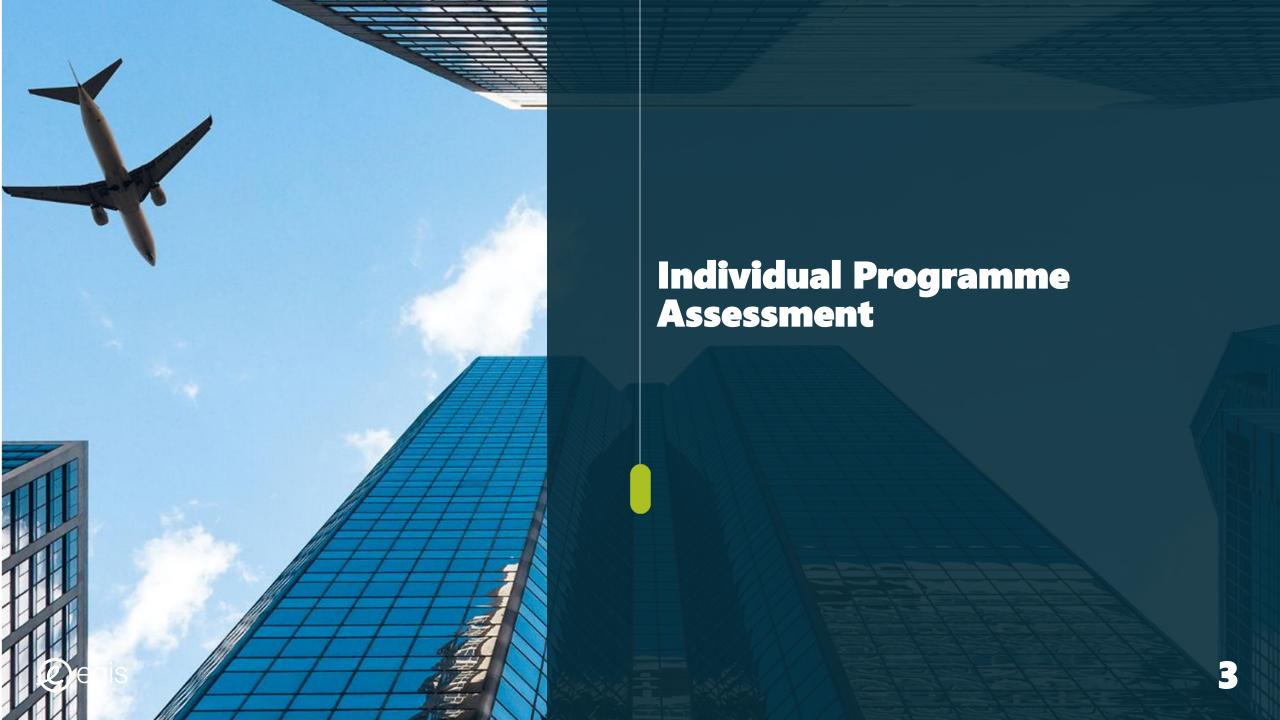
2.81



<sup>\*</sup> The IR considers that this CAPEX programme has ended, therefore the scores for the last SIP or interim SIP assessed will be used as per CAP 2597b.

Note: See Individual Programme Assessments for detailed assessments informing the scoring.

Note: The NR23 Baseline (CAA FD) CAPEX values are used for the purpose of weighting.



# **Sustainment & Surveillance (1/4)**

## **SIP25** contents

### LTIP Dashboard

• The LTIP dashboard [pg34] shows the programme remains at Amber status. The NR23 forecast spend has remained at £300m (£300m in SIP25, £233m in SIP24, £231m in SIP24), over the NR23 baseline figure of £231m. Two out of four milestones are on track (two out of six in SIP25, three out of six in SIP24 and two out of eight in SIP24).

## **Description**

- The section details NERL's robust investment and maintenance strategy for over 90,000 "complex and interdependent sub-systems and services" across six domains, focusing on operational safety, resilience, and proactive mitigation of future risks [pg19, 51].
- The FDP Evolution programme completed the "Identify" phase and moved to the "Define" phase, which is expected to be completed by Q2 2026 [pg19]. The aim of the Define phase is to "reduce uncertainty to provide a meaningful and actionable plan, including cost ranges". These are to be communicated to customers in SIP26 or iSIP26 [pg20].
- The first sustainment build of the New En Route Centre (NERC) for London Area Control successfully transitioned "on time and within budget". This change is claimed to provide fixes and enhancements to datalinks, expanded system capability and usability, updated radar processing and improved the management of special use areas with Support Information System (SIS) fixes [pg7, 52].
- Two major AIRACs were delivered containing almost 200 changes, including OSEP Deployment 11 (A31), Wedgetail orbit areas and high-altitude remotely-piloted aircraft transit routes. The delivery of Uninterruptible Power Supplies (UPS) Replacement at Swanwick (T16) was completed in April. An update of the Support Information Retrieval System (SIRS) at Prestwick was also completed, and remote control and monitoring of this system at Swanwick will be enabled in July [pg52].
- The construction of the Great Dun Fell (T15) Radome, originally planned for Q3 2023, has now commenced; however, progress is being hampered by adverse weather conditions. The Tiree Radome replacement (T2), originally planned in the NR23 baseline for Q4 2023, and has been further rephased to support a multi-national MOD exercise in the Hebrides Air Weapons Range [pg52].



