

NATS (EN ROUTE) PLC SIP: INDEPENDENT REVIEWER REPORT

Review of iSIP22

6th September 2022

Final – sent to CAA

TABLE OF CONTENTS

1	Introduction and scope		
2	High-level comments		
3	DP En-Route & Voice	J	
4	Airspace & Ops Enhancements		
5	Sustainment & Surveillance		
6	Property & Facilities Management		Assessment of individual programmes
7	Information Solutions		Assessment of individual programmes
8	Simulation Transformation & Sustainment		
9	Oceanic		
10	iTEC collaboration	J	
11	Conclusions and recommendations		

Chapter 1: Introduction and scope

SCOPE OF THE ASSESSMENT

The requirements on the content and scope of the service and investment plans, interim service and investment plans and associated Independent Reviewer assessments have been put forward in Condition 10 Article 9 of the NERL Licence.

SIP REQUIREMENTS

SCOPE:

The scope of the SIP as defined by the NERL Licence is to provide an update of the Licensee's investment plans, including its technology and airspace programmes.

PROGRESS:

The documents shall provide an update of the Licensee's delivery of the investment plans, as measured against the capital expenditure programme milestones set out in the Licensee's business plan and as amended to be consistent with the price controls in Conditions 21, 21a and 22.

MATERIAL CHANGES:

The documents shall provide an update of material changes in the Licensee's expectations as to the level and quality of the services it will provide, the means by which the services will be provided, and the likely implications for charges to Users beyond the expiry of the period for which charges are for the time being set pursuant to the Charge Control Conditions. Service and Investment plans shall include such information as is reasonably necessary to achieve this including, but not limited to, material changes in the Licensee's expectations as to its operating practices and resources.

The iSIP is normally prepared in the context of the Business Plan. In 2022, the appropriate context is provided in the 2021 SIP Addendum which contains updates and changes to the Business Plan, following the impact of the COVID-19 pandemic.

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SIP release schedule

- Annual SIP, not later than 31st January;
- Interim SIP not later than 31st July;
- Updates to SIPs 30th April and 31st October.

Responsibilities of the Independent Reviewer

The CAA may appoint an Independent Reviewer to report on the Licensee's delivery of and engagement on its capital expenditure programme. The reports shall:

- a) review the timeliness and accuracy of the Licensee's reporting in its service and investment plans;
- b) assess whether the Licensee has sufficiently explained and justified its capital expenditure programme in its service and investment plans;
- c) assess and propose scores for the Licensee's engagement with Users against the assessment criteria referred in paragraph 8 and the CAA's guidance;
- d) track and assess the Licensee's progress on delivering its capital expenditure programme and achieving the associated benefits; and
- e) report on the cost efficiency of the Licensee's capital expenditure and its implementation.

The scope of this report is limited to points a), b) and d). Point c) will be reported upon separately, and point e) will be addressed on request from the CAA.

Chapter 1: Introduction and scope

iSIP22

Introduction

Overview

- In April 2022, NERL released the SIP quarterly update, which provided a follow up update to NERL's SIP22 investment plans.
- iSIP22 provides the second quarterly update of 2022 and begins by providing an overview of the key changes to the interim SIP22 from the draft published for consultation, and operations update and an engineering services update.
- The document also includes the updated "programme on a page" presentation of programme updates and LTIP quarterly dashboard. This is the approach which has been followed since the IR's SIP21 review, and provides readers with the key changes to the programme, early on in the document with greater detail in the appendices.

Contents

- In the following sections we provide feedback on the overall appropriateness of the information provided to users for each of the capital investment programme, and then on each programme in turn:
 - DP En-Route & Voice,
 - Airspace & Ops Enhancements,
 - Sustainment & Surveillance,
 - Property & Facilities Management,
 - Information Solutions,
 - Simulation Transformation & Sustainment,
 - Oceanic,
 - iTEC collaboration.
- Finally, we present the conclusions and recommendations.

References in this document, unless otherwise specified, relate to the iSIP22 document. The format is: [Page number] or [Page number. Paragraph number] Eq: [20] references page 26 of SIP22 and [26.3] references page 26 paragraph 3 of iSIP22.



