RP3 Customer Consultation Working Group

Report of the Co-Chairs

1. Introduction

1.1 Context

As part of the UK Civil Aviation Authority's (CAA) process for setting NATS (En-Route) Plc (NERL) price controls for Reference Period 3 (RP3) – 1st January 2020 to 31st December 2024 – customer consultation is required between NERL and its airline customers on its business plan for the period of RP3.

In January 2018 the CAA set out its 'Guidance for NERL in preparing its business plan for Reference Period 3' (Ref 1) which is driven by the need to align with the European Union (EU) process to develop the regulatory framework and targets for the RP3 period. The CAA guidance includes the requirement for NERL to undertake consultation with its customers to review and refine its En-route and Oceanic business plan for RP3.

NERL issued its RP3 initial business plan (iBP) on the 9th April 2018 (Ref 2) in preparation for the customer consultation. A revised business plan (rBP) is due no later than 26th October 2018.

This report has been produced by the co-chairs of the Customer Consultation Working Group (CCWG) following completion of the customer consultation which took place between May and September 2018.

1.2 Objectives of the Customer Consultation

The objectives of the customer consultation process – as stated in the CAA guidance (Ref 1) - were to :

- ensure that airspace users – and airports, where appropriate – and NERL could effectively share their views and priorities and engage on how NERL might approach key issues in the next reference period, and
- ensure that NERL's final business plan is informed by a broad range of views from both NERL and its customers.

2. The Consultation Process

2.1 Customer representation in the process

In February 2018 NERL issued invitations to join the RP3 Customer Consultation process to 101 airlines, IATA and business aviation customer organisations. Following this invitation, 55 customer representatives from 29 organisations (see Annex 1, page 70) signed up to the process. Together they represented the majority of movements through UK airspace and a cross section of airline interests and trade associations.

NERL and the co-chairs made further approaches for additional low-cost airlines to join the consultation. However, apart from attendance at 5 meetings by easyJet and Flybe no further airlines were able to join.

2.2 Observers

The CAA took part in the Customer Consultation Working Group sessions as observers - often with two regulatory representatives and occasionally supported by their external consultants. A CAA operational expert also attended the Oceanic meetings.

With the support of the airline representatives it was agreed at the kick-off preliminary meeting in February that the NATS Trade Union Section (NTUS) could also attend the CCWG as observers. Their inclusion was well received by the CCWG and enabled the NTUS to see how the process was followed and hear the debates between NERL and its customers that may affect their members during RP3.

2.3 Working Arrangements

A pre-consultation webex was held on the 22nd February when the CCWG was established and it was agreed that it would be co-chaired by Neil Cottrell – Head of Infrastructure, British Airways – who would also act as co-ordinator of the airspace users' views, and Dr David Harrison – former NATS Safety Director – acting as an independent co-chair.

At the first full meeting held on the 3rd May the CAA presented the context of, and their mandate for, the Customer Consultation process. The role of the co-chairs, the proposed conduct of the meetings and the working arrangements were also presented. The working arrangements set out rules for the management of the meetings, timely preparation and distribution of papers, presentations and minutes including the use of a dedicated NERL customer web site.

NERL proposed a programme of meetings and workshops, and outline agendas for each of the meetings were agreed. These were amended with the agreement of the CCWG as the process progressed, by the addition of extra meetings or smaller meetings/workshops between NERL specialists and members of the airspace user community to explore specialist subjects. In recognition of the complexity of the

headcount requirements an extra workshop was arranged within the consultation process to further explore these elements of the NERL cost base. Similarly two additional workshops were arranged to further discuss the costs and benefits of ADS-B in the Oceanic environment.

An additional meeting and webex were arranged to enable UK airports to be briefed on NERL's initial RP3 Business Plan and provide their thoughts, observations and requests into the process. Including the airports into the consultation process enabled more operational insights as well as general aviation intelligence.

The dates of the CCWG meetings and workshops held and their main subject matter are summarised below :

Date	Meeting / Workshop	Main Topics Covered
22nd February	Kick-off Webex	Pre-consultation Webex
3rd May	Meeting 1	Overview of iBP and regulatory framework
17th May	Meeting 2	Delivering the core en-route service
23rd May	Meeting 3	Evolving the core en-route service
5th June	Meeting 4	The Oceanic Plan
6th June	Meeting 5	UK Airports engagement
21st June	Meeting 6	Additional customer requests
27th June	Meeting 7	Key assumptions and performance metrics
18th July	Meeting 8	Summary to date and next steps
19th July	Meeting 9	Oceanic follow-up
25th July	Webex	Airports follow-up
15th August	Workshop 1	Euroconsult report on Aireon's costs
16th August	Workshop 2	ABS-B Business Benefit Case Workshop
23rd August	Workshop 3	RP3 Manpower Planning Workshop
13th September	Meeting 10	Consultation Closure

3. NERL's initial Business Plan

On the 9th April 2018 NERL issued its RP3 initial business plan (iBP) in preparation for the customer consultation. At the first meeting in May NERL's Chief Executive Officer, Finance Director, Operations Director, Technical Services Director and Safety Director presented an overview of the iBP and its Appendices. NERL described two fundamental challenges for RP3; to continue to provide a safe and efficient service capable of handling the predicted rise in air traffic during RP3, whilst simultaneously significantly changing the operation to create more capacity and capability for the future.

The following table provides the headline targets proposed by NERL in its iBP. The inclusion of this table is for completeness and does not imply the airline groups' acceptance of any of the targets.

	Measure	Target
Safety = RP2	- Effectiveness of Safety Management - Rate of accidents/serious incidents - Rate of runway incursions and losses of separation - Rate of over-delivery by the network manager	Compliance with EC targets
Service Quality = RP2	C1 : average ATFM delay per flight from all causes C2 : average ATFM delay per flight from NERL attributable causes C3 : weighted metrics that captures the impact of the timing and length of delay C4 : variability of daily average delays expressed as a daily excess score Allowance for special event transition delay Technical resilience	13.8 secs 10.8 secs 23.8 secs 2000 score To be agreed ahead of specified transitions Meet CAP1639 Resilience proposals
Environment = RP2	3Di flight Efficiency	Score of c.16.2 – 17.9 p.a.
Investment	Total RP3 investment (2017 prices) Contribution to RP3 unit price (2017 prices)	£725m - £800m £3.73 per chargeable service unit
Average Price 12%	Real price reduction - Average RP3 vs Average RP2 - Average RP3 vs Average RP1	 -12% - 23%

4. The Co-Chairs Assessment of the Consultation Process

From the co-chairs' perspective the working arrangements agreed for the Customer Consultation were appropriate for the task, with minor modifications made by agreement through the CCWG when required. For example, when adjustments were needed to the timing of papers or slides onto the website. All parties were co-operative and considerate of other diary priorities, appropriate attendance and additional requests.

NERL worked with the co-chairs to ensure the meetings were well-planned and effective and provided well-structured and clear information ahead of all the meetings. The CCWG website was used effectively to provide all the necessary papers and slides in a timely manner and create a library of information.

Customers were well organised through their pre-meetings with their nominated co-chair, building alignment around their approach to key issues.

There was consistent attendance and active involvement at the consultation meetings at which discussions were open and constructive throughout on the part of NERL and its customers.

Observation 1 : Unfortunately there was a lack of airline diversity within the attendance as there were only a few attendances by low cost carriers easyJet, Flybe, and none from Ryanair. NERL and the co-chairs made further requests for their inclusion following the first meeting but without success.

Observation 2 : Although the customers were generally well represented there was a lack of knowledge diversity across the participants. The majority of the representatives were regulatory experts; few airline participants were operational experts despite a request from NERL in February 2018 for their attendance. This led to relatively little support or challenge on NERL's proposed service performance.

Observation 3 : Although only as observers, it was good to see NATS trade unions presence accepted by all parties and they met all the working arrangement rules and behaviours. Their presence should be considered again by all parties before RP4.

Observation 4 : The inclusion of a meeting and follow-up webex for UK Airports in the consultation process enabled a better overall network view of NERL's current performance and future technical and service requirements. They were also able to provide more knowledge on general aviation needs.

The two primary CAA's representatives attended all but one of the main meetings with attendance occasionally supplemented by their consultant.

Observation 5 : Recognising the importance of the RP3 consultation process every meeting was attended by at least one Executive Director from NERL plus a NATS Board Member. As NERL is the largest UK air navigation service provider, and the sole provider of en-route services, the attendance of a more senior CAA representative would have been welcomed.

10 meetings, 3 workshops and various webexes constitute a substantial amount of time and effort for all concerned. The financial cost to NERL in preparing and presenting so many slides and presentations and involving a large number of individuals has been very high. Similarly the time required by the CCWG members to read, prepare and attend these meetings and workshops has been very high.

Observation 6 : Consideration should be given to how the consultation process could be made more efficient to benefit all participants. This might include earlier discussions and agreements via, for example the SIP process, or earlier identification of the key issues to be debated.

It is recognised that the UK is one of the only European States to fully engage in a customer consultation process prior to each Regulatory Period. The CAA, NERL and airline customers should be commended for their willingness and openness to engage in such a thorough process.

Observation 7 : The airlines believe the process in RP3 could have been improved if there were more credible options presented in the plan (e.g. Manpower). These would have led to more meaningful discussions and trade-offs.

This probably reflects NERL's view that there were no material credible options in the current circumstances on manpower, and noting that NERL presented a range of tactical options on the technology programme.

The airlines would request that this approach is considered for RP4.

Observation 8 : Given the huge amount of time and effort put in by NERL and its airline customers it is important that their agreements and dis-agreements are fully taken into account by the CAA.

5. Key Outcomes from the Consultation

The tables in the Appendix are the primary outputs to this report. They contain the main outcomes of the consultation process in terms of key points that either have, or have not been agreed in relation to NERL's iBP and to aid the production of the rBP. Discussion subjects marked in green are those in which the co-chairs believe agreement has been reached or are provisionally agreed dependent upon a later action being complete. Discussion subjects in black are those in which the co-chairs believe agreement has <u>not</u> been reached. They are set out under 12 headings covering the main elements of the iBP.

