

Proposal to modify Condition 2 of NATS (En Route) plc licence in respect of resilience planning, policy statement on enforcement and consultation on draft guidance

CAP 1639



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Chapter 1

Proposal to modify licence

- 1.1 This document invites representations on our proposal to modify the air traffic services licence held by NATS (En Route) plc (“NERL”). The proposal is to add to Condition 2 of the licence (General obligation to provide Core Services and Specified Services) a requirement for NERL to submit a resilience plan to the CAA to ensure it is consistent with its obligation to develop and maintain its assets, personnel and systems to meet its requirement to provide the core service and specified services under Condition 2 (2). NERL’s Board will be required to take full ownership of the plan by submitting a certificate confirming that it considers the plan is fit for purpose and complies with its obligations under its Licence.
- 1.2 NERL would be required to ensure that this resilience plan is consistent with guidance issued by the CAA. The CAA will finalise the guidance following this consultation. We also propose that NERL should review the plan at least every two years, or when directed by the CAA.
- 1.3 The plan submitted by NERL would be subject to review by an independent reviewer appointed by the CAA to provide an opinion on the likely effectiveness of NERL’s principles, plans and processes to produce a resilient service. The text of the proposed licence modification is at Appendix A.
- 1.4 We consulted on the proposed licence modification in February 2017 and explained our reasons for the proposal.¹
- 1.5 We are also inviting comments on the draft guidance to which NERL should have regard when developing its resilience plan. The text of this guidance is at Appendix B.²
- 1.6 Our February consultation document also included policy proposals on the principles and performance levels for better defined resilience requirements which we would expect NERL to achieve, and how we proposed to enforce them. These requirements are intended to be used as guidance for informing our enforcement process, using indicators that would trigger intervention by us in accordance with our enforcement policy. As such, these will not be hardwired into the licence itself but will be set out in an update to our policy on the

¹ [CAP 1512: Proposals to take forward the NATS Independent Enquiry recommendations with regards to resilience](#) (February 2017)

² The February consultation did not include the draft guidance, which we are seeking views on for the first time here.

enforcement of the licence. We anticipated that we could, if necessary, amend these expected resilience levels and our proposed enforcement of them during RP3. We also said that we were content with NATS' current contingency arrangements but noted that NATS was currently looking at how to improve these.³

- 1.7 We received three responses to our consultation from NERL, British Airways and the Heathrow Airport Consultative Committee. All supported the proposed licence modifications.

Views invited

- 1.8 Under section 11(1) of the Transport Act 2000 (the Act) the CAA may modify the conditions of a licence if the holder consents to the modifications. NERL, as the licence holder, has given its consent to the modifications proposed in this document.
- 1.9 Under sections 11(2) and (3) of the Act, before making modifications to a licence, the CAA must publish a notice setting out the proposed modifications, their effect and the reasons for the proposal, and state the period (of not less than 28 days) within which representations may be made regarding the proposed modifications. This document constitutes such a notice.
- 1.10 Any representations on the proposals in this document should be sent by email to economicregulation@caa.co.uk by 26 March 2018. Alternatively, comments may be sent by post to:
- Rod Gander
Consumers and Markets Group
Civil Aviation Authority
CAA House
45-59 Kingsway
London, WC2B 6TE
- 1.11 We expect to publish the representations on our website as soon as practicable after the period for representations ends. Any material that is regarded as confidential should be clearly marked as such. Please note that we have powers and duties with respect to information under section 102 of the Act and the Freedom of Information Act 2000.
- 1.12 If you have any questions on this document please contact Abigail Grenfell on 020 7453 6243 or by email to abigail.grenfell@caa.co.uk.

³ RP3 is the regulatory period for the next NERL Performance Plan (2020-24).

Next steps

- 1.13 Once we have considered the representations, we will decide what further modifications, if any, to make to NERL's licence. We will publish notice of our decision which we expect will take effect in the second half of April 2018.
- 1.14 We will take representations on our draft resilience plan guidance into account in finalising our guidance. If the representations do not lead us to consider making material changes to our guidance, we will publish our guidance when we publish the notice of our decision on the licence modification. If we are minded to make material changes to our guidance we will consult on revised draft guidance, and will aim to publish our resilience plan guidance during the first half of 2018.
- 1.15 Under the proposals NERL will have to publish its resilience plan within nine months of the modified Condition coming into effect. If we publish guidance, as we propose to do, NERL shall have to produce its resilience plan within nine months of the publication of the guidance.

