

CAA Operational Assessment

Title of airspace change proposal	OSEP 11 (CLN)
Change sponsor	NATS
Project reference	ACP-2021-061
Account Manager	[REDACTED]
Case study commencement date	8 Oct 24
Case study report as at	20 Nov 24

Instructions

In providing a response for each question, please ensure that the 'status' column is completed using the following options:

- YES
- NO
- PARTIALLY
- N/A

To aid the SARG Lead it may be useful that each question is also highlighted accordingly to illustrate what is:

resolved YES not resolved PARTIALLY not compliant NO

Executive Summary

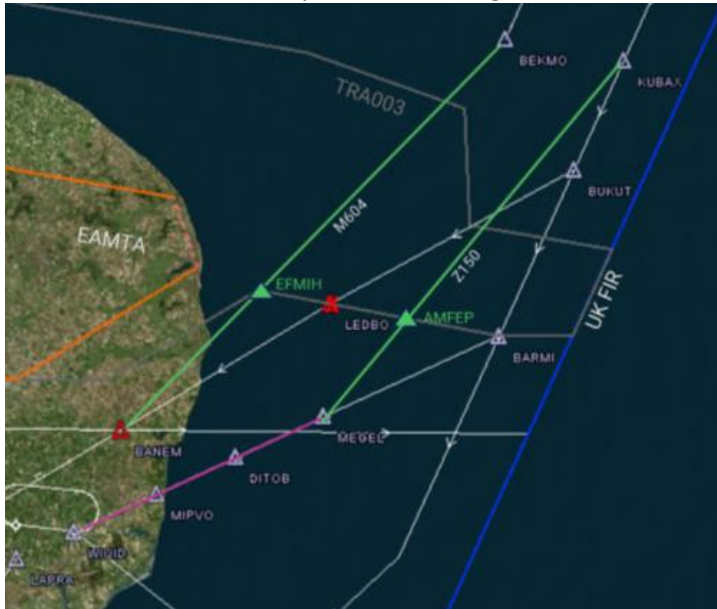
This airspace change proposal seeks to improve the Air Traffic Service (ATS) route network and airspace structures in the eastern part of the London Upper Information Region (UIR)/Flight Information Region (FIR), including the cross-border arrangements with the Amsterdam FIR. It is aiming to reduce CO2 emissions, reduce ATC complexity, optimise the airspace using FUA principles, enable fuel savings to customers, facilitate more efficient flight planning, and provide efficient airspace volumes for military airspace users.

This will be achieved through 2 components:

1. Optimise East Anglia Military Training Area (EAMTA) and adjacent route structures (M604/N866).
2. Optimise the route structure at KOLAG for Amsterdam Schiphol Airport departures to the west.

A third component was considered but was not progressed due to the complexity of aligning implementation dates, creating unacceptable risk to realising the benefits from the other components.

An indication of the Component 1 redesign:



An indication of the Component 2 redesign:



1.	Justification for change and options analysis (operational/technical)	Status
1.1	Is the explanation of the proposed change clear and understood?	YES
	<p>Clear explanations of the proposed changes:</p> <ul style="list-style-type: none"> • Permanent realignment of EAMTA. • Route realignment of ATS Route (M604). • New ATS Route Z150 (AMFEP-MEGEL). • Standard Instrument Arrival (STAR) truncation BARM1 1N, BARM1 2A (both supporting Stansted and Luton Airports). • Realign L60 via a new Coordination Point (COP), remove existing COP (KOLAG). 	
1.2	Are the reasons for the change stated and acceptable?	YES
	<p>A NATS initiative to realign the EAMTA to support more direct routings of General Air Traffic (GAT), matching the tactical re-routes offered by ATC when possible. These tactical flows have been facilitated since Feb 24 by an agreement with MOD to adjust the lateral dimensions of the EAMTA by use of an LOA. This ACP would make those arrangement permanent by airspace design.</p> <p>Requests from an airline operator (KLM) and LVNL, the Dutch Air Navigation Service Provider (ANSP), to improve the efficiency of westbound flights out of Amsterdam Schiphol airport.</p> <p>All changes consider the Airspace Modernisation Strategy (AMS) and CAA Policies.</p>	
1.3	Have all appropriate alternative options been considered, including the 'do nothing' option?	YES
	<p>Only one option was developed but this consisted of 3 components as part of the broader NATS OSEP initiatives: <i>NATS Operational Service Enhancement Project (OSEP) will deliver small scale changes across NERL airspace between now and 2027. The changes will deliver benefits through enabled fuel/CO2 savings, reduced routing inefficiency, safety improvement and alleviating capacity hotspots.</i></p> <p>The changes within this ACP are scoped by geographical area, but with component 3 having been dropped due to not being achievable within the desired timescale.</p> <p>The remaining 2 components are to create flight-plannable routes that align with the behaviours currently achieved routinely through tactical ATC instructions.</p>	