# **Sustainment & Surveillance (2/4)**

# SIP25 contents (cont.)

### **Benefits**

- NERL states the benefits of proactive investments in sustainment, "ensures the continuity of safe and resilient services by minimising the risk of technical failures" for aviation customers [pg53].
- Further claimed investment benefits include ensuring ongoing compliance with regulatory and legislative requirements. In addition, part of the sub-portfolio contributes to reducing greenhouse gas emissions from NERL's estates [pg53].

### Milestones

- iSIP25 reports six milestones as complete; Node Core Replacement FOS (T13), Dry Air Coolers (DACs) and Chillers Deployment 1 (T3), Prestwick UPS Replacement (T1), Tiree DVOR Replacement (T14), Dry Air Coolers (DACs) Deployment 2 (T9), and Swanwick UPS Replacement (T16) [pg51].
- Tiree Radome replacement (T2) and Surveillance Deployment 1 (T5) have slipped in comparison to SIP25 and the NR23 baseline, while GDF Radome replacement (T15), ExCDS Mid Life upgrade (T8), Surveillance Deployment 2 (T10) and Surveillance Deployment 3 (T12) remain as reported in SIP25 but have spilled from their NR23 baselines.

### Risks

- The key risks of this sub-portfolio identified by NERL remain stable, comprising the "diversion of effort ... to maintain service resilience" in response to a "critical asset failure or significant emergent scope" and "delivery capacity constraints across a small number of niche skill areas". There is also a risk of "increased supplier costs, where materials prices have consistently exceeded broader inflation measures".
- Mitigations include proactive monitoring of technical risks in assets, planning for potential failure scenarios, embedding agility into engineering workforce planning, and increasing recruitment in the most constrained work centres.
- Technical risks relating to the FDP Evolution Programme identified by NERL include developing requirements by undertaking System Requirements Specification in parallel with the High-Level Requirements Specification to formalise the "as-is" position based on the current NAS system, and achieving the appropriate Assurance Level (AL) [pg20].



# **Sustainment & Surveillance (3/4)**

## **IR** opinion

### **User focus**

- 1. NERL provides a clear explanation of the key benefits of the FDP evolution activity within iSIP25 and the customer consultation. The list of key benefits includes to "remove the obsolescence risk that currently exists with a targeted Full Operational Service (FOS) date by 2029" [pg19].
- 2. NERL has communicated when additional information for its FDP Evolution will become available "We will identify an appropriate milestone(s) to assist customer tracking of the delivery of this important programme and aim to include this in SIP26 or iSIP26, depending on progress during Define phase" [pg20]. However, it is untimely that this could still take up to a year, 24 months after initial communication of the change in iSIP24.
- 3. NERL references the example of delivering the "first sustainment build for our New En Route Centre (NERC) London Area Control system since 2018, successfully transitioned in Feb 25 on time and within budget" [pg7]. The absence of a milestone for this deployment within the programme inhibits the traceability of the costs and benefits associated with its deployment across NERL's SIP/iSIP documentation. In addition, the IR notes this is the first reference to "NERC" during NR23 SIP reporting, which further inhibits user traceability.

## **Optioneering**

5. NERL's TCAB held on 27<sup>th</sup> February 2025 provided additional detail on the various options considered and assessed for NERL's FDP evolution. The optioneering presented is an improvement on SIP25 as it contains a clear description of the potential outcomes and benefits of each option and a uniform assessment matrix, which provides opportunity for scrutiny by users and the IR. However, given the materiality of the proposed change, there remains a lack of detail relating to delivery timescales, costs and risks for each option.



# **Sustainment & Surveillance (4/4)**

## IR opinion (cont.)

## Responsiveness

6. A customer letter raised questions relating to NERL's ERAM FDP Evolution [customer letter, 30<sup>th</sup> June 2025]. NERL's response appears to address the matters raised, with the exception of establishing accountability measures and the pass through of liability to vendors, which does not appear to have been directly addressed in NERL's response [NERL letter, 24<sup>th</sup> July 2025].

## Mitigating & corrective actions

7. NERL included a high-level CAPEX assessment (e.g., Very High, High, Medium) in its February TCAB optioneering engagement, but has still has not provided any clarity on the overall CAPEX required for the ERAM solution. Considering the time elapsed since NERL first proposed the ERAM concept (in iSIP24, over 12 months ago), the overall materiality of the change [customer letter, 5<sup>th</sup> July 2024], the IR expected further cost detail to have been shared with customers by now. This opinion is supported by the fact that FDP Evolution is moving into the define phase, and NERL previously stated that "Define phase, with associated programme gate – capex required to be committed" [SIP25, pg18].

NERL has taken the following action in response to comments made by the IR during its SIP25 review:

- 8. ERAM FDP activities have been separated into a standalone section under the Sustainment & Surveillance programme within iSIP25, providing greater traceability of FDP related developments.
- 9. Within the iSIP25 customer consultation, NERL provided further details on which elements of the AMS can be achieved with NAS, which aspects would be delivered through ERAM, and which would be enabled by the various versions of iTEC (v1, v2, SkyNex (v3)).
- 10. In response to customer requests relating to NERL's FDP approach made in relation to SIP25, NERL has commissioned "an independent study to explore the relative progress of ATM developments across the European network" [pg26].



