

# CAA Consultation Assessment

Title of airspace change proposal	LAMP2 D1.1 (WEST)
Change sponsor	NATS
Project reference	ACP-2017-70
Account Manager	[REDACTED]
Case study commencement date	08/06/2022
Case study report as at	28/09/2022

### 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 London Airspace Modernisation Programme 2 (LAMP 2) Deployment 1.1 (LD1.1) airspace change is sponsored by NATS En Route Limited (NERL). The sponsor’s objective is to update the route network to deliver specific initiatives of the CAA’s Airspace Modernisation Strategy (AMS) using Performance Based Navigation (PBN) to provide benefits in capacity, minimise environmental impacts and ensure the recovery and continued growth of aviation is sustainable.

The changes proposed by LAMP 2 LD1.1 are to the airspace and route structure to change aircraft flight profiles from 7,000 ft to 24,500 (FL70 to FL245). The airspace from 24,500 ft to 66,000 ft (FL245 to FL660) that lies above the LD1.1 region in the South-West area of the UK Upper Information Region (UIR) is being changed by the Free Route Airspace Deployment 2 (FRA D2) airspace change proposal (ACP). The two ACPs cover almost the same geographical area of South-West England and most of Wales. Due to the dependencies between the two ACPs the sponsor conducted consultations for both proposals concurrently. If approved, the sponsor plans to proceed with simultaneous implementation.

The sponsor proposed no changes in this ACP which would alter flight profiles below 7,000ft over an inhabited area. The changes proposed by LAMP 2 LD1.1 will interface with the existing traffic flows for Bristol, Cardiff, and Exeter Airports. A separate ACP, LAMP 2 Deployment 1.2 (LD1.2) will be

used to implement any further changes that may be required after LAMP 2 LD1.1 such as network connection changes for any amended or new arrival/departure routes proposed by Bristol, Cardiff, or Exeter Airports via the ACPs they are progressing under the Future Airspace Strategy Implementation – South (FASI-S) programme of changes.

The LAMP 2 LD1.1 ACP area borders with the airspace operated by the Irish Aviation Authority (IAA), Direction des Services de la Navigation Aérienne (DSNA) (France) and the Ports of Jersey (Channel Islands) Air Navigation Service Providers (ANSPs). The sponsor consulted a stakeholder audience that included these three ANSPs during a consultation which was conducted virtually for 12 weeks and 1 day and was targeted at an aviation expert audience.

The sponsor consulted on two options to determine where the Division Flight Level (DFL) will be between the lower LAMP 2 LD1.1 airspace and the high-level FRA D2 airspace. The first option, referred to as option 4, was systemisation using PBN routes based on 5nm radar separation environment with improved connectivity provided by direct routes with FRA above 30,500 ft (FL305) (except in section 9 where it is FL245). The second, referred to as option 6, was systemisation using PBN routes based on 5nm radar separation interfacing with FRA above 24,500 ft (FL245) allowing aircraft to begin the free-route portion of the flight earlier. The sponsor’s preferred option was option 6, as it offered greater flexibility, less complexity and the potential to further improve environmental performance. The consultation explained the changes proposed to the volume of Controlled Airspace (CAS) and Special Use Airspace (SUA) for both consultation options.

The sponsor received a total of 35 consultation responses and revised their proposed airspace design as a result of consultation feedback. The sponsor is progressing their preferred option 6 as their final design. Additional amendments were made post consultation that were not the result of feedback received: these were technical amendments as a result of validation simulations and safety assessments, amendments to the proposed controlled airspace (CAS) which were identified post-consultation, refinements to details consulted on regarding waypoint names and technical amendments referred to by the sponsor as largely nomenclature changes.

PART A – Summary of Airspace Change Process to date		
A.1	<a href="https://caa.co.uk">Airspace change proposal public view (caa.co.uk)</a>	
A.2	Stage 1 DEFINE Gateway	Yes
A.2.1	The required documentation was presented on time, and we were satisfied that the sponsor had met the requirements of the Process up to that point. Progress to the next Step of the Process was therefore approved.	
A.3	Stage 2 DEVELOP & ASSESS Gateway	Yes
A.2.1	The sponsor did not initially progress through the Stage 2 Gateway assessment meeting. The sponsor was advised to address actions relating to economic and environmental issues. Amended documentation was presented on time for the March 2021 Gateway assessment meeting and we were satisfied that the sponsor had met the requirements of the Process up to that point. Progress to the next Step of the Process was therefore approved.	