From the Appendix 80 subject areas or findings were covered across the 12 main elements of the iBP - 45 findings 'Agreed', 25 'Not Agreed' and 10 either 'Pending' or with 'Provisional Agreement'. The pending or provisional agreement items are generally ones which might be achieved through the SIP processes, the CAA's consultation process on its national performance plan or once further information is available from the European Commission.

The three main subject areas with 'Not Agreed' findings were under the headings of Opex (Section 6), Oceanic (Section 10) and Regulatory Mechanism (Section 11).

Whilst airlines broadly agreed with the scope of the RP3 change portfolio presented by NERL they did not feel they had enough knowledge to also agree the full level of

costs and associated contingency. The Airlines require an enhanced governance process to be determined which would allow them to fully support the other NERL-proposed contingency mechanisms (Opex Flexibility Fund and the Wider Plan regulatory mechanism).

All parties appreciated throughout the consultation process that 'nothing is agreed until everything is agreed' i.e. items identified in the following appendix as 'agreed' or 'not agreed' may have to change if, for example significant reductions are made to the proposed Capex or resources.

6. Conclusion

The appendix shows a good proportion of agreements reached between NERL and the airline customers. However within the following 5 subject areas full agreement could not be reached :

- Oceanic (ADS-B)
- Resource Levels
- DC Pension Costs
- Productivity
- Capital cost (not scope)

Without doubt the widest difference of opinion lay within the plans for the Oceanic region and the future use of ADS-B. The 2 additional workshops organised to better understand the Aireon cost structure and the cost and benefit case for oceanic ADS-B helped to bring the parties closer together. Generally everyone accepted that there were safety, capacity and fuel benefits of ADS-B, however the full extent of those capacity and fuel benefits were not agreed. Airlines find it difficult to capture fuel benefits fully in their modelling, and therefore are unable to confirm the fuel benefits case presented by NERL. Airlines will continue to engage on benefits. Nevertheless, the primary issue lies in the cost of the service provided by Aireon. NERL's rationale for implementing ADS-B from 1 January 2020 is based on substantial safety benefits, supplemented with capacity and fuel saving benefits which – in their view - outweigh the cost of the data charges. However, the airlines do not believe implementation needs to take place at the beginning of RP3, and maybe resolved outside the RP3 consultation process.

The need for airspace modernisation was a critical subject recognised by all the stakeholders throughout the consultation process. The need to progress the required work as soon as possible was also fully supported; despite important discussions to finalise the governance and funding arrangements, these should not slow the progress down.

The co-chairs are of the view that the CCWG process addressed the CAA's objectives and mandated questions to the extent possible. With final European

regulations and targets unknown at the time of the CCWG consultation some of the discussions could not be concluded.

There is no doubt that the consultation process has helped to improve the mutual understanding and alignment on many issues of importance to all those concerned. It has also identified some areas, such as the long term investment process and the airspace modernisation programme, where further collaboration will benefit both NERL and its airline customers.

The co-chairs would like to thank all those that have been involved in the consultation process for their active and positive engagement throughout the spring and summer of 2018. We would also like to specifically thank those that have worked tirelessly to ensure each of the meetings and workshops have been organised and prepared to such a high standard.

Dr David Harrison
Former NATS Safety Director

Neil Cottrell
Head of Infrastructure
British Airways

References

1. Guidance for NERL in preparing its business plan for Reference Period 3. CAP 1625. 9th January 2018.
2. RP3 initial Business Plan for customer consultation 2020-2024. Plus Appendices. 9th April 2018

RP3 Customer Consultation Working Group

Appendix – Points Agreed/Not Agreed

1. Customer Priorities

Number	Subject of Discussion	Airline View	NERL View	Status
1.1	Customer priorities gathered from 24 airline customers and trade bodies, IATA and 16 airports. Priorities (in order) : 1. Safety 2. Airspace modernisation 3. Airspace tools & procedures 4. Operational & technical resilience 5. Improved environmental performance 6. Improved environmental performance 7. Cost efficiency 8. Protection from unmanned aircraft 9. Oceanic value for money 10. Making use of airborne capabilities 11. Improved resilience under adverse weather conditions	Airlines broadly support the priorities.	Based on customer feedback on priorities gathered during 2017. NERL Business Plan was written taking these customer priorities in account.	Agreed

1.2	Overall Business Plan Objective : To maintain safety, service and environmental performance at RP2 levels whilst handling ever higher traffic levels and a reduction in prices.	Airlines are not persuaded that the iBP goes as far as it could in maximising price reductions whilst still meeting the other priorities. Further work that is required on factors influencing 'price' would include a need to review WACC assumptions, some staff group numbers and elements of pension costs (see section 6). It is likely that the CAA will need to determine a WACC – as opposed to airlines and NERL reaching agreements here. On pensions the airlines would like to see plans developed to reduce the cost burden of the DC scheme for new starters. Airlines will ask the CAA to review the efficiency of NATS not having used the 'statutory override' provisions to pass employer NI contribution costs on to employees for the DC scheme members.	Our average prices in RP3 are projected to be 12% lower in real terms than in RP2. This builds on significant price reductions that we have delivered during the RP2 period (26% in real terms), and the significant operating cost savings of more than 40% in real terms since PPP. We plan to make further operating cost efficiencies amounting to £70m (in real terms) over the RP3 period. We believe strongly that the cost efficiency of our plan needs to take account of both the direct costs we incur and the indirect costs that our customers incur relating to the effectiveness of our operational performance. Our objective is to balance these costs in a way that produces the most efficient total cost for airlines (see Appendix I of the iBP). Our plan is ambitious, as it aims to maintain very good safety, service and environmental performance at RP2 levels, with domestic traffic increasing by ~30% from 2010 to 2025 and oceanic traffic increasing by ~50% from 2010 to 2025. We will also complete our technology	Not Agreed

			upgrade programme, and modernise airspace. We need the financial resources to deliver this ambitious plan.	

2. Traffic Forecasting

Number	Subject of Discussion	Airline View	NERL View	Status
2.1	Poor accuracy of STATFOR forecasts during RP2. STATFOR forecast estimated domestic traffic growth of 7% over RP2. Traffic will have increased by 15% over the five years of RP2. STATFOR forecast estimated oceanic traffic growth of 14% over RP2. Traffic will have increased by 25% over the five years of RP2.	STATFOR forecasts for RP2 have been poor at a national level, however airlines note that past performance is not necessarily indicative of future performance as forecasting is an inexact science. NATS should look to improve their input to STATFOR.	STATFOR forecasts for RP2 have been poor at a national level. STATFOR may be adequate at a European level but is insufficiently robust at a national level.	Agreed
2.2.	Use of NERL forecast for UK domestic during RP3. In RP3 NERL expects growth to slow to c6% primarily due to airport capacity constraints in the south east. STATFOR predicts a 7.1% growth in flights over RP3.	Airlines were concerned that the original NERL forecast excluded several likely airport capacity changes that would increase the passenger forecasts. This has been taken account of – at least to some extent – in the revised NATS forecast presented at the final workshop on Sept 13th. The airlines were still concerned as to whether this went far enough (e.g. the likely increase in LTN passenger cap was excluded even though it is likely to result in increased movements). Nevertheless, the revised forecast was a big step in the right direction	The STATFOR forecasting process is now better understood and its limitations at a national level recognised. NERL's own forecasting model is solely focussed on UK movements and has consistently out performed STATFOR forecasts. NERL believes that STATFOR's forecast is higher, and less accurate, than NERL's for two main reasons: - STATFOR has overstated the baseline 2017 calendar year for the effect of the	Provisionally Agreed (subject to NERL adopting the forecast presented on Sept 13th, and engaging further with STATFOR to see if consistency can be achieved and taking

		and the airlines welcome it. The airlines would also encourage NERL to continue to engage further with STATFOR to see if consistency can be achieved.	collapse of Monarch Airlines and strikes by Ryanair staff - STATFOR has overstated its TSU forecast by assuming that the pattern of jet stream will follow the track in 2016 and 2017 which NERL believes was north about relative to the pattern which will be seen in our RP3. Taking a 5 year average would be more representative and is supported by the Met Office. NERL's August 2018 forecast fully incorporates airport capacity information, where this has been provided by airports. NERL has requested that STATFOR take into account UK specific factors and NERL will update the forecast for the rBP.	account of the Feb-19 STATFOR forecasts which EC will publish)
2.3	Use of NERL forecasts for Oceanic Traffic during RP3. Over RP3 NERL predicts oceanic to increase by 10%. STATFOR predicts oceanic traffic to increase by 9%.	Airlines note that NERL have not been consistent in the use of a single forecast in regard to their modelling of the costs and benefits they have presented for the Oceanic service. Airlines would have wished to see a consistent forecast to be used for the calculation of benefits and costs.	NERL believes the NERL's base case forecast for oceanic is the appropriate forecast for determining price, rather than the STATFOR derived forecast (which does not include flights which do not enter European airspace) or NAT EFFG forecast (which is immature and	Agreed

		Given NERL's position that the difference between the two forecasts used would not produce a material difference in the cost/benefits presented – and given the continued lack of airline agreement to the much more significant issue of the overall benefits case presented for the inclusion of space-based ADS-B in Shanwick it is agreed that the difference produced by virtue of different forecasts is the least of our worries. On that basis the airlines are prepared to support use of the NERL Oceanic forecast in preference to the STATFOR forecast.	does not have a sufficiently robust methodology). Note: We do not consider the difference between the benefits presented in our iBP, and those which would stem from our own traffic forecast to be material to overall benefit forecasts because the benefits are modelled on a traffic forecast that's c. 1.3 – 2.6% lower than our iBP forecast. Based on current fuel prices, the average fuel saving during RP3 is around 3 times higher than the incremental cost. This gives us a high degree of assurance that the use of a different traffic forecast would not materially affect the business case.	