# **DP En Route & Voice (1/3)**

## **SIP25** contents

### LTIP Dashboard

• The LTIP dashboard [pg34] shows the programme remains at Red status. The NR23 forecast spend has increased to £158m (£142m in SIP25, £196m in iSIP24, £186m in SIP24), and remains below the NR23 baseline figure of £186m. Two out of three milestones are on track (zero of three in SIP25, one out of three in iSIP24 and one out of three in SIP24).

## Description

- The section reiterates NERL's commitment to replacing ageing infrastructure, providing new technologies to replace disparate systems, and continuing to work towards NERL's vision of "one operation, bringing greater consistency, flexibility and resilience to meet future capacity and enable efficiencies across operations" [pg55].
- The programme continues to be reported under smaller independent streams: Stream 1, Stream 2, Stream 3, Stream 4 and Stream X [pg55]. The overall forecast for the programme has increased by £15m, with Stream 1 rising by £13m due to a "revised delivery approach", Stream 4 increasing by £5m from "elongation of test activities", and Stream 2 decreasing by £3m through efficiencies gained from a "joint delivery plan with the supplier" [pg37].
- NERL "faced significant challenges to deliver DP En Route and other transformation programmes in line with our NR23 business plan" [pg7]. In May 2024, Stream 1 PCUA FOS (D2) "did not pass operational validation and was put into a recovery phase". A new solution that "balances technical feasibility, schedule and cost, operational need and ease of transition into service" is now being put to action [pg26].
- NERL has completed the recovery phase for Stream 1, delivery of iTEC v2 and Foursight into Prestwick Centre Upper Airspace (PCUA). The recovery plan involves an "interim stage to deploy the iTEC V2 platform with the current conflict detection toolset rather than the Foursight solution (which will be deployed as a second step)" [pq56].
- Stream 2 has seen the Platform Technically Ready for Use (TRFU) milestone (D7) delayed by a quarter to Q1 27 [pg55, 56]. NERL states "there is no impact on customer-facing services or opex impacts as a result of this schedule change" [pg56].
- Due to supplier delays, some Stream 4 activities have been reassigned to internal resources. A revised work plan has been agreed to assess commercial and timeline impacts, with "no expected change in supplier costs; however ... the shift of some activities to NATS staff will likely result in an overall capex cost increase". [pg56].



# **DP En Route & Voice (2/3)**

## SIP25 contents (cont.)

### **Benefits**

- The expected benefits of the programme are to ensure the future availability of safe and resilient services by replacing ageing infrastructure with modern, "supportable systems on industry-standard architecture", claimed to enable interoperability with partner ANSPs and reduce technical risk and support costs [pg56].
- Further presented benefits include a unified technical platform, and operation across Swanwick and Prestwick to support the expansion of cross-border free route airspace. Resilience and cost efficiency benefits are also delivered through Secondary Voice Systems (SVS) deployment milestones, which provide improved voice communications and a backup facility for the MoD [pg56, 57].

### **Milestones**

- SVS FOS (AC & Mil) (D6) remains the only milestone completed (October 2023). A forecast of Q2 28 Q2 29 is now provided for PCUA FOS (D2). While Platform RFU and Tech Services Readiness (D7) has slipped to Q1 27.
- The forecast for milestone MVS FOS (AC & Mil) (D8) remains unchanged from SIP25, and both AC FOS (D4) and MVS & SVS FOS at Prestwick (D5) remain as "Post NR23" [pg55, 56].

### **Risks**

- Risks primarily relate to delivery capacity and supplier delivery, which are "compounded by the overall complexity of the programme and the assurance and acceptance requirements for each of the streams to transition into service." These factors are already impacting the delivery of deployment milestones. [pg57].
- Mitigations include identifying internal resource pinch points, managing demand through prioritisation, and increasing capacity via recruitment. Supplier-related risks are addressed through "ensuring greater presence within the programme board to enhance communication and resolve issues earlier", continuous improvement of the Supplier Management Process, and "close collaboration with suppliers (supplier relationship forums) to boost capacity and resolve quality issues, learning from experience and managing key dependencies." [pg57].



# **DP En Route & Voice (3/3)**

## **IR** opinion

### **User focus**

- 1. NERL has proposed a recovery plan for PCUA FOS (D2) which involves an interim step to deploy the iTEC V2 platform with the current conflict detection rather than Foursight [pg56]. The resultant impact on the delivery of customer benefits and the planned timescales for the revised two-step deployment are largely unclear.
- 2. The budget for Stream 1 has risen from £38.7m in SIP25, to £108.1m in iSIP25 [pg58], with delivery slipping from Q4 2024 (NR23) to Q2 2028–Q2 2029 [pg 55]. Given the materiality of the change around Foursight in Stream 1, a long-standing feature in NERL's CAPEX plans, the IR considers that NERL should have engaged more extensively with customers on the matter in a view of providing early warning of the extent of additional CAPEX required.
- 3. Similarly, the following explanations relating to the overall programme do not appear to reflect the significant rescoping of Stream 1 into a two-step deployment: "in terms of outcomes, the overall scope of our plan remains unchanged from our revised NR23 plan (noted in SIP23)" and "Stream 1 Prestwick Full Operational Service (FOS) deployed on the existing operational technical platform to gain the benefits of upgraded iTEC functionality, incorporation of the Foursight controller tools, [...]" [pq55].
- 4. The overarching programme benefits for DP En Roue & Voice are clearly explained, and the interdependencies with other programmes clearly articulated (e.g. cross-border free-route airspace) [pg56].

## **Optioneering**

6. The IR recognises that opportunities for NERL to optioneer around the recovery of Stream 1 were limited given the nature of the project.