Chapter 2

Statutory and licence framework, and reasons for the proposed modifications

Statutory and licence framework

- 2.1 We have a primary duty under section 2 of the Act to exercise our functions under the Act so as to maintain a high standard of safety in the provision of air traffic services. We have secondary duties, including to exercise our functions in a manner we think best calculated to (among other things) further the interests of users of air traffic services (including with regards to the availability, continuity, and quality of air traffic services).
- 2.2 Under section 8 of the Act NERL has a number of duties that it must fulfil in carrying out its functions in respect of the licensed area. It must:
- secure that a safe system for the provision of authorised air traffic services is provided, developed and maintained;⁴
 - take all reasonable steps to secure that the system is also efficient and co-ordinated;
 - take all reasonable steps to secure that the demand for authorised air traffic services is met; and
 - have regard, in providing, developing and maintaining the system, to likely future demands.
- 2.3 Under Condition 2 of the licence NERL has a general obligation to make available the Core Services (as defined in Condition 1(3)) so as to be capable of meeting on a continuous basis any reasonable level of overall demand for such services. Furthermore, NERL must at all times develop and maintain its assets, personnel, systems and other parts of its business so as to be able to comply with its general obligation.
- 2.4 Our enforcement policy⁵ sets out that we concentrate on serious and systemic issues and, as far as practicable, take a proportionate approach to enforcement issues with increasing levels of involvement and intervention, depending on the severity of the issue. Our involvement and interventions can range from working level meetings to flag areas of possible concern to prevent these becoming more

⁴ For the purposes of Section 8 of the Act, the system is considered safe if (and only if) NERL complies with requirements imposed by the Air Navigation Order with regards to its services.

⁵ [CAP 1234: Economic Licensing Enforcement Guidance](#) (May 2015)

serious; through to more formal, high level discussions for more serious incidents; or ultimately, for serious issues that we consider could indicate a licence breach, a more formal investigation that can lead to an enforcement order requiring specific action.

- 2.5 NERL's resilience performance is already, to some extent, reflected in the delay performance metric within the licence.⁶ Effectively NERL has a points allowance with excess delay on any given day scoring a number of points. If NERL exceeds the allowance within a given year then it becomes liable for penalties within the incentive scheme. The formula for determining the excess delay score varies according to the time of year and level of delay, but is broadly based on the average delay per aircraft.

Reasons for the proposed modifications

- 2.6 On 12 December 2014 a disruption in NERL's en route air traffic services caused 14,863 minutes of NERL attributable delay. This followed a more severe disruption on 7 December 2013 which caused 137,225 minutes of NERL attributable delay. The 2014 disruption led to the establishment of an Independent Enquiry, led by Sir Robert Walmsley, to review the circumstances around the events of that day.⁷ This review included an assessment of the levels of future resilience and service delivery that should be expected across the en route air traffic network, taking into account relevant aviation benchmarks and costs.
- 2.7 In relation to both incidents, we found it difficult to assess whether NERL could be said to have taken 'all reasonable steps to secure that...demand is met'⁸ and that it had 'at all times develop[ed] and maintain[ed] its assets, personnel, systems and other parts of its business'⁹ to be able to meet demand in accordance with its statutory duties and licence obligations. We accepted that NERL had taken a number of steps to recover each time quickly and safely, that it had maintained good communications with its customers and had taken steps to minimise the impact of the disruption such as offering alternative routing. However, we did not consider that the licence obligations were clear enough to effectively hold NERL to account should we find that its policies, plans and procedures were inadequate to properly minimise the risk of disruption or to manage an efficient and effective recovery, in line with its statutory duties and licence obligations. The Independent Enquiry report did not find that there had

⁶ C4 set out in Condition 21 (12) and (13) in NERL's licence

⁷ The Independent Enquiry's final report can be found at <http://www.caa.co.uk/Commercial-industry/Airspace/Air-traffic-control/Air-navigation-services/Air-Traffic-Control---NATS-system-failure-enquiry/>

⁸ Section 8 of the Transport Act 2000 (2000)

⁹ Condition 2 of the licence

been deficiencies in NERL's actions in this regard but accepted our concerns about better oversight and assurance in the future.