3. Safety

Number	Subject of Discussion	Airline View	NERL View	Status
3.1	1. Safety is Paramount 2. To remain compliant with EU safety targets. 3. High level internal safety target : To maintain or improve safety levels by ensuring that the number of serious or risk bearing incidents per flight does not increase and where possible decreases (i.e. to maintain or improve RP2 performance)	Agreement on the paramount need to consistently deliver a safe operation. Supported Supported Airlines concern that main safety improvements are not delivered until the end of RP3.	Based on customer feedback survey. These targets should be known by the end of 2018. In line with the UK State Safety Plan In the face of increasing traffic and rate and scale of change - this is a very challenging target.	Agreed Provisional Agreement (dependent on what the EU safety targets are) Agreed
3.2	Electronic Conspicuity 1. The development of a 'known traffic environment' for uncontrolled airspace through the use of ADS-B technology.	Airlines want to work with NERL and the regulator to legally require all users to carry the necessary equipment to see and be seen, to improve the safety of the whole system. Requires the CAA to propose the implementation plan.	NERL has been, and still is, supportive of total electronic conspicuity with the intent to reduce the safety risk from general aviation and other airspace users.	Agreed

	2. To retain within the wider Business Plan.	Supported	As the CAA's decision to move to a full conspicuity solution has been confirmed only very recently, we have signalled our support in the wider plan. We require the CAA to propose the implementation plan for equipage and airspace. Therefore NERL is unable to estimate the costs required to move this area from the wider to the core plan.	Agreed
	3. Cost of electronic conspicuity	Once known these costs should be borne by all airspace users in a fair and equitable manner with airlines accepting the principle that users of controlled airspace should fund the prevention of risks in controlled airspace. However, the prevention of risks outside the scope of commercial airline operations should be funded from other sources using the user pays principle i.e. costs allocated to General Aviation or Military Aviation and drone operators. Given the lack of clarity on technology requirements for this and funding the airlines accept that investment plans for conspicuity and the degree to which the burden	This would require the development of international and UK requirements, the potential need for changes in airspace or classification and an agreement on the nature of the costs to be taken into account. These require agreement with the CAA. NERL would need to integrate this with its new technology platform. Potentially needing to install a network of ground based receivers and to modify the surveillance processing systems. Further, this would require a new concept of operations to safely integrate electronic conspicuity into NERL's surveillance services and procedures. Full costs would need	Agreed

		falls to commercial airlines will need to be dealt with through the SIP process.	to be determined to be included in the core Business Plan, as appropriate. The investment plan for conspicuity would be subject to separate consultation with customers through the SIP process making clear expected benefits, costs and risks.	

4. Service Quality – Capacity & Delay

Number	Subject of Discussion	Airline View	NERL View	Status
4.1	Service performance metrics C1 & C2 1. To retain the service performance metrics : C1 : average ATFM delay per flight from all causes C2 : average ATFM delay per flight from NERL attributable causes 2. C3 : weighted metric that captures the impact of the timing and length of delays. C4 : variability of daily average delays expressed as a daily excess score. Technical Resilience Allowance for special event transition delay.	Airlines happy to support retaining the same metrics. Airlines acknowledged that C1 is mandated by the EC but has limited value to the airlines. The other metrics are recognised by airlines to be of more relevance. Airlines have no desire to see greater risk on service metrics than current. Airlines wish to review EC performance regulation as it becomes available. There was an airline request to understand more on the cost of potential service improvement – NERL have noted the costs increase would be exponential for increased service. Concern was also expressed on the disconnect between airport declaration of capacity and airspace constraints (i.e. no directionality is	NERL proposes that the UK maintains a symmetrical regime with 1% revenues across C2, C3 and C4. A Special Event Delay Allowance for DP-ER, DP Lower and LAMP would replace the existing exemption days mechanism. NERL would not bear any financial risk on C1. The incentive scheme should be consistent with European regulations, therefore this view is dependent on the outcome of the SES performance regime	Provisional Agreement (dependent on final EU regulation Provisional Agreement (dependent on final EU regulation)

		taken into account in the scheduling process).		
4.2	Service performance targets 1. To retain the service performance targets from RP2 : C1 : 13.8 secs C2 : 10.8 secs C3 : 23.8 secs C4 : 2000 score Technical resilience: to meet CAP 1639 resilience proposals.	Supported	Extremely challenging due to increasing traffic levels and the scale of change in RP3. Dependent on the outcome of the SES performance regime and acceptance of proposals for Special Event Delay Allowance for DP-ER, DP Lower and LAMP.	Agreed
4.3	Allowance for special events transition delay. 1. A change of metric NERL is proposing to replace the exemption days with a special transition delay allowance in RP3, specifically for significant transitions, based on the positive experience from ExCDS. 2. Proposed Approach	Detail on governance process required, however supported in principle if this follows the process used for the 2018 ExCDS transition. It is possible that airlines could work on the governance process now to reach full agreement on this ahead of final BP. Supported	Based on NERL's learning from recent major transitions the current concept of 'exemption days' should be improved. Only for significant transitions within RP3 i.e. DP-Enroute, DP Lower and LAMP and their transition phases. Each agreed separately with customers.	Provisionally Agreed Agreed

4.4	Incentive cap on service quality	Airlines have no desire to see greater risk on service metrics than current. However if the EC performance regulation does increase the cap on risk we do not believe this needs to be reflected in the cost of capital. Airlines wish to review EC performance regulation as it becomes available.	Proposal is for a 1% cap for service subject to CAA consultation on local scheme. A mandatory 3% cap for service quality (C1 or C2) puts material revenue and regulatory return at risk. This material increase in risk from today would need to be compensated by a rise in the cost of capital. EC proposals to allow local targets but based on an "additional" 1% for other capacity metrics are not accepted as this would put additional revenue at risk.	Pending (dependent on final EU regulation)
4.5	Separate targets for London Approach	Airlines had requested new delay targets for London approach with priority given to the London network. They had believed that this would give system wide benefits. Having heard NERL's response airlines are content to retain the status quo.	NERL is required by its licence to "maintain the most expeditious flow of air traffic as a whole without unreasonably delaying or diverting individual aircraft". To do this, NERL regulates the network to produce the necessary effect on the relevant sectors with the least negative impact on customers. As far as possible, NERL distributes regulation across airports to avoid penalising a small set of customers unduly. To achieve this, NERL treats London approach as an integral part of the network.	Agreed

			Therefore, NERL did not consider that establishing individual targets for different parts of the network would be consistent with its licence. NERL therefore did not support separate targets for London Approach.	
4.6	Drones 1. Core plan requiring £7.8m over RP3 for user registration, online training, education and management and publication of drone no-fly zones. 2. Funding model for full UAS (unmanned aerial system) UTM	Airlines question why this is a NERL activity rather than CAA. Supported Once known these costs should be borne by drone operators.	A new service framework that proportionally manages the risk to commercial aircraft and airport operations to the risk of airspace infringements to current airspace users. NERL has placed this into the wider plan as a new funding model would be required in order that costs are borne by commercial drone operators. This will also likely require legislation. (This subject is linked to electronic conspicuity in section 3 : Safety above)	Agreed (Pending CAA response) Agreed

5. Service Quality - Environment & Flight Efficiency

Number	Subject of Discussion	Airline View	NERL View	Status
5.1	RP3 metric for airspace efficiency should be 3Di rather than the EU's KEA	Supported. Whilst 3Di is not perfect, airlines recognise that it is a superior measure to KEA and understand the importance to NERL of the use of 3Di as a tool to encourage delivery of improvement in environmental performance in their operation. Airlines question what would happen if EC mandate KEA. Could there be an opt out ? Even if there is not an opt out if KEA were mandated airline's would wish to see 3Di used as a management tool regardless of whether it was a metric used in the performance plan. Supported. Airlines agreed to engage with the European Commission directly to communicate their support	On the basis that KEA has reduced scope relative to 3Di and therefore has less potential airspace efficiency benefits for airlines. Current draft RP3 Regulations would permit the UK to use 3Di for its environment incentive scheme. NERL will continue to engage with CAA and the European Commission to ensure that this is retained in the final Regulation, and with the Network Manager to ensure local KEA targets are achievable as a fall back option.	Agreed Agreed
5.2	RP3 3Di metric scope			Agreed

		Agree subject to airline request to be involved in discussions regarding proposed refinements to 3Di in particular relating to exclusion of re-positioning flights. (Details need to be finalised.) If airlines could work on the details of the requested 'refinements' to 3Di ahead of the final report this could be an issue that moves to being fully agreed.	RP3 3Di should be refined to make it more reflective of actions that NERL can take to improve airspace efficiency and avoid NERL making windfall losses or gains in areas for activities outside of its control This includes: – scoping out 3Di incentives below either (i) 7,000ft for arrivals and 9,000ft for departures or (ii) 10,000ft for arrivals and departures on the basis that CAA and DfT have dictated that noise should be the prime route design consideration below 7,000ft – Exclusions and exemptions to remove non NERL controllable activities or impacts such as airport schedules and scheduled arrival holding, airport growth, capacity or delay priorities, choice of minimum cost routes, flights not under our control, operational factors such as mass diversion scenarios, runway direction, weather and flights pursuing different goals to fuel efficiency (e.g. calibration, training and non-revenue flights). – triggers to apply adjustments to the 3Di performance scheme for changes outside of our	

			control, which result in significant operational or performance impacts to neutralise any impacts in light of permanent changes to the volume of airspace or accuracy of data and modulated targets where traffic levels markedly diverge from the base traffic forecast NERL will provide further details on exemptions.	
5.3	RP3 3Di target range is proposed to be in the range 16-18 entirely through the refinement of scoping out the lower airspace.	Supported – subject to agreement above.	NERL is proposing a 3Di target range for RP3 based on the concept of sustainable growth. This means that investment plan in RP3 will deliver stable airspace efficiency offsetting the inefficiency caused by traffic growth.	Agreed (pending airline amendments being actioned)