## Responsiveness

6. NERL had limited opportunities to demonstrate responsiveness for this programme in iSIP25.

## Mitigating & corrective actions

7. In response to a SIP25 IR opinion, NERL has added additional detail of the programmatic risks relating to DP En Route & Voice.



# **Airspace & Operations Enhancements (1/3)**

## **SIP25** contents

### **LTIP Dashboard**

• The LTIP dashboard [pg34] shows the programme remains at Amber status. The NR23 forecast spend has increased to £76m (£74m in SIP25, £75m in iSIP24, £80m in SIP24), and remains below the NR23 baseline figure of £80m. Three out of four milestones are on track (five out of seven in SIP25, five out of seven in iSIP24 and four out of eight in SIP24).

## **Description**

- The long-term programme ambition remains the "design and implementation of significant airspace change that will systemise UK terminal airspace, enhance the way we manage flows of traffic with new technology and deliver Cross-Border Free Route Airspace across the UK's high-level sectors." [pg60].
- NERL provides an update on UK Airspace Design Service (UKADS), stating that "the current complex model for the delivery of airspace change associated processes requires simplification" and believe "the current regulatory process will not support the timely and effective delivery of airspace modernisation in the London TMA Cluster", though welcoming the CAA consultation on a proposal for a UKADS [pg29].
- The Interim XMAN HMI has been removed due to significantly greater costs than initially anticipated (c.£2.5m to £3m) owing to the complexity of information exchange with external stakeholders, and "neighbouring ANSPs will not be ready for XMAN data exchange until sometime between 2026 and 2028 at the earliest" [pg30].

### **Benefits**

• NERL focuses on delivering tangible customer benefits through airspace changes and enhancements to Queue & Capacity Management tools, with the primary goal of improving safety, reducing delays, and achieving environmental benefits, including 3Di improvements and enabled CO<sub>2</sub> reductions.

### **Milestones**

- Following the successful deployment of TBS Pairwise and TBS Gatwick Advanced Mixed Mode, is "further enhancing the Intelligent Approach product ... this new Intelligent Approach baseline will form the basis for further development towards the TBS Gatwick concept to include Optimised Mixed Mode (A11)", though "full deployment of OMM will not be possible before NR28 due to dependencies on AMAN and ExCDS projects." [pg62].
- Planning for the rectification of the AMAN Headbranch project (A21) was completed using lessons learned from its 2024 deployment and reversion, with redeployment expected in early 2027 [pg62].



# Airspace & Operations Enhancements (2/3)

## SIP25 contents (cont.)

## Milestones (cont.)

- Since the successful delivery of OSEP Deployment 11 (A31) in March, two additional deployments have been identified for the next tranche of OSEP deliveries. The frequency of future OSEP deliveries will be reduced to reflect the complexity and scale of these additional initiatives [pg63].
- London Airspace South (LAS) (A17.1) has been delayed due to Gatwick postponing its CAP1616 Stage 3 submission to October 2025.
- The ScTMA (A13) received confirmation of meeting Stage 3 criteria, but "formal approval is dependent upon Edinburgh Airport's submission which was delayed to the end of Jun 25, with the Stage 3 decision due in Q3 25".
- The MTMA (A18) project is paused due to partner airports' challenges in progressing beyond Stage 2, delaying the planning of the next phase.
- NERL notes that the implementation of the UKADS may also influence the timing and/or structure of deployments [pg63].
- Planned Cross-Border Free Route Airspace deployments (A16.1, A12, A15), all remain dependent on the delivery of iTEC v2 through PCUA FOS (D2) and AC FOS (D4).
- NERL continues expanding internal Free Route Airspace in the remaining non-FRA Scottish sectors (FRA D3), completing simulations in December 2024 and May 2025, and following successful outcomes, a delivery plan has been agreed with deployment targeted for Q1 2026.

### **Risks**

- The risk of public misunderstanding during consultations, given the complexity of future airspace change proposals, remains and is mitigated through collaboration with FASI sponsors and ACOG. UKADS may provide a significant opportunity to enable greater coordination and collaboration among stakeholders [pg63].
- As a result of the CAP1616 process and/or co-dependence with other sponsors ACP's there remain risks of deployment delays or CAA's non-approval of airspace change proposals, beyond NERL's control. This risk is currently impacting LAS, and previously affected ScTMA (A13) and MTMA (A18).



# Airspace & Operations Enhancements (3/3)

# **IR** opinion

### **User focus**

- 1. Overall, the dependencies between programme milestones are articulated clearly and concisely, giving customers a holistic view of the programme and the nuances of its delivery [pg62].
- 2. The project-level risks for this programme are described in detail.

## **Optioneering**

4. The optioneering approach taken in relation to the removal of Interim XMAN HMI (A6) is considered proportionate given the low levels of CAPEX involved (<£0.5m) and the external dependence on other ANSPs [pg30]. NERL's approach relating to this milestone has been consistently explained across prior SIPs/iSIPs, with the rationale for its removal in iSIP25 clearly articulated.

## Responsiveness

5. NERL had limited opportunities to demonstrate responsiveness for this programme in iSIP25.

## Mitigating & corrective actions

- 6. NERL has considered the following SIP25 IR opinion, which stated "NERL should ensure that significant cross-programme interdependencies and risks are adequately signposted in future SIP material" [SIP25 IR report]. Within iSIP25 such interdependencies are detailed or clearly signposted by NERL, representing an improvement compared to SIP25.
- 7. NERL has provided a detailed update relating to the UK Airspace Design Service (UKADS) [pg29]. Given the imminent timescales, the advanced stage of consultation, and the strong backing for UKADS to be established and operational by the end of 2025, there is now greater certainty around its delivery. This would justify a more detailed assessment of how UKADS may affect the programme scope and CAPEX portfolio, particularly in relation to delivery risks against existing airspace milestones.