- 2.8 The Independent Enquiry recommended that we and NERL jointly develop and agree definitions of resilience, contingency and business continuity to be used in the context of air traffic control in the UK and a methodology for determining acceptable levels of disruption to give greater clarity.¹⁰ The Independent Enquiry also recommended that we include a new condition in the licence requiring NERL to submit a resilience plan to us for our approval.¹¹
- 2.9 In line with the Independent Enquiry's recommendations, we have developed the proposed licence modifications. They contain definitions of resilience, contingency and business continuity and require NERL to submit a resilience plan for our approval. The requirements are similar to requirements in the airport, energy and rail sectors.

Effects of the proposed modifications

- 2.10 The proposed modifications will focus NERL's attention on providing a resilient service with sufficient contingency by requiring it to produce a resilience plan and to review it at least every two years. The requirement to submit a resilience plan certificate after every review will assure the CAA and other stakeholders that its Board has visibility and ownership of the principles, policies and processes in the plan.
- 2.11 The proposed modifications will allow the CAA to obtain an independent expert opinion on the likely effectiveness of NERL's principles, plans and processes to produce a resilient service, by making provision for the CAA to appoint an independent reviewer of NERL's resilience plan and any revisions to the plan that NERL makes, following a review, to ensure continued compliance. The independent reviewer will not opine on whether NERL is compliant with its licence conditions but, coupled with the resilience plan certificate, this review will give the CAA greater assurance before it approves the plan.
- 2.12 The proposed modifications will also give users visibility of NERL's principles, policies and processes to maintain resilience and an opportunity to comment constructively on them, by requiring NERL to consult on revisions to the plan and the CAA to consult on guidance and to take into account the views of users when approving the form, scope and level of detail of the plan.

¹⁰ Recommendation 20 of the Independent Enquiry

¹¹ Recommendation 30 of the Independent Enquiry

- 2.13 We expect this focus by NERL, the expert advice commissioned by the CAA, and the comments of users will combine to improve the resilience of NERL's core services, including its contingency arrangements.

Enforcement of the proposed new resilience condition

- 2.14 Enforcement of the proposed revised licence condition will be carried out in line with our enforcement policy. We would carry out an urgent review if NERL failed to produce the required plans and/or to provide updates when required and, if the matter was not resolved to an agreed timescale, this would be considered prima facie evidence of a breach of the licence. If the independent reviewer finds that the plans etc. are materially inadequate, we may also consider this to be prima facie evidence of a breach (depending on the extent of the problem) although, in light of our enforcement policy and the existing terms of the NERL licence, it is more likely, in the first instance at least, that we would require NERL to resolve the issues and resubmit the plans.
- 2.15 Any potential licence investigations would take into account NERL's adherence to its plans etc, although its absolute duty to maintain a safe system and more flexible duty to take all reasonable steps to meet demand means that this will always require us to exercise a degree of judgement. For example, if NERL finds during an incident that the plans etc. are not suitable in that particular case for safety reasons and/or that there is a more effective remedy, then it might decide to deviate from them. In such cases, we would expect to see clear and rational reasons for this following the incident and would expect a review and revision of the plans to take this into account for the future. However, we would consider more formal enforcement action if there were not clear reasons for deviating from the plans and doing so had worsened the impact for users. We may also consider more formal action if it was clear that plans had not been followed if, for example, there was little knowledge or understanding of these plans within the organisation.