6. Opex

Number	Subject of Discussion	Airline View	NERL View	Status
6.1	ATCO Headcount To increase ATCO headcount by 150 from c868 to c1018 over RP3.	Airlines are concerned that there is not enough evidence that the increase should be 150. NATS gave detailed presentations on this but it is difficult for airlines to judge whether the plan is optimal. In particular the airlines had a concern on the amount of ATCO efficiency/productivity increase with new tools during RP3, which is only 2% and whether more could be done in RP3 to reduce training times. The airlines note the SDG study which estimates that a realistic range of ATCOs should be 895 to 975 and that DSESAR productivity should be 4% to 6% in RP3 rather than the 2% that NERL have included in their iBP. Having said that, the airlines are concerned the NERL traffic forecast is too low, which if correct would increase pressure on ATCO numbers.	An additional c150 ATCO are required over RP3 to cover: - traffic growth in RP2 (catch up) and further growth in RP3; - the patterns in which traffic could be presented with double digit growth in some sectors and with a non-linear relationship between traffic and headcount; - airspace modernisation; support to the change programme; - preparation for Heathrow Runway 3; - improved operational resilience required by airlines and reflected in CAA Oberon findings; - replacement for ATCO retirements noting that it takes three years to recruit an ATCO and a further two years for ATCOs to gain the number of validations being lost by experienced ATCOs leaving the business;	Not Agreed

		NERL did have a look at a sensitivity on the impact of 50 less ATCOs which increased delay time but what could have helped would have been some credible alternative ATCO number options. In summary the airlines agree there needs to be an increase in ATCO numbers but feel they cannot agree the ATCO numbers suggested per se and suggest two actions : i) For the rBP NERL need to look again at credible alternative ATCO options looking at what could be achieved with stretch targets on productivity, training etc. ii) In particular airlines would like to see more ambition from NERL in relation to ATCO training and validations (see section 6.9)	- maintain the safety, capacity and environmental targets Reducing headcount by c50 would increase C2 delay from c11 secs to c18 secs, an inability to implement the required airspace changes and introduce technology change. Increasing ATCO headcount beyond the planned levels in the iBP is not possible as the training college and training capacity on unit will be working at maximum capacity. The 2% productivity within our plan is in addition to delivering significant technical upgrades and airspace change and continuing to deliver high service quality despite significant traffic growth. If the change programme was not delivered, there would be a productivity dis-benefit. For these reasons, NERL believes that its planned ATCO headcount is set at the right level to deliver the service quality targets that customers support, with the resilience that is necessary, while enabling the resources necessary to implement the technology	

			programme and the associated important airspace changes.	
6.2	ATSA Headcount ASTA numbers will peak in 2019 at 562 and then reduce over the course of RP3 to end at 516.	ATSAs cover operational roles and are also needed for change programmes, training etc. NERL have explained their requirement but again it is difficult for airlines to fully assess whether the plan is optimal. The airlines note the SDG study which estimates that a realistic range of ATSEs should be 393 to 466. Again the airlines are concerned about the lack of productivity benefits in RP3. The airlines cannot agree the ATSA numbers suggested per se and suggest that for the rBP NERL need to look again at credible alternative ATSA options looking at what could be achieved with stretch targets on productivity etc.	ATSAs are categorised as: Operational ATSAs: provide direct support to ATCOs and work in similar watch based shifts arranged to ensure support is available 24/7. ATCO training and simulation: primarily involved in supporting the simulation capability across 3 areas: TATC training, training for new systems & keeping licenced ATCOs current. Other: typically have significant experience of the operation and are, in part, deployed on tasks that would otherwise require an air traffic controller to be redeployed from the operation. Operational ATSAs are due to reduce by c14% between 2017 and 2024 (c60% reduction between 2007 and 2017), with the projected increases in ATCO training and simulation reflecting the increased TATC throughput and in the Other category reflecting requirements around the significant size and	Not Agreed

			scale of the airspace and technology change programme. The main activities these resources support are airspace capacity management, ATC development, safety improvement & investigation and operational support. There have already been significant reductions to our operational ATSA numbers during RP1 and RP2, as we have deployed technology into the operation, such as EFD, ExCDS and PCUA. Reducing ATSA headcount would have an impact on NERL's ability to deliver the plan, as ATSAs perform roles which would otherwise need to be completed by more expensive ATCOs.	
6.3	Central Management and Support Staff Headcount (PCG/MSG)	NERL presented a very detailed plan of why these are increasing and what they are needed for – this mainly to support the change programme but they are also replacing some (more expensive) engineers. The plan is very detailed for 5 years with many new support roles (e.g. 11 heads for communications) during the change programme.	These grades operate right across the business, from providing critical management support directly to the Operation, reflecting increasing requirements in cyber security & resilience, and performing roles requiring a high level of specific expertise. They also include resources required, e.g. communications, to support the airspace change	Not Agreed

		Airlines note that they have also delivered change programmes themselves but also reduced headcount at the same time. Although NERL have challenged these numbers internally several examples look very generous e.g. 11 additional heads for communications. The airlines feel NERL do not have the same pressure/shareholders challenge that airlines face to be more productive when developing their programmes. For the rBP the airlines would challenge NERL to think more creatively about how they cover this work with less heads without any reduction in quality/timescales noting the SDG estimate that an efficient headcount number would be in the 621-636 range, as opposed to the 718 proposed.	programme recognising the increasing requirements around consultation and engagement (which will require a formal consultation on proposals which will affect around 26-27 million people). Further they reflect the development of our P3O function and increased governance around our change portfolio. These are not purely management positions but reflect the critical skills required in our business to enable us to deliver the required levels of safety and service performance. A number of these roles are 'expert' roles rather than managerial ones without which we could not deliver plan outcomes. Where efficient and appropriate NERL plans to utilise these grades rather than more expensive or scarce resources, e.g. ATCOs or ATCEs.	
6.4	Technical Services Headcount 1,075 FTE in 2018. Estimate 837 FTE in 2024 A reduction of 288 FTE (a 22% reduction)	Airlines are concerned about the amount/duration of parallel running in the plan and in the overall profile of combined asset management and technical staff costs which	NERL will deliver a 22% reduction in Technical Services headcount as a result of the introduction of the new DSESAR capabilities and at the transition to a Service	Not Agreed

		increase during RP3 and are higher at the end of RP3 than today.	Orientated approach to service management. • In consultation with customers, we consciously reduced our asset sustainment activities in RP2 to allow resource to be focussed on the SESAR plan. This means that the average age of our systems has increased. • We are starting to see an increase in failure rates, whilst not currently causing any disruption to service, is certainly increasing the risk of failure. This is also driving higher maintenance costs. • Our main suppliers are either ceasing support for systems or planning to – this drives us to more expensive 'interim' support options. • Defending ourselves against increasingly sophisticated Cyber threats is driving significant cost into our business to secure older systems. • Without replacement, these costs will continue to rise faster than more up to date systems; our analysis indicates that the cost of the current systems of £22m per annum in 2019 would rise to £30m per annum by the end of RP3 if we do nothing.	

			• The expected cost of the Current systems at the end of RP3 is £13m hence a saving all other things being equal of £17m per annum. • There will be approx £9m of costs of the Current systems which will continue to the end of RP4 and beyond primarily for Controller Comms, Connectivity & Surveillance, which are outside of the scope of DSESAR and hence are a continuing requirement. When looking at the total cost at the end of RP3 compared to current costs, these include additional scope and therefore is not a like for like position. Two key examples of additional scope are within cyber security and increased system resilience.	
6.5	Other Headcount	Airlines support the headcount of other groups based on the SDG findings.	NERL's headcount assumptions are based on robust internal planning processes. As SDG conclude, our other headcount is reasonable.	Agreed
6.6	Pay Levels	Airlines note the SDG study which concluded that ATCO pay levels in RP3 were realistic (although not necessarily efficient). The report	As SDG conclude, our pay levels are reasonable.	Agreed (for ATCOs)

		also generally concluded that other pay levels were also realistic. However NERL's commissioned consultancy report on pay levels from NERA suggested that the following groups of staff are paid above the top end of the expected pay ranges; ATSA and MSG. The airlines would like the CAA to challenge NERL with an appropriate pay reduction task for ATSA/MSG in RP3.		Not Agreed (for ATSAs & MSGs)
6.7	Pensions	Airlines acknowledge the work that had already been done to minimise the cost of the DB scheme. However, they believe it is still a generous scheme and believe that NERL is still asking airlines and the travelling public to help them fund it. Pension provision is continually changing throughout the UK and the airlines believe NERL is well behind the curve on this. Airlines would like NERL to create a new, lower cost, DC pension scheme for new starters – and would like to see this introduced within the early years of RP3 in order to reduce the cost burden of generous pension provision on customers.	Within the legal constraints of the scheme, we have taken reasonable actions that are meaningfully available to mitigate the cost risk of the scheme. Therefore, we propose no change to current regulatory mechanisms. We have no plans to make changes to DC pension levels for new hires in RP3, noting that we pay on average 15% of pensionable payroll. Negotiating this with the workforce would distract from delivering higher customer priority items (e.g. completing the technology programme and modernising airspace).	Not Agreed

		Airlines would like the CAA to review the efficiency of the increased staff costs that relate to improved pension provision for employees that NERL chose to take on for members of the DC scheme by not using the statutory override provisions to pass on the increased costs of employer NI contributions to employees from April 2016. The impact of NERL not using the statutory override provision effectively increased the PPI costs for these members of the DC scheme and saddled customers with a large cost that will be borne for many years to come. Accepting there is an immediate cost benefit in terms of reduced funding of pension costs for those NERL employees that transfer out of the DB scheme and chose to take a Cash Alternative to Pension payment the airlines seek assurance that the scheme actuary will be continually involved to ensure the basis on which the CETVs are calculated remains appropriate and allow trustees to judge whether reductions should be applied to CETVs in light of an assessment of overall current		