# **Information Solutions (1/3)**

## **SIP25** contents

### **LTIP Dashboard**

• The LTIP dashboard [pg34] shows the programme remains at Green status. The NR23 forecast spend remains at £39m (£39m in SIP25, £43m in iSIP24, £39m in SIP24), and remains below the NR23 baseline figure of £56m. Two out of two milestones are on track (one out of two in SIP25, one out of two in iSIP24).

## **Description**

- The programme description is carried forward from SIP25, it highlights the critical role of the IT programme in supporting business resilience through non-operational information systems.
- NERL's cloud-first strategy "delivers value by providing effective, reliable, and secure IT services". Enabling the "workforce to work from various locations and reduce demand for office space", and "provide an efficient IS service both in terms of percentage of IT spend against company revenue and headcount." [pq66].

#### **Benefits**

- NERL states that this sub-portfolio delivers both direct and indirect customer benefits by enabling efficient engagement between non-operational business units, customers, regulators, and the wider industry. Another stated benefit is that of helping NERL in remaining compliant with commercial, legal, and regulatory obligations [pg67].
- Investments are claimed to support timely customer interaction and coordination during service impacts, ensure business continuity and resilience through secure and compliant IT services, manage cyber-security threats, and contribute to environmental goals by minimising estate emissions and encouraging suppliers to align with net-zero carbon targets [pg67].

### Milestones

- Aurora R4 (IS3) and STAR Replacement (IS2) were completed in July and September 2024, respectively. The Windows 11 upgrade (IS4) is progressing well, with 99% of upgrades complete. The remaining devices are on track to be upgraded on time and within budget.
- However, the SAP Core upgrade (IS1) implementation has been delayed due to issues in the User Acceptance Test phase but NERL states project schedule contingency has been sufficient to absorb the potential impact. the revised completion date of Q3 25 is hence within the NR23 baseline forecast [pg66].



# **Information Solutions (2/3)**

# SIP25 contents (cont.)

### Risks

• Key risks include a major cyber event triggering unplanned work and funding needs (mitigated through proactive engagement with the National Cyber Security Centre), limited resource availability affecting project delivery (managed via internal prioritisation and external recruitment), and enterprise IT demand exceeding budget (addressed through business planning, prioritisation, and sourcing additional capacity internally or from the market) [pg67].



# **Information Solutions (3/3)**

# **IR** opinion

### **User focus**

- 1. A proportionate level of information has been provided relative to the programme's size and importance.
- 2. NERL has improved the description of how this CAPEX programme supports the delivery of customer benefits in iSIP25 [pg66, 67] compared to SIP25.

## **Optioneering**

3. NERL had limited opportunities to demonstrate optioneering for this programme in iSIP25.

## Responsiveness

4. A customer has sought clarification relating to NERL's CAPEX relating to the development of its NIBS solution (IS1) and whether external service provision rather than the development of an in-house solution could have been more cost-effective [customer letter, 30<sup>th</sup> June 2025]. NERL has provided a clear response to address this concern [NERL letter, 24<sup>th</sup> July 2025].

## **Mitigating & corrective actions**

5. NERL had limited opportunities to demonstrate mitigating & corrective actions for this programme in iSIP25.



# **Common Platform (1/3)**

## **SIP25** contents

### LTIP Dashboard

• The LTIP dashboard [pg34] reports NERL's iTEC Collaboration Project's RAG with a Green Status. The NR23 forecast spend remains at £19m (£19m in SIP25, £31m in iSIP24 and SIP24) and is below the NR23 baseline figure of £31m. One milestone is on track (previously, in SIP25 this programme reported no milestones).

## Description

- The Common Platform "is not a NERL managed capex programme and does not report through NERL's capex governance mechanism" [pg34]. The CAPEX of £4m per year recorded, funds NERL's investment "within the iTEC Collaboration for iTEC SkyNex development and the onward development of FourSight tools." [pg69].
- NERL intends to "transition the lower operation onto the strategic iTEC SkyNex product in the region of 2035", "subject to a suitable deployment window being found that ensures minimum impact ...". This will be followed by the upper airspace transition "from its earlier (DP En Route) version of iTEC onto the strategic iTEC product to provide a unified service on a common platform ...". No risks are currently tracked regarding the identification of such a window [pg69].

### **Benefits**

- The benefits of continued investment in iTEC SkyNex (on a modernised technical architecture) are claimed to be the delivery of open, modular applications that enhance agility and cost efficiency by reducing reliance on proprietary systems [pg69].
- Further, it is reported to be able to support trajectory-based operations across UK airspace, improving service resilience, environmental outcomes, and safety. Common controller tools are stated to enable free route and systemised airspace roles, lowering workload and enhancing service delivery [pg69].

### Milestones:

• Cycle 1 milestones for iTEC SkyNex are on track, with the first software build delivered in May 2025. A dedicated NERL Evaluation Facility is under construction to support the evaluation of ongoing build iterations. Draft technical and commercial proposals have been prepared for the SESAR IR2 bid, enabling Indra to pursue funding that could help reduce development costs for Cycles 2 and 3 [pg69].