1.4	Is the justification for the selection of the proposed option sound and acceptable?	YES
	To create flight-plannable routes that align with the behaviours currently achieved routinely through tactical ATC instructions. The objectives are aligned with AMS and CAA policies, and are expected to be a net benefit to Airline Operators (AOs) and ANSPs.	

2.	Airspace description and operational arrangements	Status
2.1	Is the type of proposed airspace design clearly stated and understood?	YES
	Diagrams and descriptions of the current airspace design and the proposed changes are provided. Whilst the diagrams presented are not as clear as they ideally should be, they are sufficient for the scale of the ACP and the target audience.	
2.2	Are the hours of operation of the airspace and any seasonal variations stated and acceptable?	YES
	No changes.	
2.3	Is any interaction with adjacent domestic and international airspace structures stated and acceptable including an explanation of how connectivity is to be achieved? Has the agreement of adjacent States been secured in respect of High Seas airspace changes?	YES
	<p>The changes proposed in component 2 of this project require cross-border agreements with LVNL and Maastricht Upper Area Control Centre (MUAC). The sponsor has evidenced good collaboration, which has resulted in an agreed airspace design that supports an improved cross-border airspace design.</p> <p>REQUIREMENT: The CAA will issue a high seas letter to the ICAO EUR/NAT office providing notification of the changes.</p>	
2.4	Is the supporting statistical evidence relevant and acceptable?	YES
	A breakdown of the number of flights affected is included in the assessment of the impacts, along with estimates of the number of route miles saved by the proposal. The premise of the changes is to create flight-plannable routes that align with the behaviours currently achieved routinely through tactical ATC instructions. Actual realised benefits would be achieved through the arrangements being made permanent and the ability for AOs to more accurately flight plan and determine their fuel uplift requirements. This is articulated in high level statements – as a CAP1616 V5 Level 3 ACP, this is sufficient for this proposal.	

2.5	Is the analysis of the impact of the traffic mix on complexity and workload of operations complete and satisfactory?	YES
	Sufficient for the scale of ACP - the impacts are expected to provide benefits to AOs and ANSPs.	
2.6	Are any draft Letters of Agreement and/or Memoranda of Understanding included and, if so, do they contain the commitments to resolve ATS procedures (ATSD) and airspace management requirements?	YES
	<p>An LOA between NATS and MOD temporarily amends the operating area of the EAMTA to enable more direct routing of GAT. This has been in effect since February 2024 but may no longer be required once the EAMTA is amended because of this ACP. No other details of impacts on LOAs were provided within the ACP submission.</p> <p>The sponsor was requested to provide details on any amendments that may be required to existing LOAs with neighbouring states. The sponsor subsequently provided copies of x4 LOA documents that are affected by this change; 78 Sqn (EAMTA), Amsterdam ACC (Annex C), Amsterdam ACC (Annex D), and Maastricht UAC.</p> <p>CONDITION: The sponsor shall ensure that all affected LOAs are amended and agreed by all signatories (or cancelled as appropriate) prior to the implementation of the airspace change.</p>	
2.7	Should there be any other aviation activity (low flying, gliding, parachuting, microlight site etc) in the vicinity of the new airspace structure and no suitable operating agreements or ATC Procedures can be devised, what action has the change sponsor carried out to resolve any conflicting interests?	N/A
	No changes impacting other aviation activity other than MOD.	