Chapter 2: High-level comments

iSIP22

High-level comments

Presentation and clarity

- 1. Overall, iSIP22 is a strong document, further building on the improvement noted in previous reviews in terms of presentation, with previous IR comments on presentational aspects being clearly taken into account.
- II. The document generally provides an exhaustive and detailed view of the situation of NERL's investment plan, providing sufficient context for 'non-expert' readers to understand.
- III. Notably, NERL has improved the readability and the interpretation of performance graphs and tables which previously lacked keys/legends/explanations. Minor enhancements could still be made in the future, such as further explanations on the C3 and C4 scores on [13] and clarification on the traffic forecast overviews on [10] for which the difference between 'Eurocontrol' and 'Europe' are treated interchangeably which could be confusing.
- IV. The IR also notes improvements in terms of transparency and level of detail in the 'Investment Plan Overview for CY22 and CY23' section, which spans from [16] to [23]. However, the section is now long and lacks structure, making it challenging to read and extract key takeaways. The IR recommends that this section is restructured and divided into subsections in future SIP documentation.
- V. As in SIP22, iSIP22 included a 'key achievements 2021' section, providing an overview of NERL's progress in the previous year. This was a welcome addition to the SIP format, and we recommend it is included in future iSIPs. The IR encourages NERL to amend the content to cover the achievements in the first half of 2022 to ensure consistency in the reporting of progress.

Operations update

Programmes & milestones

- I. Regarding the dashboards and presentation of milestones, the format noting last reported elements provides good traceability to previous the quarterly SIP forecasts. However, in a couple of cases, the information in the 'Last reported (Apr-22 Quarterly)' column is incorrect, actually reflecting what was reported in SIP22. This was the case on [25] and [28].
- II. Overall, variations from the previous forecasts and milestones are well documented and adequately explained.
- III. Across the programmes, the text in the 'Risk update' paragraphs is the same as what was reported in the previous quarterly SIP22 update, without providing any indication of whether this risk has increased or decreased (ie. on [27], [29], [31], [33] and [34]). The IR encourages NERL to provide some indication of quarterly evolution of risk profiles in future editions.

DP En Route & Voice review

- 1. NERL provides a good and exhaustive level of detail in the 'Investment Plan Overview for CY22 and CY23' section of the progress of the DP En Route & Voice programme review (previously called 'Take 5 review').
- II. The IR welcomes the high level of transparency provided by NERL with detailed explanations on the causes of programme delays (eg. on [17.13]), options assessment rationale (eg. on [18.16]), expected benefits for customers (eg. on [20.23]) and high-level cost breakdowns (eg. on [21.25]).



Chapter 3: DP En-route & Voice

DP EN-ROUTE & VOICE

DP En-Route & Voice programme review • The DP-ER & Voice programme is currently subject to a detailed review to improve the schedule for completion and build resilience into the programme. Slide [17] notes that NERL engaged with customers on this in June 2022 to "to highlight progress achieved, the overall aim of the DP En Route & Voice programme, the high-level optioneering and early information on a recommended option to ensure we remain aligned to our NR23 commitments" • This review has been highlighted as necessary due to the factors constraining progress "beyond what was reasonably expected". Slide [18] highlights the high-level options considered and presented to customers, ranging from continuing with the current approach to stopping the programme overall, along with a matrix highlighting the risk/feasibility for each option and details of the NERL proposed plan on [19]. The anticipated programme benefits are also presented on [23]. • NERL also summarises the customer views on [22] regarding the revised plan and invites customers to provide further views on the plan through targeted guestions. **SIP** contents **Milestones and timelines:** summary • The DP En-Route & Voice RAG status remains red in the LTIP dashboard presented on [24] and is reporting a forecast CY22 cost of £6m less than reported in the guarterly SIP. Only 3 out of 9 milestones are reported on track for RP3, unchanged from the guarterly SIP update. • NERL state in the footnote in [24] that the status will be revised once internal governance and customer consultation is complete. The proposed revision plan is summarized in [27] and would entail "prioritising full operational service in Prestwick as soon as possible" and "separate the delivery of the programme into smaller steps, making each step more achievable" as stated on [27]. • Nevertheless, [27] reports that progress was made last guarter with steps being achieved in DP ER, MVS and SVS. Further progress is planned on top of the programme review in the next guarter. It is also noted that several risks have matured relating to resources availability, hence impacting the programme's progress. • NERL note on [28] that all outstanding milestones are currently being reviewed and that dates will be revised at the outcome of the planning. **DP En-Route & Voice programme review** • A very good level of transparency and detail is provided on the review throughout the the 'Investment Plan Overview for CY22 and CY23' section from [17.11] onwards. The explanations on the programme delay causes, future options assessment, expected benefits and cost breakdowns are welcome additions, picking up on previous IR comments. • The approach and subsequent options identified on [18.16] is exhaustive, sensible and should allow for an effective replan based on both NERL's and their customer's priorities. The invitation for customers to provide further views on [22], while targeted with guestions, would benefit from being more explicit elsewhere in the document. **IR opinion** Milestones and timelines:

- While the IR welcomes the proposal to separate delivery of the programme into smaller steps, the steps should be traceable back to the initial milestones.
- The dates in 'Last reported (Apr-22 Quarterly)' column on [28] do not match those in the quarterly SIP.