# Common Platform (2/3)

# SIP25 contents (cont.)

### Risks

• The main risk NERL foresees is ensuring sufficient long-term ATC resourcing for the project, as this must be balanced with service and operational demands. This is a risk shared among collaboration partners and is being mitigated by establishing a core team with succession planning to preserve corporate memory and external relationships [pg70].



# Common Platform (3/3)

## **IR** opinion

### **User focus**

- 1. Given the materiality of the iTEC Skynex deployment, the IR considers NERL's statement that "no risk being tracked to identify a suitable deployment window as there are other transitions to resolve in advance and there may be alternative approaches to the deployment of major transitions available that could mitigate this future risk" to contain insufficient detail [pg69]. The IR would expect a more detailed explanation of the factors that must be resolved before NERL can provide a suitable deployment window for iTEC Skynex.
- 2. In relation to the iTEC collaboration, NERL explains that "The NERL Evaluation Facility is under construction and will be used to evaluate the various iterations of the cycle builds" [pg69]. This appears to be the first instance of this initiative being referenced in NERL's SIP/iSIP engagement. To ensure transparency, the IR requests that NERL confirm whether it is being funded through the Common Platform programme and to specify which milestone it relates to.

## **Optioneering**

3. NERL had limited opportunities to demonstrate optioneering for this programme in iSIP25.

## Responsiveness

4. A customer has requested that "in light of the challenges surrounding ITEC's implementation, we urgently seek a detailed account from NERL. This should encompass the range of alternatives considered, the reasoning for maintaining ITEC as the preferred solution despite its delayed rollout, and how NATS is guarding against the sunk-cost fallacy. We are particularly interested in understanding potential strategies to accelerate this project's progress" [customer letter, 30<sup>th</sup> June 2025]. NERL has responded directly to the points raised, with the exception of providing an explanation for how NATS is guarding against the sunk-cost fallacy. Though NERL did offer a "face-to-face bilateral meeting [...] to further discuss the points raised" [NERL letter, 24<sup>th</sup> July 2025], this specific matter does not appear to have been addressed in NERL's response.

## Mitigating & corrective actions

5. NERL had limited opportunities to demonstrate mitigating & corrective actions for this programme in iSIP25.



# **Property & Facilities Management (1/3)**

## **SIP25** contents

### LTIP Dashboard

• The LTIP dashboard [pg34] shows the programme changed to Amber status. The NR23 forecast spend remains at £38m (£38m in SIP25, £38m in iSIP24, £27m in SIP24) and remains over the NR23 baseline figure of £19m. Two out of two milestones are on track (one out of one in SIP25, one out of one in iSIP24 and zero out of one in SIP24).

## **Description**

- The programme description [pg71] is carried forward from SIP25. NERL highlights efforts in 'right-sizing' its estate post-COVID through agile working practices, upgrades at Swanwick and Prestwick, and sub-letting spare space at Whiteley, while initiating demolition and replacement of Atlantic House with a smaller, efficient modular building [pg31].
- To support net-zero goals, solar panels are being installed at Swanwick and Prestwick centres. Despite a reduction in scope for solar panel installations at remote sites, the overall project cost has not decreased due to increased delivery costs, and expected benefits have dropped by 1.1m kWh (16%) [pg71,72].
- Options are under review to decarbonise the Prestwick Centre, where "heating and hot water is delivered by five gas boilers which are approaching end of life." [pg31].
- The preferred option is to replace the five gas boilers with four air source heat pumps (total 1.38MWth), requiring upgrades to heat emitters, with an estimated £3.5m capex, £200k annual opex, and 201t CO₂e annual savings [pg32].

#### **Benefits**

- The presented benefits delivered include sustaining infrastructure and services that support employee accommodation, security, and wellbeing, while reducing technical risk, meeting legal and licence obligations, and supporting third-party tenants. In addition to supporting the NATS 2040 strategic goal of being carbon negative, the primary benefits are to reduce cost, emissions, resource use, and improve resilience. [pg72].
- NERL also claims the installation of solar panels at Swanwick and Prestwick will generate ~5.6m kWh (previously ~7m kWh in SIP25) annually, contributing over 45% to the 12.1m kWh NR23 target, with full installation and operations of solar panels expected by 2026 [pg72].



# **Property & Facilities Management (2/3)**

# SIP25 contents (cont.)

### Milestones

- Atlantic House Technical Design (P1) was completed in September 2024; the new building's modular units arrived in February. "The long-awaited local government approvals for Building Warrants were finally received in June 25". "Until these warrants were in place, NERL could not start construction work. Construction has now begun, and concurrently, a major replan to determine the impact on the onward schedule is underway" [pg71].
- Solar panel installation (P4) "is progressing well with the Prestwick Centre roof installation now complete", and "work is progressing well on the Swanwick and Prestwick Centre ground installations (P4) with the project on track to deliver these by the end of the year." [pg71].
- While the scope to deliver solar installations at remote sites has been removed, reportedly due to "supplier cost increases and reduced benefit estimates." [pq71].

#### Risks

• As was reported in SIP25, the most significant risks of this programme continue to relate to cost increases, owing to general and construction cost inflation, and significant supply chain challenges. "For example, between 2019 and 2023 the cumulative increase has been 28% on construction costs." Further NERL "do not see any reduction in costs before the end of the reporting period; as a result, all ... FM projects are subject to cost risk in their forecasts." [pg72].