Chapter 3

Policy statement on enforcement triggers and contingency arrangements

- 3.1 The Independent Enquiry recommended that we work with NERL to develop and agree definitions of resilience, contingency and business continuity to be used in the context of air traffic control in the UK. These have been included in the proposed licence condition. The Independent Enquiry further recommended that we jointly develop a methodology for determining acceptable levels of disruption to give greater clarity to our enforcement policy with regards to resilience requirements.
- 3.2 In our consultation on the proposed modifications we also consulted on a methodology and policy for the resilience requirements which covered:
- key principles underlying NERL's resilience requirements (including contingency arrangements);
 - the methodology for setting the requirements; and
 - details of how we propose to enforce them.
- 3.3 These are intended to be guidance for informing our enforcement process, using indicators that would trigger intervention by us in accordance with our enforcement policy. As such, we are not proposing that these are hardwired into the licence itself but will be set out in an update to our policy on the enforcement of the licence.
- 3.4 The resilience requirements are not intended to set new performance targets or drive performance improvements and they do not replace the triggers in the RP2 performance scheme. The level of performance required was agreed with the industry as part of the RP2 process where the industry indicated it was content with the level of performance and unwilling to accept the higher charges that performance improvements would have required. However, we said in the consultation that the methodology could be used to inform the debate around performance targets in RP3.
- 3.5 In its response to our consultation, British Airways did not disagree with our policy, but commented on some of aspects of it. We discuss its comments below alongside our policy on the resilience requirements.
- 3.6 Given the general support from respondents for our policy on the resilience requirements, we are now adopting it.

Methodology for deriving resilience requirements and triggers for formal intervention

- 3.7 We have based the resilience requirements on a number of underlying principles:
- to maintain a high standard of safety;
 - to use a proportionate approach that will not unduly increase the regulatory burden on NERL or cut across the performance plan (for example the requirements do not replace the current delay targets); and
 - to use existing NERL processes and methodologies as far as possible.
- 3.8 The methodology is based on the Risk Analysis Framework that is already used within NATS to assess and classify the tolerability of incidents that cause disruption of ATC Services and result in NATS attributable ATC delay. The degree of risk posed to the operational service from such a failure is a product of the severity of the service impact should the failure occur and the likelihood of its occurrence. This is conceptually similar to the NATS Safety risk classification system, although a more qualitative approach is taken for the derivation of Service Resilience risk. This sets out a classification systems that ranks the severity of service impact as having no effect, Minor, Moderate, Major and Severe.
- 3.9 Working closely with NATS, we have extrapolated this risk scale to take account of the risk to a number of potential key system failures and used the historical performance as a baseline to show average performance.¹² This gives us an indication of current 'normal' performance for each severity level.
- 3.10 We have used the standard delay metric (measured by Eurocontrol). Other metrics, such as cancellations, are not routinely collected in a format where it is easy to attribute the cause directly to NERL. British Airways noted that other examples of delay, such as rotational delay and on-stand delay, may also not be included in the metric.
- 3.11 British Airways said it expected that an assessment would need to be made of how resilience would be impacted by NERL's revised RP2 capital expenditure programme, which brings forward investment in new technology.¹³ We expect NERL to comment on how its RP2 capital programme will affect resilience in its service and investment plans.

¹² The methodology uses NERL performance over the last 10 years as an indication of acceptable performance as, although we have raised concerns and investigated a number of incidents over this period, we have not found that we have needed to take formal enforcement action.

¹³ RP2 is the regulatory period for the current NERL Performance Plan (2015-19).

- 3.12 The resilience requirements are set out in Table 1 below.¹⁴ They are based on a range of frequency of events of different levels of severity from a stretch target for improvements to an upper limit where the frequency would cause concern and would trigger an investigation into possible licence breach. Figures for events causing less than 10,000 minutes are for guidance only as we consider that the financial incentives in the performance regime create adequate incentive for NERL to address these lower levels of delay. Events causing more than 10,000 minutes of delay would come under the auspices of the resilience regime and, where appropriate, would lead to enforcement action as discussed below.