A.3	Stage 3 CONSULT Gateway	Yes
A.3.2	<p>The required documentation was presented on time, and we were satisfied that the sponsor had met the requirements of the Process up to that point. Progress to the next Step of the Process was therefore approved.</p> <p>The sponsor submitted Step 3D Collate and Review Responses Document V1. Inconsistencies in the way in which the categorisation had been conducted, including some inconsistencies with the response categorisation for the aligned FRA D2 ACP, were drawn to the attention of the sponsor who reviewed the categorisation and submitted Step 3D Collate and Review Responses Document V1.1. The CAA was satisfied that the sponsor had met the requirements of the process up to that point.</p>	
A.4	Stage 4 UPDATE & SUBMIT	Yes
A.4.1	The sponsor formally submitted their proposal. During the CAA document check the sponsor was requested to submit their consultation response document and particular items of consultation evidence to support their submission. All documentation requested was submitted.	

<b>PART B – Consultation Assessment</b>		
B.1	AUDIENCE	
B.1.1	Did the consultation target the right audience?	Yes
	<p>The sponsor targeted aviation stakeholders for consultation as the LAMP 2 LD1.1 changes are within controlled Class A and C airspace above 7,000ft and so the sponsor expects the changes to have no significant change to noise or visual intrusion and no change in impact for stakeholders on the ground. Stakeholders were mapped according to their interest and influence. The sponsor considered their high influence, high interest group of stakeholders to be representatives of airlines that operate within the airspace or airports organisations who would potentially be affected by the proposed flightpath changes, military airspace users and General Aviation (GA) organisations. These stakeholders were directly targeted for consultation responses. So too were ANSPs, airports that may need to update aeronautical information due to the airspace change and local airspace users and representatives of national aviation organisations that might be impacted by changes to CAS.</p> <p>The sponsor's stakeholder list was annexed to Step 3D Collate and Review Responses document (Annex A) and comprised the following:</p> <ul style="list-style-type: none"> <li>- ANSPs including the IAA, DSNA ACC Brest (France), Direction des Services de la Navigation Aerienne (DSNA) (France), Maastricht Upper Area Control (MUAC) and Eurocontrol Central Flow Management Unit (CFMU)</li> <li>- 56 Airlines, 26 Airports that will use the airspace including Cardiff, Exeter, and Bristol Airports and local airspace user groups likely to be affected by the establishment of new controlled airspace</li> <li>- 8 Data Houses/Computer Flight-Service Planning Providers (CFSPs) including Jeppesen, Lufthansa Systems and Sabre</li> </ul>	

	<ul style="list-style-type: none"> <li>- 30 Members of the National Air Traffic Management Advisory Committee (NATMAC) including the Ministry of Defence (MoD) Defence Airspace and Air Traffic Management (DAATM), the British Gliding Association (BGA) and General Aviation (GA) umbrella organisations. These stakeholders were identified as likely to be affected by the establishment of new CAS or the disestablishment of current CAS.</li> <li>- General Aviation (GA) and other stakeholders including Ports of Jersey Senior Air Traffic Control Officer (SATCO) and QinetiQ</li> </ul> <p>In addition to the stakeholders above being targeted, the sponsor mapped aviation stakeholders who may use the region’s airspace or have some aviation technical expertise into their low influence, high interest category stating that these would include private pilots who fly their aircraft in the vicinity of the proposed new airspace. While the consultation was targeted at those stakeholders for whom the proposals were most relevant, the sponsor welcomed feedback from stakeholders in this low influence/high interest group and all interested stakeholders by hosting the consultation on the CAA’s public facing citizen space platform and by using a range of communication tools to promote the consultation.</p> <p>As the consultation progressed, c.20 new stakeholders were added to the sponsor’s stakeholder list. These included some ANSPs and aviation stakeholders representing spaceports/space industry. The sponsor has said that these additional stakeholders were identified early in the consultation and has provided clarification during the stage 5 process that these stakeholders were added in week 3 of the consultation. The sponsor explained that Borealis Alliance members had erroneously been missed during the combining of LAMP with FRA and that the other additional stakeholders are future airspace entrants i.e., drone/BVLOS operators and were added to ensure exclusivity to potential future users of the airspace in this region.</p> <p>The stakeholder list for this ACP has been compared with that for FRA D2 and the contents of both lists, including stakeholders added during the consultation, are aligned.</p>
B.1.2	Please provide a summary of responses below
	<p>The sponsor targeted 164 stakeholders and received 35 responses during the consultation period, achieving a reasonable response rate of 21%. All responses were received via the citizen space platform, and all were analysed. Responses were received from:</p> <ul style="list-style-type: none"> <li>- 3 ANSPs: IAA (Ireland), DSNACC Brest (France) and NAVIAIR (Denmark).</li> <li>- 13 Airports: Cardiff Airport, Bristol Airport Ltd., Exeter and Devon Airport, London Luton Airport Operations, Cornwall Airport Newquay, Farnborough Airport, London City Airport, Bournemouth Airport, MAG Stansted Airport, MAG Manchester Airport, Southampton Airport, Heathrow Airport Ltd. and Ports of Jersey.</li> <li>- 3 CFSPs: Boeing (Jeppesen), Flightkeys and Lufthansa Systems.</li> <li>- Military stakeholder: MoD DAATM.</li> <li>- 10 airline stakeholders: Delta Airlines, Flybe Ltd., Emirates Airline, DHL Air Ltd., Virgin Atlantic, TUI Airline, British</li> </ul>

Airways, KLM Royal Dutch Airlines, Ryanair and American Airlines.