# **Property & Facilities Management (3/3)**

## **IR** opinion

### **User focus**

1. In relation to Solar Panel Installations (P4), NERL states that "The scope to deliver solar installations at our remote sites was subject to a cost-benefit analysis resulting in a decision to remove this scope due to supplier cost increases and reduced benefit estimates. The reduction in scope has not reduced the project cost forecast overall due to cost increases in delivery of the remaining centres' scope (partially due to recent volatility in commodity and finished goods prices)" [pg72]. The explanation of cost changes for the programme is unclear, as it does not provide transparency on the proportion of scope that was removed and initially accounted for, nor on the extent to which the cost of delivering the remaining elements has increased.

## **Optioneering**

2. NERL has undertaken an extensive optioneering exercise for the decarbonisation of the Prestwick Centre, focused on replacing its five gas boilers [pg31]. The need for the replacement was explained in detail, with a wide range of options identified and assessed comprehensively.

## Responsiveness

3. NERL had limited opportunities to demonstrate responsiveness for this programme in iSIP25.

## **Mitigating & corrective actions**

4. The IR maintains its SIP25 and iSIP24 opinions that "Whilst NERL specifies the risk of cost increases owing to general inflation and construction cost inflation, the programme risk section remains largely generic with limited detail on how risks have matured and evolved since the last SIP/iSIP updates" [SIP25 IR report], "the risk section of this programme remains generic with limited detail on how specific risks have matured and evolved since the last SIP update" [iSIP24 IR report]. The IR has not seen evidence of an improvement in this regard in iSIP25.



# Oceanic (1/3)

## **SIP25** contents

### **LTIP Dashboard**

• The LTIP dashboard [pg34] shows the programme remains at Red status. The NR23 forecast spend remains at £24m (also £24m in SIP25, iSIP24 and SIP24) and is equivalent to the NR23 baseline figure. Two out of two milestones are on track (zero out of two in SIP25, zero out of two in iSIP24 and two out of two in SIP24).

## Description

- The programme description [pg74] is carried forward from SIP25. The investments made remain focused on transforming North Atlantic service infrastructure with NAV Canada and Aireon to deliver the ICAO NAT Vision, supported by a shared roadmap of sustainment and enhancement activities proposals that are expected "this quarter" [pg74].
- NERL highlights resilience risks due to ageing hardware and communications protocols, with MECS modernisation re-phased to align with FDP re-platforming, while core sustainment continues to establish a new hardware and software baseline for added resilience [pg74].

### **Benefits**

- Key presented benefits include maintaining a safe and resilient North Atlantic air traffic service with a shared view between Shanwick and Gander [pg75].
- Removal of Oceanic Clearances (O1) are also presented as helping to harmonise procedures and reduce airline training costs [pg75].
- The New Traffic and workload management tools (O2), which NERL claim will increase opportunities for the best NAT profile (saving fuel) and balance ATC resources for more efficient use of staff, will be delivered iteratively as the current platform cannot deliver the full benefits [pg75].

### **Milestones**

- NERL is developing a recovery plan to deploy the Removal of Oceanic Clearance (O1) following issues identified in the final stages before deployment, and a revised date will be issued at the appropriate time. NERL expect this to be "no earlier than summer 2026" [pg75].
- The New Traffic and workload management tools (O2) will now deliver the final toolset along with the FDP modernisation (O5) milestone [pg75]. Similarly, the initiative to modernise MECS (O4) will now be phased and coincide with the FDP Modernisation (O5) for the Oceanic service (Q2 30 Q1 31) [pg74].



# Oceanic (2/3)

# SIP25 contents (cont.)

### Risks

- NERL states that the Oceanic programme is exposed to the risk of resourcing challenges affecting project delivery, particularly the Workstation Modernisation and Alignment milestone, due to resource diversion to the OCR recovery plan. Targeted recruitment ensures that supply can meet demand, and simplification of project delivery structures is making the management of initiatives more efficient [pg75].
- Additionally, as previously highlighted, "the current platform carries an increased level of resilience risk to ATS as legacy hardware and old communications protocols are ageing and becoming increasingly difficult to maintain." This risk is reportedly being mitigated through ongoing upgrades to IP-based communications, sustainable hardware, and workstation modernisation under the Oceanic Sustainment project [pg75].



# Oceanic (3/3)

## **IR** opinion

### **User focus**

1. NERL has maintained clear communication around when customers should expect a revised forecast deployment date for Removal of Oceanic Clearance (O1), with the latest update in iSIP25 explaining that it aims "to provide a clear update as soon as possible, likely no earlier than summer 2026" [pg75].

## **Optioneering**

2. NERL had limited opportunities to demonstrate optioneering for this programme in iSIP25.

## Responsiveness

3. NERL had limited opportunities to demonstrate responsiveness for this programme in iSIP25.

## **Mitigating & corrective actions**

- 4. Within iSIP25, NERL has fulfilled its promise to provide an updated CAPEX forecast for the programme to reflect re-phasing of programme milestones undertaken in SIP25 and iSIP24.
- 5. However, NERL has not provided a detailed explanation for why the forecast CAPEX remains equal to the NR23 baseline forecast of £24m, despite half of the programme's milestones being delayed until mid-NR28: "Other sustainment activity remains underway in line with the commitment in SIP25. This includes our intent to ensure the modernisation of workstations used in the oceanic service (O3). This, in conjunction with the bringing forward of other sustainment activity, means our forecast outturn of £24m remains the same as previously described but for a range of slightly different outcomes" [pg75]. Given that CAPEX is being re-purposed from future technology projects to sustainment initiatives, the IR would expect a comprehensive explanation of the specific need for additional sustainment CAPEX compared with the NR23 baseline expectations.