Table 1: Levels of performance for CAA intervention and licence enforcement

Description	Delay range (minutes)		Potential stretch target	Average historical performance	Threshold that triggers formal intervention
Minor	1,000	4,000	N/A	5-10 / year	N/A
Low moderate	4,000	10,000	N/A	2-4 / year	N/A
Moderate	10,000	20,000	1 in 2-3 years	1 / year	More than 3 in 1 year
Major	20,000	100,000	1 in 5-10 years	1 in 3-5 years	More than 1 a year
Very major	100,000	100,000+	<1 in 10 years	1 in 10 years	More than 1 in 3 years

A year means a 12 month period

Enforcement of resilience requirements

- 3.13 The resilience requirements will be used as triggers to inform our policy of a stepped approach to enforcement, giving an indication of the level of scrutiny each incident should require.
- 3.14 **Minor or low Moderate** - As mentioned above, we would be unlikely to be concerned by individual incidents, as the financial incentives in the performance regime provide adequate incentive for NERL to address these lower levels of delay. However, a significant rise of such incidents above average performance may lead us to look at whether this was an indication of a more systemic

¹⁴ These performance figures would not include incidents caused by factors outside of NATS control (such as industrial action) or planned reductions in capacity for maintenance or upgrades, although significant overruns beyond the planned outage may count towards the overall total of delay.

problem with NERL's policies, processes or procedures which could be seen as prima facie evidence of a possible breach of the licence, depending on the nature of the events.

- 3.15 **Moderate** - Individual incidents are unlikely to cause us significant concern in their own right and we would most likely only seek an explanation at working level. But if the numbers of such incidents rise towards the formal intervention threshold, we would seek explanations at a more senior level, in particularly looking more formally at whether there were linkages between the failures to assess if there was a more systemic failure of NERL's policies, processes or procedures. A breach of the formal intervention threshold would likely be considered to be prima facie evidence of a possible breach of the licence.
- 3.16 **Major** - Initially we would be likely to require a more formal written explanation of the causes of the incident, actions taken to rectify the failure and to mitigate the effects and any recommendations for improvements that NATS will take forward. However, we would be unlikely to seek to take formal enforcement action on individual incidents unless the number of incidents rose to the formal intervention threshold.
- 3.17 **Very Major** - Our approach would depend largely on the amount of delay and we may decide to carry out a full investigation either ourselves or using an independent panel. Any severe incidents involving the closure of airspace or lack of availability of ATM service for a prolonged period would trigger an automatic investigation either by us or an independent panel.
- 3.18 British Airways said that although on average there was one very major event every ten years, there could be three such events in ten years without our formal intervention threshold being met. BA also said it would welcome clarity from the CAA on analysing longer term trends beyond the scope of the formal intervention thresholds.
- 3.19 Under our enforcement policy, there are a number of ways we can investigate incidents which fall short of formal interventions, such as discussions at a working level providing advice and guidance to NERL, as well as formal interventions. We intend to use these ways, as well as formal interventions, to hold NERL to account for its performance, depending on the nature and effect of the incident. NERL could also face automatic financial penalties under the price control incentive mechanisms for delays that do not trigger our formal investigation. Formal interventions, therefore, are just one way by which we can enforce the resilience requirements. Nevertheless, we will consider using them in circumstances when the formal intervention thresholds are not met, if we consider it would be appropriate to do so, and always for severe incidents as set out in paragraph 3.17 above.

- 3.20 We understand British Airways' request for clarity on analysing longer term trends. We will regularly consider the data to see whether we should undertake an analysis of trends. We would also welcome stakeholders informing us of concerns they have about trends in NERL's performance or individual incidents.
- 3.21 Any investigation into individual or potentially systemic issues will take into account that the level of delay will have been influenced by the need for NERL to ensure the safety of aircraft both en route and on the ground. Once that is satisfied, NERL must then take all reasonable steps to ensure that service is restored as quickly and as safely as possible. In assessing whether NERL has taken all reasonable steps and that it has complied with its licence obligations, we would also consider the capacity set out in NERL's service and investment plan and the resilience plans that will be required if the proposed licence modifications in this document are made. We will investigate to ascertain whether NERL had adequate policies, processes and procedures in place to assess and mitigate risks and to respond and recover from the incident.
- 3.22 The methodology for the resilience requirements is based on delay minutes but we may also take into account the number of cancellations that were made during an incident to satisfy ourselves that NERL was taking all reasonable steps to provide services during disruption, taking into account its safety requirements. Although there are many reasons for airlines to cancel flights and it is not always possible to attribute cancellations to a particular incident, we may seek further details from airlines and airports if there were significant numbers of cancellations that happened at the same time as a NERL engineering failure, especially if NERL was close to the formal intervention threshold for any severity level. The results of this investigation may be considered prima facie evidence of a breach of NERL's duties or its licence.
- 3.23 The methodology does not include disruption to service for non-engineering aspects of its system such as personnel and other non-engineering assets. Such failures will not count towards the numbers for the formal intervention threshold for each level of severity but each incident or complaint will be dealt with on its own merits. We will continue to investigate and enforce these failures in line with the stepped approach in our enforcement policy. In particular, such failures are more likely to manifest themselves as longer-term issues which lead to ongoing lower-level disruption, rather than engineering failures which tend to be more obvious, sudden and higher impact disruption, so we will in particular look at whether there are systemic failures in NERL's policies or procedures that have caused or contributed to the failure.