		funding position of the pension fund/covenant strength.		
6.8	Opex Flexibility fund Currently the FAS facilitation fund of £22.5m over RP2 is made up of £15m from NERL and £7.5m from the Small gaps fund. Funds are allocated by the FAS Investment Board. An Opex flexibility fund of £35m has been assumed for RP3. An ongoing Small Gaps fund would continue to be funded through the CAA/DfT component of the Unit Rate	Airline understanding is that the proposed £35m is directly comparable to the £15m FAS Facilitation Fund. The Small Gaps fund which is proposed to be administered through the CAA element of the En-route unit rate. As such this is a large increase in contingency of 133%. NERL has noted that the £7m per annum sum is equivalent to 1% of annual revenue. A more detailed rationale as to why £7m ppa is the 'right' number would need to be presented to gain airline endorsement. Airlines support the concept of an Opex flexibility fund though this is subject to further agreement on the overall value and further proposals being made on SIP and Airspace Modernisation governance. Discussions on appropriate SIP governance proposals for Opex Flexibility will help determine this is the right approach to manage this contingency fund and that it is only accessed for spend that the airlines broadly support. For the avoidance	The OFF will be governed through the SIP process. NERL has put forward proposals for an enhanced SIP process, and will be engaging with customers further in November. The OFF is not a direct replacement for the FFF as the scope is much wider. The FFF is subject to specific criteria requiring proposals to be in line with the Future Airspace Strategy (FAS). The OFF would not be restricted to FAS related activities and so could be used to deliver customer benefit of any category. Therefore, we intend that the OFF would provide flexibility for us to deliver the most cost efficient outcome for customers and to support delivery of core plan programmes where specific risks or unforeseen circumstances arise. Any funds not used would be returned to customers at the start of RP4. However, NERL would bear the risk on any overspend.	Provisionally Agreed

		of doubt the airlines want the Opex Flexibility Fund to be subject to forward-looking NERL-Airline governance via the revised governance process as opposed to the retrospective reporting outlined in Appendix O of the iBP appendices. The only question to settle, after that, would be the value – where further engagement and justification of the £35m by NERL may help.	The value of the fund therefore needs to reflect this arrangement and should not be a limiting factor on NERL being able to deliver additional customer benefits where agreed through the appropriate governance process.	
6.9	ATCO Validations	With the introduction of more technology is there an opportunity to more easily increase validations per controller and improve productivity/resilience. Airline community do not accept NATS position as it lacks amibition.	In the short to medium term we do not see that the organisation's investment programme presents any real opportunities for either reducing the time taken to obtain additional validations or for making it easier for ATCOs to hold more validations and remain competent. This is primarily because the method of operation will still be based on sector (i.e. geographical) specific qualifications which require an in depth knowledge of the airspace and associated procedures that are specific to that area of operation. Longer term (i.e. RP4) the potential does present itself for us to start exploiting benefits from the new technology through the introduction of new operational methodologies	Not Agreed

			(e.g. full dynamic sectorisation). Among other things this would lead to a move away from geographically based operational qualifications to more task based skills. Removing the number of discreet skills in the operation in this way will enable some benefits in terms of productivity and resilience although this will need to be supported by appropriate changes to employee working practices to fully realise the benefits.	
6.10	ATCO Training	Airlines want to understand how training time for ATCOs compares with other ATSPs – are there opportunities for reducing training period ? Airline community do not accept NATS position as it lacks ambition.	Previous benchmarking has shown NATS Initial Training to be favourable in terms of duration when compared with other European ANSPs, many of whom continue to train all of their students on all of the ATC ratings. NATS has made significant reductions in the time to achieve the necessary ratings for ADI, APS and ACS over the past few years. Due to the variation in size, complexity and other operational commitments (such as Airspace or Technical System Changes), it is difficult to compare the unit elements of ATCO training. NATS considers ATCO training as a single, end to end process which we	Not Agreed

			aim to improve continuously through the governing bodies we have put in place. The imperative for us to boost operational ATCO numbers to meet current and higher future demand has driven our search for more innovative approaches to training ATCOs. This has been aided by new technology and training techniques that have relatively recently become available and developed, including: - Learning Needs Analysis - Bite size learning - Spaced learning - Blended learning - Spiral curriculums - Mobile Learning - Augmented reality - Gamification With increasing numbers of TATCs, we now have the opportunity to trial these more innovative approaches and to validate their effectiveness.	

7. Investment Plan - RP3 Change Portfolio

Number	Subject of Discussion	Airline View	NERL View	Status
7.1	**For information to inform sections 8 - 10 below** Total Capex Requirement The portfolio is made up of 8 programmes (2 requiring no Capital expenditure) Airspace Change 1. Airspace 110m 2. Domestic Enhancements 38m Technology Change 3. DSESAR 294m 4. Technical Resilience 145m 5. Business Resilience 88m Operational Change 6. Oceanic 15m 7. Service Orientation 8. Operations Integration Military 8m Contingency 30m Accelerated to RP2 23m Total £751m	Airlines agree with the broad strategic thrust and scope of the RP3 Change Portfolio. However Airlines are not in a position to be able to support the costs presented by NERL. This determination will need to be made by the CAA. (More detail on agreements and disagreements of the investment plan are highlighted in the next three sections.)	NERL has proposed a balanced portfolio which aims to complete the replacement of our core operational systems through DSESAR, modernise airspace through LAMP (and other projects) whilst also maintaining and sustaining existing systems and infrastructure. The total investment programme also includes the Oceanic programme service line investments as well as military investment which will be funded separately by the MoD. Alongside these capital investments NERL has also proposed two opex only programmes which will deliver the transformation programmes necessary to make best use of the new technology both in engineering and operations. 1. The total proposed investment of £751m includes £23m which is	Agreed (scope but not cost)

	1. A Capex Requirement of £751m, as a point estimate, including contingency of £30m (see below) 2. A Contingency of £30m	Airlines are broadly supportive of the strategic thrust to replace outdated technology and improve airspace. However they do not have the detailed expertise to understand whether the technology solutions are the right ones/most efficient ones and have asked for more detail to help inform their view. The airlines concerns can be mitigated by enhanced governance in RP3 of detailed projects. The airlines also have concerns on airspace change dependencies and the extent to which these can be governed in a more structured approach. Airlines agree that a capex contingency fund held at the portfolio level is in principle more efficient than if contingency was built into each project. As airlines are not in a position to agree the cost of the change portfolio we cannot in turn agree the proposed amount of contingency. This will need to be determined by the CAA. The airlines current position on Oceanic investment of £15m is that this should be considered as a wider option and agreed via the RP3 SIP process.	proposed spent during the final year of RP2 in order to enabler an earlier delivery of the DSESAR platform and de-risking LAMP. 2. The total proposed investment includes a small contingency of £30m which NERL would use to address risks and potential new requirements which may arise during RP3.	Agreed (the principle but not the amount) Agreed

	3. The point estimate of c£750m could vary between – a lower value of c£725m if c£25m capex is accelerated from RP3 to RP2; and – a higher value of c£800m without any acceleration and if a further £50m is needed and agreed through the SIP process	Agree that the point estimate could vary but ultimately this will be subject to the CAA determination of the cost of the change portfolio.	3. Recognising the uncertainty in planning an investment programme 7 years ahead, NERL has declared a likely capex outturn in the range £725m-£800m. Should NERL believe there is a rationale to change the core plan to make use of this extra funding then NERL would present the case for consultation through the SIP process.	(the eventual point estimate determined by CAA may vary)

8. Investment Plan - Airspace Modernisation

Number	Subject of Discussion	Airline View	NERL View	Status
8.1	Criticality to customers	Airlines noted that 'Airspace modernisation and tools are critical to meet current demand, not just future demand because the airspace was already constrained'.	Numbers 2 & 3 on the customer priorities list (after safety). Delivering airspace change is at the heart of the NERL BP for RP3	Agreed
8.2	The proposed plan Broken into 4 parts : Systemised airspace (redesign of lower level airspace), Free Route airspace, Queue & Capacity management (IPA, AMAN, TBS), and Operational airspace enhancements (addressing hotspots)	Supported	NERL has optimised the phasing of the airspace programme and has considered the dependencies with the technology programme. Some changes may be delivered using legacy technology, while other changes (eg Free Route) require iTEC/DP en-route first.	Agreed
8.3	Capex Systemised airspace - £66m Free Route airspace – £26m Queue and capacity management - £18m Domestic enhancements - £38m Total Capex Requirement of £148m (see section 7.1)	Customer propose adding IPA Early Morning TEAM (0600-0700) to the Core Plan	NERL proposes including IPA EMT (0600-0700) in the rBP core plan (£4.5m)	Agreed (Scope not cost)

8.4	Support for LAMP LAMP enablers and phase 1 & 2 to take place in RP3 (2023/24). Engagement and commitment from all stakeholders required.	Supported – Airlines will always welcome the opportunity to bring forward delivery of LAMP. Concern raised over available funding for small airports requiring a ACP to support LAMP.	Runway 3 operation and the growth of capacity constrained airports dependent on LAMP delivery. Co-ordination and cross industry co-operation required, including CAA, DfT, SoS and airports. Funding arrangements to be determine through discussions between CAA and DfT.	Agreed Agreed
8.5	Wider FASI-S plan - NERL's role 1. CAA guidance has asked NERL to take on a wider role in co-ordination of airspace change in the South-East. 2. The funding for NERL's co-ordination role to be captured within the rBP.	1. The airlines are supportive of NERL taking on a wider technical and co-ordination role for airspace change but overall programme management should be based on an independent supervisory structure funded by Government as part of national infrastructure projects.. 2. Airlines believe that the funding for a wider airspace modernisation PMO should come from government using a model such as that put in place for HS2 ltd, particularly as airspace forms a key	1. Consultation feedback has been to widen NERL's role. rBP to include costing for the enlarged NERL role, including the establishment of a project management office. 2. While NERL would welcome Government funding for airspace modernisation, it is important to recognise that obtaining it could be a challenge where direct beneficiaries can be clearly	Agreed (exact set up still to be agreed) Not Agreed

		component of the UK's national strategic infrastructure. The airline community would only consider funding the wider PMO function if full funding from Government was not forthcoming and then would want to understand the funding requirement for airlines to make a contribution to this. Further to the issue of funding, the airline community believe that a final decision on whether NATS ought to assume that wider co-ordination role on its own, including the PMO function, should be made via the CAA's Draft Airspace Modernisation Strategy consultation and the CAA's final determination on this issue.	identified and there are many calls on public funds. It is critical that the issue of funding does not delay airspace modernisation. Similarly, an independent organisation could take time to set up and recruit the right staff. It is more important to set up the right governance for airspace modernisation instead of it being run through its own legal entity.	
8.6	Benefits to Customers	Airlines want tracking of benefits year by year through the SIP process.	The proposed plan will deliver NERL's commitments to airspace modernisation. Enabling significant fuel savings (100kT-150kT p.a. by the end of RP3), support a 1-2 point reduction in 3Di, deliver a service quality benefit of c7 sec by 2025, plus significant safety improvements.	Agreed
8.7	Options for the core rBP :			