Chapter 4: Airspace & Ops Enhancement

AIRSPACE & OPS ENHANCEMENT

- The Airspace & Ops Enhancements programme RAG status has shifted from green to amber in the LTIP dashboard presented on [24], with forecast CY22 costs remaining the same as reported in the guarterly SIP. 8 out of 9 milestones are reported on track for RP3, unchanged from the guarterly SIP update. • However, NERL notes on [22] that "Good progress has continued within our airspace programme which will deliver the bulk of customer-led benefits in RP3 and into NR23". This message is reiterated on [29]. • The reason for the amber status is noted on [29] as a consequence of "changes in risk to the costs and schedules across the programme". These seem specifically to be: **SIP** contents summary AMAN Headbranch SAT issues, delaying the milestone from November 2022 to January 2023. • TBS Pairwise (Heathrow) supplier lead times and expert resource shortfalls, delaying the milestone from Q2/Q3 2023 to Q1 2024. A long list of tasks are reported to have progressed last guarter and further progress is planned in the next guarter in AMAN Headbranch, West Airspace Deployment, ScTMA and MTMA, TBS Gatwick, and OSEP as noted on [29]. • The programme risks on [29] note that "DfT support funding for airports to achieve the CAP1616 Stage 2 gateway may not be continued for later phases". Amongst the progress made last guarter and some delays being noted on [29] it is not immediately clear what is driving the shift to amber status considering: • Forecast CY22 costs remain the same as previously reported; o The AMAN Headbranch and TBS Pairwise delays do not seem major compared to the overall programme timescales, and; • The programme risk note remains unchanged from the text in the quarterly SIP. **IR opinion** The IR would have expected a more detailed description of the evolving risks in the 'risk updates' text should these be the drivers for the amber RAG status. The successful completion and delivery of OSEP Deployment 4 and AME is encouraging and the notes on enabled CO2 benefits are welcome additions to the programme updates 'one pagers'.
 - The AMAN Headbranch shadowing activities foreseen for next quarter (July start) was due to commence in May according the quarterly SIP.



Chapter 5: Sustainment & Surveillance

SUSTAINMENT & SURVEILLANCE

- The Sustainment & Surveillance programme RAG status has remained amber in the LTIP dashboard presented on [24], with forecast CY22 costs being £2m less than reported in the quarterly SIP. 10 out of 15 milestones are reported on track for RP3, unchanged from the quarterly SIP update.
- NERL notes on [31] that "as a result of delays within the key NODE core replacement project and delays to other deliveries due to ongoing impacts of Covid-19 and supply chain issues".
- It is also implied on [31] that the DP ER programme replan may have an impact on Sustainment & Surveillance, as "significant planning is underway for NR23 that will incorporate the impact of the DP ER replan".
 - The noticeable impact of further delays since last quarter on [32] seems to be a shift of milestone 3 from November 2022 to December 2022.
 - A long list of tasks are reported to have progressed last quarter on [31], with further progress planned in AIRAC builds, FM, Swanwick UPD and other projects in the next quarter.
 - The programme risks on [31] note concerns around supplier and material costs and increases in timescales as a result of "Covid-19 disruption and the impact of the UK's withdrawal from the EU".
 - The programme seems to be progressing and the IR understands that a return to green may be challenging due to the nature of the causes noted on [31] and in previous SIP documentation.
- However, in the documented 'Progress in last quarter' section on [31], the completion of Distance Measuring Equipment Sustainment Phase 1 deliveries were previously reported to have been reported in March 2022 (not last quarter as implied here). Similarly, the Facilities Management (FM) test seems to be identical to that reported in the quarterly SIP. Such updates would expect to be different from those previously reported, focusing on the past 3 months specifically.



SIP contents

summary

IR opinion

Chapter 6: Facilities Management

PROPERTY & FACILITIES MANAGEMENT

- The Property & FM programme RAG status has remained green in the LTIP dashboard presented on [24], with forecast CY22 costs unchanged from figures reported in the quarterly SIP. The 1 milestone of the programme in the RP3 baseline is reported on track, unchanged from the quarterly SIP update.
- NERL notes on [33] that the programme "continued to develop projects including the minor asset sustainment activities" in parallel to investigating initiatives related to Net Zero targets.
- Specific progress noted on [33] highlights achievements last quarter in the NATS-wide Security Strategy, Level 4 Swanwick property consolidation (the milestone was achieved a month early) and the Atlantic House Business Case for early enabling works.
- Progress is expected next quarter in remaining property consolidation at Swanwick and Prestwick Centres, asset refurbishment to cover operation room enhancements and activities to start a solar panels installation project.
- The programme risks on [33] note concerns around supplier and material costs and increases in timescales as a result of "Covid-19 disruption and worldwide economic events".
- The reporting is proportionate and accurate for this project. The size, significance and green status of the programme mean that an in-depth report is not required at present.