# **ATC Training Transformation (1/1)**

**NERL** has stopped reporting on the ATC Training Transformation Programme.





# **Annex: Scoring Guidance**

# **Scoring Guidance (1/3)**

	POOR (1)	BELOW EXPECTATIONS (2)	BASELINE EXPECTATIONS (3)	EXCELLENT (4)
	Some delay in providing information to at least some stakeholders, limited early warning of factors that may affect delivery.	Information provided in a timely but not proactive manner to some/all stakeholders, reasonable early warning of factors that may affect delivery.	Information provided to all stakeholders <b>proactively and promptly, early warning and</b> (where relevant) explanation of factors that may affect delivery.	Information provided to all stakeholders <b>proactively</b> and <b>promptly</b> , <b>excellent quality early warning</b> and (where relevant) explanation of factors that may affect delivery.
USER FOCUS	Unclear, inaccessible or perfunctory provision of information on the CAPEX proposed (and other details, including where practicable what is proposed, cost, delivery timescales and benefits, and any impacts on OPEX) with limited regard for user priorities and resource constraints.  Limited additional information	Reasonably clear, accessible and meaningful information provided on the CAPEX proposed (and other details, including where practicable what is proposed, cost, delivery timescales and benefits, and any impacts on OPEX) with reasonable regard for user priorities and resource constraints.  The level of substantiation	Clear, accessible and meaningful information on the CAPEX proposed, including where practicable what is proposed, cost, delivery timescales and benefits, and any impacts on OPEX, with good regard for user priorities and resource constraints.  Comprehensive substantiation for all material changes to the	Extremely clear, accessible and meaningful information on the CAPEX proposed, including where practicable what is proposed, cost, delivery timescales and benefits, and any impacts on OPEX, with excellent consideration of user priorities and resource constraints.
	provided for material changes to the CAPEX plan and <b>unclear on</b> <b>traceability</b> of changes back to previous plans.	provided reasonably reflects the materiality of the change under consideration but does not allow users systematically to trace changes to the plan to previous plans.	CAPEX plan under consideration, including <b>clear traceability</b> of all material changes from previous plans.	



# **Scoring Guidance (2/3)**

	POOR (1)	BELOW EXPECTATIONS (2)	BASELINE EXPECTATIONS (3)	EXCELLENT (4)
<u> </u>	Poor information on the overall approach to optioneering adopted (including the need for the programme or the outcomes and benefits that NERL is seeking to deliver).	Limited information on the overall approach to optioneering adopted (including the need for the programme or the outcomes and benefits that NERL is seeking to deliver).	Good information on the overall approach to optioneering adopted (including the need for the programme and the outcomes and benefits that NERL is seeking to deliver).	<b>Excellent information</b> on the overall <b>approach to optioneering</b> adopted (including the need for the programme and the outcomes and benefits that NERL is seeking to deliver).
OPTIONEERING	Limited information on alternative options presented (including limited discussion of costs, risks, timing, how benefits would be delivered, OPEX interactions, delivery risks and service quality), limited opportunity for meaningful scrutiny of relative merits of different options by users and IR.	A range of different options identified where possible (including costs, risks, timing, how benefits would be delivered and explicit consideration of OPEX interactions, delivery risks and service quality), reasonable opportunities for meaningful user and IR engagement and scrutiny.	Good information provided on a range of alternative options where possible (including costs, risks, timing, how benefits would be delivered and explicit consideration of OPEX interactions, delivery risks and service quality), good opportunities for meaningful user and IR engagement and scrutiny.	Excellent information provided on alternative options where possible (including costs, risks, timing, how benefits would be delivered and explicit consideration of OPEX interactions, delivery risks and service quality), extensive opportunities for meaningful user and IR engagement and scrutiny.



# **Scoring Guidance (3/3)**

	POOR (1)	BELOW EXPECTATIONS (2)	BASELINE EXPECTATIONS (3)	EXCELLENT (4)
RESPONSIVENESS	Perfunctory response to at least some user and IR submissions, insufficiently clear or untimely explanation how these submissions have been accounted for.	Generally constructive response to user and IR submissions, reasonably clear and timely explanation to some/all stakeholders of how these submissions have been accounted for.	Engaged and constructive response to user and IR submissions, clear and timely explanation to all stakeholders of how these submissions have been meaningfully accounted for.	Engaged and highly constructive response to user and IR submissions, very clear and timely evidence to all stakeholders that submissions have been meaningfully accounted for after substantial consideration.
MITIGATING AND CORRECTIVE ACTIONS	Limited evidence of mitigating and/or corrective actions, where appropriate, following user and IR submissions. Actions not communicated to at least some stakeholders in a timely manner.	In most cases reasonable mitigating and/or corrective actions taken, where appropriate, following user and IR submissions. Actions communicated to some/all stakeholders in a timely manner.	In almost all cases appropriate mitigating and/or corrective actions taken promptly, where appropriate, following user and IR submissions. Actions clearly explained to all stakeholders in a timely manner.	In all cases appropriate mitigating and/or corrective actions taken promptly and proactively, where appropriate, following user and IR submissions. Actions very clearly explained to all stakeholders in a timely manner.