	Enhanced queue and capacity management capability : a. TBS Stansted (£5.9m)	a. Airlines not convinced of the business case.	a. Lack of airport direct support to-date and impact on the wider plan – benefits may be limited as mainly medium traffic mix. (It should be noted that the airline most affected has not commented on this exclusion.)	Agreed (exclude)
	b. TBS Luton (£5.9)	b. Airlines not convinced of the business case.	b. Lack of airport direct support to-date and impact on the wider plan – benefits may be limited by runway/taxiway limitations.	Agreed (exclude)
	c. Heathrow IPA Early Morning (£4.5m)	c. Airlines believe there is a business case.	c. Heathrow customer fully supports with integrated funding model required – NERL proposes adding to Core Plan in rBP	Agreed (include)
	d. AMAN at Prestwick (£1.5m)	d. Airlines not convinced of the business case.	d. Lack of airport direct support to-date and growth expected at airports does not warrant this implementation.	Agreed (exclude)
	e. AMAN/DMAN integration (£3m)	e. Airlines not convinced of the business case.	e. Uncertainty over benefits but could be included if opportunities arise during RP3.	Agreed (exclude)
	To defer or remove FRA from the RP3 plan. Reducing capex by £15.8m. (Deployment of FRA is required to meet the PCP mandate.)	Not supported	Not supported	Agreed (i.e. do not defer or remove)

9. Investment Plan - Technology Programme

Number	Subject of Discussion	Airline View	NERL View	Status
9.1	The proposed technology plan is made up of 3 programmes : – Delivering DSESAR – Technical Resilience – Business Resilience	Airlines are broadly support of the strategic thrust to replace outdated technology (legacy escape) and enable airspace change. However, they do not have the detailed expertise to understand whether the technology solutions are the right ones/most efficient ones and have asked for more detail to help inform their view. In particular the airlines have asked for business cases for the sub-programmes to understand their specific benefits. They question whether the productivity benefits of the technology plan are ambitious enough. Going forward a potential mitigation to concerns around the sub-programmes could be enhanced governance in RP3 with substantive projects and business cases being signed off at the SIP and detailed tracking of benefits. (see section 12.1 below.)	NERL has set out a technology programme which focuses on completing the transformation of our current systems and the introduction of a modern flexible platform to improve performance and resilience through our DSESAR programme. This is also in support of our obligations under SES including implementation of the Pilot Common Project (PCP). In parallel with this we will continue to sustain and maintain our existing systems through our Technical and Business resilience programmes. Our approach here is to minimise where possible investment in systems that are near end of life and to use standard off the shelf solutions whenever possible when replacements are required.	Agreed
9.2	Capex Requirement	The airlines can agree with the requirement for the programmes that are to be delivered from the	Our programme proposes investment of £214m to complete the deployment of our common	Not Agreed

	Delivering SESAR 294m Technical Resilience 145m Business Resilience 88m Capex requirement of £527m (see section 7.1 above)	capex spend – but are not in a position to assess if the costs presented are efficient. Given the often very limited supplier base for the very specific and specialised nature of the developments that NERL requires airlines feel they must rely upon best practice NERL Procurement processes to seek efficient pricing and value for money.	platform and “legacy escape” through the DSEAR programme. Additionally we propose investing a further £80m during RP3 on additional tools for lower airspace which can be deployed on to the platform after airspace changes have been implemented in the London TMA. Separately a total of £233m is provisioned to ensure resilience of our technical systems and business infrastructure.	
9.3	Benefits to customers 1. DSESAR	Airlines have asked for business cases for the sub-programmes to understand their specific benefits and some information has been provided. Airlines continue to be unhappy that the productivity benefits of DSESAR are only 2% in RP3 and that benefits in RP4 are dependent on aircraft equipage of EEP which requires embodiment on aircraft. No aircraft currently have this and there are no plans/standards. Airlines are concerned that DSESAR and other initiatives has just automated existing processes		Not Agreed

		and has not taken a more radical look at processes that may lead to greater productivity gains. Airlines are concerned that DSESAR and other initiatives has just automated existing processes and has not taken a more radical look at processes that may lead to greater productivity gains.	A key benefit is the delivery of trajectory based operations which is an enabler for airspace change, including LAMP. Additionally DSESAR delivers safety benefits of up to 4% reduction in RAT points per 100,000 movements and fuel savings of c5.5kT per annum. Finally DSESAR contributes to reducing technical resilience risk and to complying with a range of SES implementing rules including the Pilot Common Project (PCP). NERL has provided information on benefits of DSESAR at a sub-programme level. NERL has highlighted that most of the workload benefits enabled by technology (e.g. iTEC and FourSight) are utilised to deliver additional capacity rather than to reduce controller numbers, thereby enabling us to handle the projected increased traffic levels. The 2% productivity improvement that airlines refer to relates solely to the reduction in operational requirement (-21 FTEs) from DSESAR implementation, and is not the key driver for the programme. The primary purpose of DSESAR is to replace legacy systems, increase	

	2. Technical Resilience		technical resilience, and enable airspace change, while continuing to deliver high service quality despite significant traffic growth. DSESAR will introduce changes to procedures and processes, but a key objective is also to ensure a safe and effective operation before, during and after the transition with the opportunity to further evolve procedures subsequently while carefully managing the rate and scale of change. The technology and airspace programmes will enable us to innovate the way ATCOs are trained, and therefore NERL will not be able to deliver greater efficiency gains until after RP3.	Not Agreed
	3. Business Resilience		NERL has not stated that all productivity benefits in RP4 are dependent on EPP. We have identified productivity benefits we expect to realise in RP4, e.g. linked to dynamic sectorisation, multi-sector planning and tools based validation. The comments on EPP were specifically in relation the Pilot Common Project ATM Functionality 6 (PCP AF6) where SDG have claimed we should be delivering benefit during RP3 and we have pointed out that this technology is	Not Agreed

			not mature and relies on EPP. However, this is not the primary source of benefit we see for RP4. Technical resilience investment is primarily intended to maintain the effective and efficient operation of our current systems. One of NERL's measures for technical resilience is technical service risk and this programme reduces exposure to technical service risk by c£53m. Business resilience investment is primarily intended to maintain the effective and efficient operation of non-operational systems including facilities and IT. This programme reduces exposure to technical service risk by c£49m.	
9.4	Project Options : Early spend of £25m	The benefits of initiating work on DP Lower would appear to justify this. Support retaining this option.	This does not change the planned level of investment but the earlier work enables the plan to deliver DP Lower in 2022 and de-risks subsequent deployment of LAMP within RP3. The benefits are that the core plan proposed can be delivered through the acceleration of this capex. Not accelerating this capex would require a re-working of	Agreed (included)

			the core plan and would move DP Lower and consequently airspace modernisation later by at least a year.	
	EXCDS for PC Lower Option is to deploy EXCDS in both Swanwick and Prestwick thereby delivering a single solution for both in early 2022. This option would reduce investment in RP3 by £50m.	Not supporting this option would increase RP3 capital cost by £50m and reduce benefits in the control period. Support retaining this option.	Delivering a common solution for both operations reduces cost and risk (due to avoided need to develop, test and deploy two variants of the same system). This option is currently included in the core BP.	Agreed (included)
	Delayed surveillance investment Option is to make minimal investment in surveillance sustainment in RP3 by extending life of existing assets to continue to provide a safe and resilient service.	This option in the iBP is to sustain existing surveillance equipment and not spend capital on new assets avoiding £20m increased cost in RP3. Support retaining this option.	This approach allows for potential further evolution of surveillance policy before we complete the sustainment programme in RP4. This option is currently included in the core BP. Replacing all surveillance assets which will reach end of life in 2027, would require an additional £20m.	Agreed (included)
	Risk-based sustainment To implement a risk-based approach to sustainment of NERL's systems resilience and facilities management planning, averaging costs across the portfolio, rather than allocating funds for each asset group separately.	Not supporting this option would increase RP3 capital cost by £55m. Support retaining this option.	This option is currently included in the core BP. Allocating funds for each asset group separately would provide additional assurance, but an additional cost of £55m.	Agreed (included)
	Delay to FourSight development	Clearer understanding of the business benefits that are	Proposal is to start development of lower airspace tools in RP3 for	Not Agreed

	Option is to delay FourSight development to RP4. The option would reduce RP3 investment by c£60m.	achievable by Foursight alone, in light of the associated ExCDS development required. Removing this £60m spend will delay delivery of new tools by two years – and NERL has said this delay will present risks regarding capacity and performance moving into RP4. Clearly the project is extremely immature – and neither the requirement nor the benefits are defined. As opposed to removing the spend from RP3 completely we propose that it should be moved from core to wider.	deployment early in RP4. These may not be "Foursight" but rather conformance tools offering further capacity and safety benefits. The option to delay investment in Foursight in lower airspace is not included in the core BP. The wider plan is intended for items where requirements (need) are less certain and where there could be significant future external developments e.g. drones, Brexit which would make them impractical to include in the core plan. The need for controller tools in lower airspace in this time frame has become even more clearly pressing over the course of this summer. Proposal is to start development of lower airspace tools in RP3 for deployment early in RP4 where we know we will need them to deliver the required safety and service quality at that point in time. Naturally projects aimed at delivering safety and capacity 7 years from now will be at a less developed stage of their life cycle. However, the only practical way to mature them and deliver them in time for the operational need would be to commence the investment in	

			the RP3 timescales. Not delivering lower airspace tools at the time they are required is also likely to lead to a need for increased operational headcount to mitigate the impact on safety and service quality which is likely to lead to a more inefficient RP4 operation. NERL would consult customers on the exact nature of the required tools through the SIP process closer to the point of commencing development. When the full requirement would be much clearer. Should the cost or timescales of deployment change as a result then any unneeded funds would be returned to customers through the existing capex true-up mechanism.	