2.8	Is the evidence that the airspace design is compliant with ICAO SARPs, airspace design & FUA regulations, and Eurocontrol guidance satisfactory?	YES
	<p>Much of the ATS operation is unaffected other than minor modifications to ATS Routes/5-Letter Name-Codes (5LNCs) etc. CAA SARG Policy 113 and 133 have been considered in the development of the final design option, with the information provided in the submission appropriate to the scale of the change.</p> <p>SARG Policy 113 requires confirmation that the STARs to be truncated are within date for periodic review. CAA records show that BARM1 1N was implemented in February 2022 and that BARM1 2A was implemented in May 2021; both are in date and are therefore suitable for truncation.</p>	
2.9	Is the proposed airspace classification stated and justification for that classification acceptable?	YES
	No change to CAS structures.	
2.10	Within the constraints of safety and efficiency, does the airspace classification permit access to as many classes of user as practicable?	YES
	No change to CAS structures.	
2.11	Is there assurance, as far as practicable, against unauthorised incursions? (This is usually done through the classification and promulgation.)	YES
	No change to CAS structures. All elements of the airspace design will be published in accordance with existing arrangements.	
2.12	Is there a commitment to allow access to all airspace users seeking a transit through controlled airspace as per the classification, or in the event of such a request being denied, a service around the affected area?	YES
	No change.	

2.13	Are appropriate arrangements for transiting aircraft in place in accordance with stated commitments?	YES
	No change.	
2.14	Are any airspace user group's requirements not met?	NO
	No change other than amendments to EAMTA with agreement of MOD.	
2.15	Is any delegation of ATS justified and acceptable? (If yes, refer to Delegated ATS Procedure).	YES
	No change.	
2.16	Is the airspace design of sufficient dimensions with regard to expected aircraft navigation performance and manoeuvrability to contain horizontal and vertical flight activity (including holding patterns) and associated protected areas in both radar and non-radar environments?	YES
	Compliant with STAR truncation policy.	
2.17	Have all safety buffer requirements (or mitigation of these) been identified and described satisfactorily (to be in accordance with the agreed parameters or show acceptable mitigation)? (Refer to buffer policy letter.)	YES
	Requirements of the new safety buffer for airspace design purposes from SARG Policy 133 have been applied.	
2.18	Do ATC procedures ensure the maintenance of prescribed separation between traffic inside a new airspace structure and traffic within existing adjacent or other new airspace structures?	YES
	No change.	

2.19	Is the airspace structure designed to ensure that adequate and appropriate terrain clearance can be readily applied within and adjacent to the proposed airspace?	YES
	No change.	
2.20	If the new structure lies close to another airspace structure or overlaps an associated airspace structure, have appropriate operating arrangements been agreed?	N/A
	The lateral dimensions of the EAMTA are being amended – the interaction between this, ATS Routes, 5LNCs and the underlying Temporary Reserved Area (TRA) have been considered within the revised design.	
2.21	Where terminal and en-route structures adjoin, is the effective integration of departure and arrival routes achieved?	YES
	The proposal includes truncation of x2 STARs. The flows of traffic departing to and arriving from affected airports (namely Luton, Stansted and Amsterdam Schiphol) have been considered.	