IR opinion

SIP contents

summary



Chapter 7: Information Solutions

SIP contents

summary

IR opinion

INFORMATION SOLUTIONS

- The Information Solutions programme RAG status has remained amber in the LTIP dashboard presented on [24], with forecast CY22 costs being £2m less than reported in the quarterly SIP. 3 out of 4 milestones are reported on track for RP3, unchanged from the quarterly SIP update.
 - NERL states on [34] that the reason for the remaining amber status is primarily due to:
 - Resourcing issues related to the project management team, and;
 - Late delivery of the STAR replacement' milestone which is undergoing supplier software defect reviews.
 - On [34] NERL also expresses the aim to fully conclude in December 2022 as previously reported.
 - A long list of tasks are reported to have progressed last quarter on [34], with further progress planned in ANPO, STAR defects resolution, Prestwick WiFi switches, Voice over IP services and ERP in the next quarter.
 - The programme risks on [34] note the risk on CY22 deliveries should it not be possible to engage with a supplier on a turnkey contract basis.
 - The solution has reported amber RAG status in the previous quarterly SIP and SIP 2022, contrary to what is implied by NERL on [24]: "although it is now reporting an Amber status".
 - The IR highlights that this programme was previously expected to return to green and that concerns were raised in the IR report on the quarterly SIP: " *it is unclear how a green status is expected to be reported in Q2-2022*". NERL previously noted this as being due to the STAR milestone undergoing software defect reviews which they hoped to mitigate in Q2-2022.
 - Considering [34] includes "STAR Replacement Defects to be successfully resolved" in the lookahead to next quarter, the IR assumes this has not been mitigated as expected. However, iSIP 2022 milestone forecasts have not shifted and a new limitation "resources related to the project management team" is also noted in the opening sentence on [34].
 - The project management issues in the 'risk update' text on [34] remains the same as in the quarterly SIP, so further detail here would be welcomed.
 - The financial (Capital costs) table on [34] notes a £2m decrease in the CY22 forecast, however only a £1m decrease is noted for the total RP3 period which may be a consequence of rounding. The same occurrence is noted in the LTIP dashboard on [24]. In a bilateral exchange between NERL and the Independent Reviewer NERL confirmed that this is indeed due to rounding.



Chapter 8: Simulation Transformation & Sustainment

SIMULATION TRANSFORMATION AND SUSTAINMENT

- The Simulation Transformation & Sustainment programme RAG status has remained green in the LTIP dashboard presented on [24], with forecast CY22 costs being £1m less than reported in the quarterly SIP (hence dropping to zero). Neither of the 2 milestones are reported on track for RP3, 1 less than reported in the quarterly SIP update.
- NERL states on [35] that the programme remains in the Identify stage of its lifecycle with the following progress being made last quarter:
 - The continued baselining of SIMs services;
 - The submission of a business case for funding, and;
 - The provision of an outline view of technology Operations Training needs in NR23.
- NERL notes that additional / alternative external capability may need to be procured which "could impact the need for some SIM service investments", hence delaying milestone 1 (identify phase) from July 2022 to September 2022 and milestone 2 (define phase) from Q4 2022 to Q2 2023.
- Tasks planned for next quarter noted on [35] include the continuation of the identify phase, a review of the relationship between the SIMs transformation and ATC transformation programmes, and Remote ACPO proof of concept options work.
- The programme risks on [35] note a risk due to "availability of technology and scalable resources" and "emerging requirements from Operations Training" (noted above).
- The programme appears to be progressing at a slower rate than expected, with another milestone slipping on [24] compared to the previous quarterly SIP and all costs now planned to be incurred in NR23.