10. Investment Plan - Oceanic

Number	Subject of Discussion	Airline View	NERL View	Status
10.1	Oceanic Objective To deliver a programme of transformational change that delivers improvements in the safety of NERL's service, provides substantial capacity for rising demand, more fuel efficient and predictable flight trajectories and that assures ongoing access through Oceanic airspace for flights unable to comply with ICAO's DataLink mandate.	Airlines can only support the project if the costs are efficient and there is a clear business case. Airlines question whether the relative level of safety improvement versus today's safe operating environment is sufficient to justify the significant increases in costs. Through the consultation process it has become clear that existing technologies/methods of improving the TLS have not been progressed by NERL, reinforcing our belief that there is no safety related 'burning platform' requiring immediate implementation of space-based ADS-B. Capex spend on STAMPER in RP2 has enabled improvements that have already increased capacity in the NAT. NERL forecasts, at the time of the capex was approved, showed that service levels (in terms of percentage approval of requested trajectories) would not fall, in the light of increasing traffic, to the levels given before the investment was approved until the late 2020's.	Our Core plan reflects a programme of transformational change, commencing in RP2, that delivers essential safety, capacity and fuel efficiency benefits. Achieved through infrastructure investment in satellite based ADS-B surveillance Based on the ICAO agreed solution for the whole North Atlantic Following a joint approach with Nav Canada. Delivering this package of benefits is not achievable using existing solutions and alternative infrastructure is not available in RP3	Not Agreed

		As such Airlines question the timing of the project, and also need to understand better their ability or otherwise to realise projected fuel savings. As such airlines currently believe that a later implementation should be considered and that this be implemented by moving plans for the NAT from the core BP to the wider BP. Further discussion can be held in 2019 separate to the EU part of the RP3 process. Following more detailed workshops held to examine the benefits NERL claim for space-based ADS-B (as agreed between IATA and NERL) there is still a great deal of work to be understand better to what degree any of the claimed benefits are accessible. Given that the Oceanic service is not regulated by the EU it is possible that the timescales demanded by the EU RP3 process can be ignored for the Oceanic service, enabling airlines longer to work with NERL to develop a join understanding.		
10.2	Core Oceanic price A proposed average price in RP3 of £51.61 reducing from £59.98 during	Supported (Although if Oceanic spend was moved from core to wider then c£15m of capex planned to embed	Our Core Oceanic price provides a 14% (real) reduction in the average price, comprising a 22% reduction in price due to traffic growth, and a 1 % reduction due to other factors	Agreed

	RP2. A 14% real reduction in core oceanic prices.	Aireon data into the operation would not be required – and then the cost of Oceanic service could be reduced further.)	such as lower cost of capital and regulatory depreciation, plus a 6% increase for recovery of investments already approved by customers in RP2, and a 3% increase to cover increased ATCO numbers to provide a resilient service at projected RP3 traffic levels.	
10.3	Satellite data price (core) A satellite data managed service at £31.15 on average over RP3. A total price of £82.76 per flight in Shanwick airspace (£51.61 + £31.15)	Airlines are concerned at the extremely high data charge applicable on the NAT, which stubbornly remains at a level equitable to the USD40 per flight hour that Aireon have determined. It is clear that Aireon's pricing model was created on the basis of their perception of a share of the benefits that they have modelled as being attributable to the use of their product in, what they describe as 'high density/high benefit' oceanic airspace, where there is no competition. The benefit Aireon determined have not been validated by airlines. Such a charge would represent a 60% cost increase in total price in this airspace by 2020. Aireon, acting in a monopolistic manner, are requiring NERL to sign up for a 12 year contract, and despite NERL attempts to reassure	Satellite data prices reflect our supplier's global charging rate for high density Oceanic airspace with no alternative sources or suppliers. We are still negotiating with our supplier, hence this illustrative cost is not expected to be higher than shown. A significant amount of detail was presented on benefits modelling to airlines on 16 August. Airlines indicated that their current forecasting models do not enable them to validate the fuel saving benefits, which they will therefore be materially underestimating. No further issues were identified which change the overall business case, or the timing of implementation. NERL has provided information on the contractual arrangements with	Not Agreed

		airlines that break clauses exist airlines have no belief that they would ever be exercised, especially not now that NSL is an investor in Aireon. The pricing model proposed passing all of the risks associated with paying the data charges to the airlines, isolating NERL completely. Aireon see themselves as a supplier of data, and see no reason to guarantee the deliver or facilitation of the ability to deliver any of the benefits that they claim (and have modelled their prices on the basis of). NERL too seek to completely remove themselves from any responsibility to ensure facilitation of fuel saving, capacity and safety benefits – and seek to saddle airlines with all of the risk. Airlines believe that NERL must share some of the significant risk of increased Oceanic costs in the event that various benefit-facilitating deliveries they are responsible for are late or are not realised at all. There is no agreement to determine our approach to this issue within RP3 timescales and further work on this matter can continue into 2019.	Aireon, including the process to invoke break clauses at the end of each regulatory period, if regulatory approval is not received (for example, if a more cost effective supplier enters the market). NERL considers a direct pass-through of satellite data charges with no margin to be the most cost reflective basis for customers. If actual traffic is higher than forecast, customer would benefit through lower charges in subsequent years.	

10.4	Satellite data price (TANGO routes) A satellite data managed service at £3.01 on average over RP3. A total price of £54.62 per flight in TANGO airspace (£51.61 + £3.01)	Support	NERL's consultation on the solution and costs for this airspace in 2017 transparently provided our cost projection throughout RP3. Tango route costs reflect the conclusion of our negotiations, and the leverage we applied given the availability of alternative ATS surveillance sources within this airspace. SIP2018 customer consultation concluded support for this approach in RP2.	Agreed
10.5	Satellite data charge true-up mechanism Propose under or over recovery of satellite data charges would be trued-up on an n+2 basis.	The principle of a separate charge in the NAT is not specifically agreed. The proposed true-up mechanism does offer both the potential for cost reduction or cost increase to airlines, based on actual costs – but is another symptom of NERL seeking to completely insulate itself from any risks associated with the introduction of this service; passing all of the risks to the airlines.	There is no risk sharing mechanism for Oceanic and with satellite costs representing c.30% of the Oceanic cost base, the size of the data charges relative to NERL's oceanic business means we cannot absorb under recoveries in the same way we would for domestic service. NERL's proposal assures direct cost reflectivity for data charges, ensuring that higher than forecast traffic volumes result in lower charges in future years, and vice versa.	Not Agreed

10.6	Oceanic Capex £15m capital investment costs in RP3. (See section 7.1 above)	Airlines have currently requested the costs to be placed into the wider plan. There is no requirement to determine our approach to this issue within RP3 timescales and further work on this matter can continue into 2019.	Our capital plan reflects investments considered essential to deliver our infrastructure change and in turn the benefits our plan brings: 1. Safety Improvement, new separation standards, Removal of mandatory speed (£4m) 2. UPR CONOPs deployment (£2m) 3. Traffic / Complexity Management improvements (£5m) 4. Infrastructure / ATM System refresh (£1m) Reduced Conflict Horizon deployment (£3m)	Pending
10.7	Benefits to Customers	Despite significant effort being expended to develop airline understanding/acceptance of the benefits that NERL forecasts, in the latter part of the consultation process, there is still much work to be concluded to convince airlines of the benefits at this time. Given there is no EU RP3 requirement to determine Oceanic in the timescales demanded for the domestic rates it is possible for the ongoing work to proceed and for there to be further inputs into a process that will eventually determine the rates and service	The proposed plan will deliver NERL's commitment to transforming the oceanic service. Our plan enables a 76% reduction at a NAT level in vertical safety risk, with improved real-time detectability and faster safety intervention capabilities. Safety benefits, including customer requested options were explored on August 16th, with consensus that the safety performance of NERL's plan, or achievement of the NAT safety target, cannot be achieved through existing tools or processes.	Not Agreed

		levels required for Shanwick and other Oceanic areas. Following the in depth benefits workshop airlines have the following high-level observations:- For all the fuel saving benefits claimed there should be sensitivity testing of fuel burn benefit needed rather than assuming 100% of benefit achieved, and NATS need to advise the impact to the claimed benefits from adjacent FIRs not utilising space-based ADS-B. In regards to ASEPS; the NATS analysis understood – but airlines are not able to verify benefit magnitude. In regards to Fuel Uplift the NATS analysis partially understood and whilst airlines cannot verify benefit magnitude – it is agreed that some level of benefit is likely – although there is a concern that it is neither realisable nor measureable. With regards to variable Mach the NATS analysis understood and airlines agreed to consider our ability to analyse and report back to NATS. (There some question of the appropriate baseline from which to	Additionally, a. c. 90% of aircraft will be cleared on their requested trajectory. b. c. 80% will be cleared with "no assigned speed" c. Access to Oceanic airspace for those flights unable to comply with ICAO's Datalink Mandate. At a fuel cost of $650/mt, fuel savings (net, after satellite data costs) of c. $153-312 per NAT Crossing for flights within Core NAT airspace. For flights on Tango routes benefit from avoidance of retrofit equipment costs, routing within higher charge airspace and sustained access to oceanic airspace when neighbouring airspace is not be available. Additionally, this investment will enable an expeditious flow of traffic across the Atlantic into UK airspace enabling arrival on time. At 16th August workshop, airlines indicated that their current models do not enable them to validate the fuel saving benefits, which they will be materially under-estimating as	

		measure benefits as airlines consider it possible to deliver this benefit without Space-based ADS-B) Finally, thinking about UPR, whilst the concept was understood there remained concerns relating to the practical implementation; with benefit realisation considered high-risk considering the operational change management challenges. Airlines have agreed to consider our ability to analyse and report back to NATS. There is also ongoing work seeking to assure airlines that alternatives that may have addressed issues relating to TLS safety levels have been fully considered to address airlines concerns that proffered further improvements to the safety measures are reasonable. In summary the fuel and capacity benefits are difficult to model and therefore the business case difficult to confirm. Airlines will continue to engage on benefits. The price still appears excessive. The airlines don't believe this needs to be finalised as part of RP3 and dialogue can continue separately.	the airlines' modelling baseline assumes that all flights get exactly what they file, no further issues were raised at the workshop that would change the overall case for ADS-B and the timing of implementation.	