3.	Supporting resources and communications, navigation, and surveillance (CNS) infrastructure	Status
3.1	Is the evidence of supporting CNS infrastructure together with availability and contingency procedures complete and acceptable? The following are to be satisfied:	
	<ul style="list-style-type: none"> • Communication: Is the evidence of communications infrastructure including RT coverage together with availability and contingency procedures complete and acceptable? Has this frequency been agreed with AAA Infrastructure? 	N/A
	No change.	
	<ul style="list-style-type: none"> • Navigation: Is there sufficient accurate navigational guidance based on in-line VOR or NDB or by approved RNAV-derived sources, to contain the aircraft within the route to the published RNP value in accordance with ICAO/ Eurocontrol standards? For example, for nav aids, has coverage assessment been made, such as a DEMETER report, and if so, is it satisfactory? 	N/A
	No change.	
	<ul style="list-style-type: none"> • Surveillance: Radar provision – have radar diagrams been provided, and do they show that the ATS route/airspace structure can be supported? 	N/A
	No change.	
3.2	Where appropriate, are there any indications of the resources to be applied, or a commitment to provide them, in line with current forecast traffic growth acceptable?	N/A
	No change.	

4.	Maps/charts/diagrams	Status
4.1	<p>Is a diagram of the proposed airspace included in the proposal, clearly showing the dimensions and WGS84 co-ordinates?</p> <p>(We would expect sponsors to include clear maps and diagrams of the proposed airspace structure(s) – they do not have to accord with aeronautical cartographical standards (see airspace change guidance), rather they should be clear and unambiguous and reflect precisely the narrative descriptions of the proposals.)</p>	YES
	<p>Descriptions and diagrams of the current airspace design and the proposed changes are provided. WGS84 coordinates are provided in the Aerodata sheet.</p>	
4.2	Do the charts clearly indicate the proposed airspace change?	YES
	<p>Diagrams of the current airspace design and the proposed changes are provided. Whilst the diagrams presented are not as clear as they ideally should be, they are sufficient for the scale of the ACP and the target audience.</p>	
4.3	Has the change sponsor identified AIP pages affected by the change proposal and provided a draft amendment?	YES
	<p>Via the aerodata sheet, no other changes are anticipated.</p>	
4.4	Has the change sponsor completed the WGS84 spreadsheet and submitted to the CAA for approval?	YES
	<p>Aerodata spreadsheet provided.</p>	

5.	Operational impact	Status
5.1	<p>Is the change sponsor's analysis of the impact of the change on all airspace users, airfields and traffic levels, and evidence of mitigation of the effects of the change on any of these, complete and satisfactory?</p> <p>Consideration should be given to:</p>	
	a) Impact on IFR General Aviation traffic, on Operational air traffic or on VFR General Aviation traffic flow in or through the area.	YES
	No changes affecting other airspace users other than MOD, who have agreed to modify EAMTA.	
	b) Impact on VFR Routes.	N/A
	c) Consequential effects on procedures and capacity, i.e. on SIDs, STARs, holds. Details of existing or planned routes and holds.	YES
	The changes are intended to improve efficiency and replicate existing behaviours where ATC provide tactical re-routes.	
	d) Impact on airfields and other specific activities within or adjacent to the proposed airspace.	YES
	The proposal includes truncation of x2 STARs. The lateral dimensions of the EAMTA are proposed and these have been accepted by the MOD. Cross-border improvements are proposed and these have been developed in discussion with LVNL and MUAC.	
	e) Any flight planning restrictions and/ or route requirements.	YES
	The changes are intended to improve flight efficiency, including flight planning and fuel uplift. Use of ATS Routes and ATC Directs (DCTs) is explained. Changes are all likely to be a net benefit to AOs.	

5.2	Does the change sponsor consultation material reflect the likely operational impact of the change?	YES
	As a CAP1616 V5 Level 3 ACP, there was no requirement for consultation. Engagement activities took place in the development of the proposal – the material presented to stakeholders was representative of the final airspace design and described the anticipated impacts.	

Case study conclusions – to be completed by Airspace Regulator (Technical)	Yes/No
Has the change sponsor met the SARG airspace change proposal requirements and airspace regulatory requirements above?	YES
The sponsor has considered the AMS and appropriate CAA Policies in the development of this proposal.	