Contingency requirements

- 3.24 As the independent enquiry also recommended that we and NERL develop and agree definitions of contingency and business continuity as well as resilience, we

also consulted on contingency requirements in our February consultation. NERL's current contingency requirements originated in the early 2000s based on its view of the business need, and have been refined subsequently in consultation with airlines and other stakeholders. The core elements of the requirements are:

- contingency shall be available for both the Prestwick and Swanwick centres;
- the contingency capabilities shall be able to cope with the loss of either, but not both centres;
- contingency facilities shall be able to provide service continuity levels of service 48 hours after being invoked; and
- the contingency facilities should be able provide 85% of the capacity of the impacted unit, with an average delay per flight of one minute within 10 days of continued use.

3.25 NATS is looking at the opportunity to improve the response time for contingency as part of its Deploying SESAR programmes. We do not propose to change the agreed requirement at present as it will be some time before the improved capacity is available and the level of performance that can be delivered in a cost effective way is not yet known. We anticipate that the contingency requirement could be improved when the capacity is available during RP3. British Airways supported our proposal not to review NERL's current contingency policy at present, but encouraged us to assess the policy sooner rather than later in RP3.

3.26 British Airways said it expected NERL to demonstrate that as well as using its own resources to provide resilience that it would leverage its relationship with other ANSPs to ensure that the maximum possible service levels can be provided in the event of a system disruption. We agree that, where possible, this would give NERL greater flexibility in times of disruption and could be a useful option to explore as part of its resilience planning, but we acknowledge that it would be very much dependent on the ability and willingness of those other ANSPs to assist.

APPENDIX A**Proposed resilience licence condition**

The proposed new conditions are set out in paragraphs 9 to 12.

1. Without prejudice to the general power conferred under this Licence, the Licensee shall make available:
 - a) the Core Services so as to be capable of meeting on a continuing basis any reasonable level of overall demand for such services; and
 - b) the Specified Services.
2. The Licensee shall at all times develop and maintain its assets, personnel, systems and other parts of its business:
 - a) so as to be able to comply with its obligations under paragraphs 1 and 5; and
 - b) having regard to the objective of permitting access to controlled airspace on the part of all Users while making the most efficient overall use of airspace.
3. The Licensee shall be relieved of its obligations in paragraph 1 above to the extent that the CAA, in response to a written request from the Licensee, notifies the Licensee in writing that it is satisfied that any requirement is or is to be met by other means and that accordingly it would not be reasonable in the circumstances to require the Licensee to provide the services specified in the notice.
4. In determining what is reasonable for the purposes of paragraph 1(a), regard shall be had to:
 - a) the level of overall demand reasonably expected to be met at the relevant time on the basis of capacity to be made available in accordance with the Service and Investment Plan provided by the Licensee pursuant to Condition 10; and
 - b) the effect on overall demand of changes in legal or regulatory requirements made subsequent to the provision of such Plan, provided that the Licensee has taken all reasonable steps to meet the resulting changed demand.
5. Without extending the obligation as to the overall level of services to be provided under paragraph 1(a), the Licensee shall meet each request for the provision of the Core Services reasonably made by any person.