10.8	Move from CPI-X to Determined Cost basis enabling prices to better reflect the cost of our service each year, consistent with our En Route pricing. Charging basis options – On a per flight basis (as in iBP) – A weight and distance based charge (CSU), similar to the one used to set En Route prices (per CSU) – A distance only based charge (per km) – A charge based on a per flight basis for the core Oceanic service & the Satellite data on a per km basis (a 'hybrid' charge)	Airlines have not addressed this issue based on the lack of agreement on proceeding with the Oceanic plan at all. There is no agreement on the basis of charging for this service – although airlines have said they do not want to see the application of any weight by distance based charge or by hour.. The principal of a separate data charge in the NAT is not specifically agreed. Airlines do not feel pressure to determine an answer to this question at this time. There remain much bigger issues relating to the overall benefits case, as well as the costs. It is also imperative to determine benefit-facilitating delivery 'gateways' to ensure that NERL is not completely insulated from the risks of increased costs being passed entirely to airlines.	NERL proposes calculating prices by dividing costs by projected traffic each year, rather than smoothing / profiling prices. Prices will be set on the basis of assumed CPI each year. With adjustments made for actual inflation on an n+2 basis. Considerations could include: Cost reflectivity – potentially points towards hybrid model Comparability with en route (domestic) charges – potentially points to per SU Consistency with other oceanic ANSPs NERL has provided data to airlines on the relative costs per flight for options. NERL suspects that a hybrid option may be more acceptable as it would have least change from today's charging regime but awaits customer feedback.	Not Agreed

11. Regulatory Mechanism

Number	Subject of Discussion	Airline View	NERL View	Status
11.1	Unit Prices (domestic) A projected average price in RP3 of £49.90 per chargeable service unit (CSU), expressed in 2017 prices. This is 12% below the average price in RP2 of £56.97 and 14% lower than the CAA's average price assumed for RP2 of £57.91.	Subject to further discussion on Opex efficiency, the capital programme (including contingency) and traffic forecasts. Also the overlay of the EC Performance Plan and whether that impacts the WACC.	Average price reduction in RP3 compared to RP2 of c12%, recognising this reflects n+2 true-ups. Without having the resources that we have proposed within our plan, we will be unable to commit to and deliver the proposed plan outcomes. It is also essential we have these resources to allow customers and the CAA to hold us to account for the plan outcomes.	Not Agreed
11.2	Cost Efficiency Measured using the determined unit cost (DUC) – projected costs divided by the projected traffic volume. NERLs plan reflects an average DUC in RP3 of £50.63 per CSU, expressed in 2017 prices. This is 4% below the average for RP2 and 7% lower than the CAA's RP2 assumption.	Subject to further discussion on Opex efficiency, the capital programme (including contingency) and traffic forecasting.	Average DUC reduction in RP3 compared to RP2 of c4%. This is comprised a10% reduction due to traffic growth, 4% increase to deliver the day to day service, a 6% increase to evolve the service, a 2% reduction due to efficiencies within the plan, a further 2% reduction for other factors (including pensions).	Not Agreed

			This provides evidence that we will be handling even higher traffic without corresponding increases in cost in a very challenging reference period. Without having the resources that we have proposed within our plan, we will be unable to commit to and deliver the proposed plan outcomes. It is also essential we have these resources to allow customers and the CAA to hold us to account for the plan outcomes.	
11.3	INEA funding NERL had applied for c£110m of funding which would be transferred to customers via the unit rate, starting in 2019. This transfer would create al 1% reduction on average RP3 prices.	Supported	Propose to start to pass this back to customers in 2019 as a deduction to the unit rate reflecting an n+2 adjustment. Funds will be transferred along with either actual interest income earned on INEA funds or the actual interest costs saved. The amount will represent the net GBP value of funds received, and will leave NERL in a 'no better, no worse' position overall.	Agreed
11.4	Prices for London Approach services	Supported	Our rBP will maintain the existing arrangements on cost reflectivity. This is currently under further	Agreed

	In line with CAP 1593 the proposal is to maintain the existing arrangements on cost reflectivity. Inclusion of London Biggin Hill in London Approach Charging	Do not believe we have a strong opinion on this point – same view as NERL.	investigation and discussion with the CAA. NERL regards this as a CAA decision and has no strong views either way.	Agreed
11.5	Traffic volume risk sharing Existing mechanism has a 'deadband' for the first 2% of traffic variance with NERL bearing 30% of risk/reward between 2% and 10%. Current EC RP3 proposal increases the upper limit to 15%. This increases NERLs risk exposure to 5.9% of revenue.	Airlines believe that NERL's position does not reflect the fact that the EC proposal is symmetric and counter-balances the increased risk to NERL with the potential for NERL to realise increased benefits. With potential traffic increases driven by LHR IPA. LGW capacity increase (emergency runway), LCY capacity increase (larger terminal, increased stand supply, more efficient taxiway movements), and LTN passenger cap increase NERL have significant potential to realise benefits over the period. Review of the financial data for UK NATS from 2012 to 2016 shows that revenues were above costs, even during periods of lower than expected traffic volumes, and that profits were markedly higher than the planned regulated return.	The EC proposal increases NERL's risk exposure from 4.4% of revenue to 5.9%, which will need to be reflected in the cost of capital or some adjustment in the traffic risk sharing keys and/or deadband, or some combination.	Not Agreed

		An increase in cost of capital is not supported.		
11.6	Wider Plan Regulatory Mechanism	Airlines support this concept providing it is symmetric i.e. if RP3 projects do not go-ahead then that money should be returned to users with a rebate/true-up mechanism. This process should be managed through an enhanced SIP process. The wider plan mechanism should require airlines and CAA agreement on both Capex and Opex proposals – as opposed to Opex only requiring CAA review.	Subject to CAA review and customer consultation through the SIP, propose that prices be adjusted to enable NERL to recover cost outlays including associated future service pension costs. Each decision on inclusion of elements of wider plan (both opex and capex) will be subject to consultation with customers through the SIP process before decision is made. Consultation will include costs, benefits and risks and any alternatives considered.	Provisionally Agreed (Pending enhanced SIP process proposals)
11.7	Non-Regulated Income Non-regulatory income is principally made up from MOD revenue (46%), London Approach (14%), North Sea Helicopters (9%), Income from NSL (23%) and other revenue (8%). Totally c£471m over RP3 reduced from £534m in RP2.	Whilst airlines understand that NERL should prioritise its day to day business they are concerned that NERL has not shown enough ambition or creativity in this area to overcome the reduction in some of its non-regulated income revenue streams. NERL also remains below its cap in this area. The airlines were also concerned that international non-regulated income (e.g. revenue from Spain)	Level of non-regulated income projected to reduce in RP3 compared to RP2, largely due to the Deployment Manager becoming its own entity, a reduced MOD FMARS contract price (reflecting MOD's share of cost efficiencies) and lower future projections due to the need to focus on NERL's core licence activities in a very challenging reference period (with a focus on delivering the technology programme, modernising airspace,	Not Agreed

		cannot be used to offset NERL charges, even though it will be drawing on its expertise. For instance if the NSL investment in Aireon space-based ADS-B returns benefit for NATS will that be included in the offset of NERL costs ?	and maintaining good levels of safety, service quality and environmental performance).	
11.8	Cost of Capital	Airlines believe the cost of capital should be lower. The proposed WACC compares unfavourably with the WACC range quoted by PWC (2.8 – 4.6%) for the CAA for Heathrow expansion – the private largest construction project in Europe. The NERA paper discounts LHR and LGW as comparators which are of significant use as regulated companies operating in the UK market and then takes far too narrow a view of European comparators, selecting AdP as a sole benchmark point. Analysis of actual cost performance to date in periods of fluctuating traffic (both positive and negative) should be given more weight versus forecasts. Our view is that NATS has consistently exceeded the expected regulatory return over time (RP1-RP2).	Propose pre-tax WACC of 4.79%, as evidenced in NERA studies. We will update our proposed cost of capital in the rBP.	Not Agreed

12. Governance and Accountability

Number	Subject of Discussion	Airline View	NERL View	Status
12.1	Improvements to the SIP process	The CAAs letter to NATS CEO on 25th May emphasised the need for 'shared governance arrangements'. An Enhanced SIP consultation process may be one option, and the airlines would welcome other more strategic management options being explored as well as providing on-going service and investment plan engagement including : – Provide FAS/Opex fund governance – Provide wider to core governance – Deliver cost and benefit tracking including performance evaluation throughout RP3 – Support deep-dives – Include CAA IR Up-date on CAP 1616 progress as key enabler for RP3 LAMP/FASI-S delivery. Improvements to the SIP or other shared governance process will be critical to gaining airline agreement to other elements of the business plan including the proposed Opex	NERL acknowledges that the SIP could more usefully take customers through trade-offs and provide customers an improved opportunity to feed input into the decision making process (at a programme/project level). This would include: • On-going reporting of service performance and investment plan delivery • Governance for the opex flexibility fund and access to wider plan funding • Cost and benefits tracking throughout RP3 • Consultation on options where any material change to the plan may be required • Continued use of deep dives where appropriate Engagement of the CAA Independent Review NERL will consult customers on changes effecting key deliverables outside of the bi-annual SIP process.	Provisionally Agreed

		Flexibility Fund and the Wider Plan Regulatory Mechanism	Customers are expected to be engaged in the wider airspace governance process created through the wider plan as well as through the SIP process.	

Annex 1 : Customers and organisations that signed up to the Customer Consultation Process

Aer Lingus	International Airlines Group (IAG)	Bristol Airport Ltd
American Airlines	IATA	Cardiff Airport
BA CityFlyer	London (Heathrow) Airline Consultative Committee (LACC)	Heathrow Airport Ltd
British Airways	Euroconsult	London Biggin Hill Airport
Delta	DfT	London City Airport
EasyJet		Manchester Airport
Emirates		London Gatwick Airport Ltd
Flybe		London Southend Airport
Qatar Airways		London Stansted Airport Ltd
TUI		Newcastle International Airport Ltd
Turkish Airlines		TAG Farnborough Airport
United		
Virgin Atlantic Airways		