RECOMMENDATIONS/CONDITIONS/PIR DATA REQUIREMENTS	Yes/No
Are there any Recommendations which the change sponsor should try to address either before or after implementation (if approved)? If yes, please list them below.	NO
<p><i>GUIDANCE NOTE:</i> Recommendations are something that the change sponsor should try to address either before or after implementation, if indeed the airspace change proposal is approved. They may relate to an area in which the change sponsor is reliant upon a third party to actually come to an agreement and consequently they do not carry the same ‘weight’ as a Condition.</p>	
Are there any Condition(s) which the change sponsor must fulfil either before or after implementation (if approved)? If yes, please list them below.	YES
<p><i>GUIDANCE NOTE:</i> Conditions are something that the change sponsor must fulfil either before or after implementation, if indeed the airspace change proposal is approved. If their proposal is approved, change sponsors must observe any condition(s) contained within the regulatory decision; failure to do so will usually result in the approval being revoked. Conditions should specify the consequence of failing to meet that condition, whether that be revoking the ACP or some alternative.</p>	

REQUIREMENT TO CONSIDER LETTERS OF AGREEMENT

- CAP1616 (3.48), CAP1616H (2.50): The change sponsor must update all relevant documentation including, but not limited to, aeronautical publications, charts, operational documentation, letters of agreement and air traffic management systems.
- CAP1616F (5.54): In developing a realistic implementation date, the change sponsor will need to consider all aspects of their project, such as final airspace design validation requirements, staff training, requirements of CAA Aerodromes and Air Traffic Management, infrastructure requirements (for example, communications, navigation and surveillance equipment), finalising letters of agreement, and defined schedules for chart updates.
- CAP1616F Appendix A (Final Airspace Change Proposal – Template) also includes the need to consider and present information relating to Letters of Agreement – see ‘Timeline for Implementation’, ‘Detailed Description of the Changes to Airspace Design and Operation’, and ‘List of Supplementary Documents’.

CONDITION (PRE-IMPLEMENTATION):

The sponsor shall ensure that all affected LOAs are amended and agreed by all signatories (or cancelled as appropriate) prior to the implementation of the airspace change.

Are there any specific requirements in terms of the data to be collected by the change sponsor for the Post Implementation Review (if approved)? If yes, please list them below.

NO

GUIDANCE NOTE: PIR data requirements concerns any specific data which the change sponsor ***must*** collate post-implementation, if indeed the airspace change proposal is approved. Please use this section to list any such requirements so that they can be captured in the regulatory decision accordingly.

General summary

This ACP is part of the NATS OSEP series of initiatives to deliver small scale improvements. It proposes some modifications to the ATS Route structure on the eastern side of the UK and includes changes to cross-border arrangements with LVNL and MUAC. The changes are in keeping with Eurocontrol and AMS objectives for increasing efficiencies through flight-plannable improvements to the ATS Network. The changes do not introduce any dis-benefits for ANSPs, MOD or airspace users.

Comments and observations

The sponsor did not use the standard template format for their final submission and did not provide a rationale. Whilst not a significant issue for this ACP, it is sponsors, stakeholders, interested parties, and the CAA that will benefit from ACPs being presented in a standardised manner.

CAP1616H (2.36) states:

*'The change sponsor **should** prepare the final airspace change proposal using the standard template (not all sections of the standard template may apply for Level 3 airspace change proposals).'*

CAP1616 (1.28) states:

'should' is used to refer to a requirement that is expected to be met in full unless the change sponsor provides an acceptable rationale (within their submissions) that it would be disproportionate to do so.'

Operational assessment sign-off	Name	Signature	Date
Operational assessment completed by Airspace Regulator (Technical)	[REDACTED]	[REDACTED]	20 Nov 24
Principal Airspace Regulator comment / Decision	Name	Signature	Date
Operational assessment conclusions approved by Principal Airspace Regulator	[REDACTED]	[REDACTED]	04 Dec 24
<p>Principal Airspace Regulator Comments and Decision:</p> <p>Noting the conditions listed, this ACP is approved.</p>			