6. For the purposes of paragraph 5 above, a person shall be held to have reasonably made a request for the relevant services where:
- a) the Licensee has been notified of, and has not rejected, a legitimate flight plan from the commander of an aircraft or a recognised flight plan processing centre to a bona fide flight which is required by applicable standards, rules and safety requirements to submit to the instructions of a person providing air traffic control in the relevant area; or
 - b) that person is in control of an aircraft in flight which has entered or is about to enter Controlled Airspace in respect of a Licensed Area either:
 - i. with the approval of the Licensee; or
 - ii. otherwise where the Licensee is or ought reasonably to be aware of the fact and where the person responsible for such aircraft has had no reasonable opportunity to seek such approval and unforeseen circumstances have arisen where failure to provide the services would endanger the safety of any person; or
 - c) in such other circumstances as the Licensee acting reasonably considers appropriate having regard to the safety of any person.
7. In providing services under paragraph 1 the Licensee shall not unduly prefer or discriminate against any person or class of person in respect of the operation of the Licensee's systems, after taking into account the need to maintain the most expeditious flow of air traffic as a whole without unreasonably delaying or diverting individual aircraft or such other criteria as the Licensee may apply from time to time with the approval of the CAA.
8. Subject to paragraph 7, the Licensee shall not unduly discriminate against or give preferential treatment to any person or class of persons in respect of the terms on which services are provided, to the extent that such terms have or are intended to have or are likely to have the effect of preventing, restricting or distorting competition in any market.
9. The Licensee shall, within nine months of this paragraph 9 coming into force, submit to the CAA a Resilience Plan in accordance with any relevant guidance issued by the CAA.
10. The Resilience Plan shall set out the principles, policies and processes by which the Licensee will comply with its obligations under Paragraph 2 and its duties under section 8 of the Act, with regard to Resilience, Contingency and Business Continuity.
11. The Licensee shall submit a Resilience Plan Certificate with the Resilience Plan.

12. The form, scope and level of detail of the Resilience Plan shall be as reasonably approved by the CAA and shall take into account the views of Users consulted in accordance with Condition 16.
13. At least every 24 months or when so directed by the CAA, the Licensee shall review and, if necessary and following consultation, revise its Resilience Plan to ensure continued compliance with Paragraph 2. Following each review the Licensee shall submit any revised plan, or a letter confirming that no revision was required, to the CAA with a Resilience Plan Certificate.
14. The CAA may appoint a person (the Independent Reviewer) to review the Resilience Plan and any revisions to ensure continued compliance with Paragraph 2. The CAA will publish the conclusions reached by the Independent Reviewer. Unless the CAA directs otherwise, the Independent Reviewer will be paid for by the Licensee.
15. No CAA guidance, whether produced within the timeframe envisaged in Paragraph 9 or thereafter, or CAA direction under Paragraph 13, shall have effect unless the CAA has first consulted the Licensee and other relevant parties. If the CAA issues guidance at any time within the nine month period mentioned in paragraph 9, that nine month period will be extended accordingly.
16. Definitions
 - a) Business Continuity means the capability of an Air Navigation Service Provider (ANSP) to continue delivery of Air Traffic Management Services at a pre-agreed level of service following a disruptive event, including provision for both resilience and contingency;
 - b) Contingency means the capability of an ANSP to resume operation from an alternative site within a defined time period and at pre-defined levels following a catastrophic disruptive incident;
 - c) Resilience means the capability of an ANSP's assets, networks, people and procedures to anticipate, prevent, absorb and adapt to a disruptive event with any disruption or degradation of service managed in alignment with pre-agreed performance standards and to safely and rapidly recover to normal services;
 - d) A Resilience Plan Certificate means a certificate addressed to the CAA, approved by a resolution of the board of directors of the Licensee and signed by a director of the Licensee pursuant to that resolution in the following form:

“The Licensee has developed and reviewed its Resilience Plan. In the opinion of the directors of the Licensee the Resilience Plan is fit for purpose and complies with its obligations under its Licence”.