IR opinion

SIP contents

summary



OCEANIC

	 The Oceanic RAG status has remained red in the LTIP dashboard presented on [24], with forecast CY22 costs unchanged from figures reported in the quarterly SIP. The one milestone of the programme in the RP3 baseline is reported on track, unchanged from the quarterly SIP update. 		
	• As noted on [36], the programme reported delays in the previous SIP report due to "the non-availability of resources and extended negotiation of scope and T&Cs with the supplier (Nav Canada)".		
SIP contents summary	 However, NERL reports the Project definition phase for OCR has been completed through "extensive engagement with NAV Canada". The programme is now seeking business case approval and resource challenges continue to be addressed to enable a return to a green RAG status. 		
	• NERL also expects the OCR project will commence the implementation stage next quarter (contracting with NAV CANADA August 2022) with the presentation of software builds in September.		
	• The programme risks on [36] note risks for resources (people and facilities) which "continue to be worked with Covid-19 disruptions impacting the cost profile".		
IP opinion	• The IR notes the strong and encouraging progress of the Oceanic programme compared to the somewhat concerning status provided in the previous quarterly SIP.		

• NERL appears to have adequately mitigated the risks of the programme and fostered a strong engagement with NAV Canada.



Chapter 10: iTEC collaboration

SIP contents

summary

IR opinion

iTEC COLLABORATION

- The iTEC collaboration status has remained green in the LTIP dashboard presented on [24], with forecast CY22 costs being £2m less than reported in the quarterly SIP. 3 out of 4 milestones are reported on track for RP3, 1 less than reported in the quarterly SIP update.
 - NERL highlights on [37] that strategic goal remains unchanged: "to deploy iTEC v3 (the target collaboration common version of the current iTEC) across our airspace on one common platform".
 - Specific progress noted on [37] highlights achievements last quarter in the common concept of operations, initial requirements derivation, sign-off of the Variation Agreement.
 - The milestone 4 delay from June 2022 to July 2022 is noted to be due to the pending signature of the "actual contract", delayed due to collaboration negotiations.
 - NERL notes on [37] the plans for progress next quarter around the implementation roadmap endorsement, continuous contribution to collaboration requirements, a decision on IOP and a decision on whether to revise the iTEC v3 costing model.
 - The programme risks on [37] note risks on ATC subject matter expertise and the desire to continue with the IOP development.
- The IR note the progress of the iTEC collaboration programme with 1 milestone slipping on [24] compared to the previous quarterly SIP. However, it is unclear how a negative decision on the will to continue with the IOP could impact the programme at this stage.
 - The financial (Capital costs) table on [37] notes a £2m decrease in the CY22 forecast, although only a £1m decrease is noted for the total RP3 period which may be a consequence of rounding. The same occurrence is noted in the LTIP dashboard on [24].



Chapter 11: Conclusions and recommendations

CONCLUSIONS AND RECOMMENDATIONS

Our conclusions and general recommendations are summarised below.

Specific conclusions and recommendations for each programme summary are presented in the main text and not repeated here.

CONCLUSIONS

As noted in our summary in slide 5, iSIP22 generally provides an exhaustive and detailed view of the Document format situation of NERL's investment plan, providing sufficient context for 'non-expert' readers to understand. The document provides a written narrative of the plans for the coming two years ([16] -[23]) which provides good insight into the plans and ambitions of NERL.

The quality of the information presented in the iSIP22 is good. It is transparent and allows the reader to understand well how the programmes are progressing and the key issues of milestones, budget and risk.

In particular, the consistent use of the one-pager dashboards has been very valuable, providing a clear indication on the progress of the project with an assigned RAG status, information on costs and milestones.

iSIP22 continues to demonstrate good traceability to the previous guarterly update, the SIP21 Addendum, and the RP3 rBP. The majority of changes to programme scope, milestones, and costs are justified. Compared to SIP22, the iSIP22 also has additional traceability to the status of milestones and costs reported in the previous guarterly SIP update.

Level and quality of services

NERL's licence requires it to provide information on the level and quality of services that NERL will provide. We appreciate that this has difficult in recent years due to the impacts of the COVID-19 pandemic, however we believe NERL have met this condition in iSIP22.

GENERAL RECOMMENDATIONS

The document continues with the format from SIP22 with key costs, milestones and scope information being clearly presented throughout. The use of additional explanations and keys alongside graphs/tables has also been increased. As previously, we recommend that NERL maintains a focus on supporting unfamiliar readers in these complex topics, eg by explaining technical terms and initially expanding acronyms etc.

Information presentation

Going forward we emphasise the importance of continuous improvement in reporting, in particular in finding ways of managing large volumes of text and making sure that the document does not become overwhelming to the reader. In some areas it would would benefit from a greater visual breakdown (better use of headers and subsections).

RAG Status

The inclusion of a RAG status per programme is a helpful addition to the SIP reporting. It allows to see at a glance which programmes have been faced with challenges since the last reporting period. We encourage NERL to provide explanation to what constitutes a change in the RAG status.



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