APPENDIX B

Draft resilience plan guidance

This draft guidance will be issued to NERL under the proposed new Condition 2.9, taking into account any representations made as part of this consultation in accordance with the proposed new Condition 2.15:

The NERL licence¹⁵ requires that it makes available Core Services, so as to be capable of meeting on a continuing basis any reasonable level of overall demand for such services, and Specified Services. Further, that NERL, shall at all times, develop and maintain its assets, personnel, systems and other parts of its business to comply with its obligations and having regard to permitting access to controlled airspace on the part of all Users while making the most efficient overall use of airspace. The level of demand reasonably expected, and thus the capacity to be made available, shall be as in accordance with the Service and Investment Plan provided by NERL, pursuant to Condition 10.

The overall service that NERL is required to supply must be consistent with the current and future regulatory settlements under the EU Performance Scheme,¹⁶ in particular in relation to service performance, and with its legal duties and obligations, as set out in NERL's ATS Licence and the Transport Act 2000. In addition, certain technical disruption criteria¹⁷ have been agreed between NERL and CAA in response to recommendation 20 of the Walmsley Independent Enquiry into the NATS system failure on 12 December 2014.¹⁸

The NERL Licence requires NERL to submit resilience plans to the CAA setting out the principles, policies and processes by which the Licensee will comply with its obligations under Condition 2.2 of its Licence and its duties under section 8 of the Act, with regard to resilience, contingency and business continuity. The resilience plans should:

- include a clear, high-level overview of NERL business continuity and resilience, both preventative and reactive, covering all aspects of the business, including its assets, personnel and systems that NERL relies on to supply the services required by its Licence; and

¹⁵ Air Traffic Services (ATS) Licence for NATS (En Route) PLC (NERL)

¹⁶ Until the UK leaves the EU it remains a full member with all the rights and obligations therein and so the UK currently remains subject to the Performance Scheme. Following Brexit, the Transport Act 2000 will continue to apply, and the extent to which elements of the EU regulations will apply will depend on the nature of the agreement negotiated with the EU.

¹⁷ The additional criteria are in Table 1 in Chapter 3 of this document. These criteria may change as a result of this consultation.

¹⁸ The NATS system failure 12 December 2014 Independent Enquiry final report dated 15 May 2015 can be found at: <https://www.nats.aero/wp-content/uploads/2015/05/Independent-Enquiry-Final-Report-2.0.pdf>

- draw on existing documentation, policies and plans to show how NERL will minimise the risk of the occurrence of, and minimise the impact of, the loss of key IT systems, infrastructure, personnel and suppliers.

In particular the plans should include the following elements:

- Policies, with reference to associated key processes, in place to provide proactive barriers to minimise the risk of occurrence of disruption, including:
 - Risk assessment and management;
 - Asset management;
 - Reliability and redundancy measures to enable systems to continue to function despite disruptive events (including errors or loss of data, failure of system components, denial of service attacks, loss of power etc);
 - Staff planning to ensure as far as practicable that adequate numbers of qualified staff are available to fulfil the service performance regime established for the relevant reference period.
- Policies in place to assess the value and effectiveness of relevant barriers that will be specified in new systems, architecture and business models.
- Policies and procedures in place to provide reactive barriers to minimise and mitigate the impact of disruption on services, including:
 - Incorporating measures into systems to allow them to continue to provide a reliable service during an unexpected event;
 - Plans for service fallback and recovery, to provide a service where possible without compromising safety, both during and following a disruptive event;
 - Plans for short term additional resource requirements whether as part of resilience plans for non-staff disruptive events or for specific staff based disruptive events;
 - Command and control – e.g. clear rules for triggering different command levels; formal training, practice and testing regimes for command level leaders; clear levels of authority (including spending authority); regular testing of facilities and equipment for command and control.
 - Stakeholder management – processes for keeping stakeholders informed on a regular basis of the situation, the likely size and duration of the impact and alternative arrangements available, such as rerouting;
 - Policies and procedures for capacity reallocation and prioritisation, to the extent available to NERL, during the recovery process, (such policies and procedures having been subject to consultation with stakeholders);

- Exercises – continuous improvement / lessons learned: e.g. regular (to be decided in accordance with risk assessment processes) table top and practical exercises, where relevant in collaboration with stakeholders; reviews of exercises and actual events, including an assessment of the effectiveness of the current plans in light of the findings of those reviews;
- Options for rerouting services where possible to alternative sectors; and
- Contingency arrangements for offering an alternative service from an independent location.