- GA stakeholders: British Gliding Association (BGA) and the British Helicopter Association (BHA).
- 3 other agencies/individuals who were not targeted for a response.

Response data

The first 8 questions on the online questionnaire dealt with preliminary items including identification. Question 9 was split into two parts and asked respondents to rank to what extent they agreed that each of consultation option 4 and option 6 was an acceptable solution to modernising the LD1.1 airspace. Question 13 was a free text box inviting any other comments on the proposal. The response data for questions 9 to 12 are set out below.

	<b>Question 9.</b> To what extent do you agree that Option 4 is an acceptable solution to modernising the LD1.1 airspace? (With LD1.1/FRA DFL set at FL305)	<b>Question 9.</b> To what extent do you agree that Option 6 is an acceptable solution to modernising the LD1.1 airspace? (NATS preferred solution with LD1.1/FRA DFL set at FL245)
Strongly agree	2 (6%)	20 (57%)
Agree	15 (43%)	8 (23%)
Neither agree nor disagree	11 (31%)	6 (17%)
Disagree	5 (14%)	0
Strongly disagree	1 (3%)	0
Don't know	1 (3%)	1 (3%)
<b>Total</b>	<b>35</b>	<b>35</b>

	<b>Question 10.</b> Do you prefer Option 4 (DFL 305) or Option 6 (DFL 245)?
Option 4 (FRA – LD1.1. DFL 305)	0
Option 6 (FRA – LD1.1 DFL 245)	28 (80%)
No preference	7 (20%)
<b>Total</b>	35

From a review of the data, respondents made use of the free text box provided for question 10 to give their reasons for preferring Option 6 which included: simplicity of implementation in flight planning system, better environmental performance, potential efficiency gains, reduced complexity, increased flexibility, that it would provide the greatest potential for delivering increased airspace capacity and would allow for greater use of FRA and be in line with other FRA implementations.

	<b>Question 11.</b> To what degree do you agree that LD1.1 will have a net beneficial impact on general aviation or sport aviation airspace users (due to net release of controlled airspace)?
Strongly agree	3 (9.37%)
Agree	10 (31.25%)
Neither agree nor disagree	18 (56.25%)
Disagree	0
Strongly disagree	1 (3.25%)
Don't know	0
<b>Total</b>	32 (N.B. 3 respondents did not answer this question)

From a review of the data, respondents made use of the free text box provided for question 11 to provide comments including that releasing more CAS would benefit the GA community and that changes that resulted in multiple changes in the base levels of airspace

were preferable to a uniform but lower base level.

	<b>Question 12.</b> To what degree do you agree with our assumptions on climb and descent gradients used to assign FRA arrival and departure points?
Strongly agree	3 (9%)
Agree	12 (38%)
Neither agree nor disagree	15 (47%)
Disagree	2 (6%)
Strongly disagree	0
Don't know	0
<b>Total</b>	32 (N.B. 3 respondents did not answer this question)

From a review of the data, respondents made use of the free text box provided for question 12 to express their views on the methodology used to assign FRA arrival and departure points. This issue is considered in B.5.4 below.

**B.2 APPROACH**

**B.2.1** Did the change sponsor consult stakeholders in a suitable way? Yes

The sponsor conducted their consultation using the citizen space online platform via the CAA's airspace change portal and as a result their consultation was aligned with CAP 1616 requirements.

Consultees were not given the opportunity to respond by post. At the Stage 3 Gateway Assessment Meeting, the sponsor explained that they expected that all the stakeholders who would participate in the consultation would have internet access and that no stakeholders who had participated in stages 1 and 2 CAP 1616 process had responded by post. On the basis that the sponsor stated in their consultation that any stakeholder or individual could participate, the CAA recommended prior to commencement of the consultation that postal responses should be allowed. The sponsor responded that they no longer publish a dedicated postal address as no postal responses had been received for a level 2 ACP since CAP 1616 had been operational. This justification was accepted by the

	<p>CAA.</p> <p>The consultation for this ACP was run concurrently with the consultation for FRA D2 due to the dependencies between the two ACPs with almost the same geographical area covered by these ACPS and simultaneous implementation planned. The two consultations were conducted with the same launch and closing dates and the same stakeholders were targeted for a response. By consulting on both proposals at the same time, the sponsor aimed to reduce the burden on stakeholders, minimise stakeholder fatigue and assist with stakeholder understanding of cumulative impacts. Concurrent consultation was achieved by the following methods: all emails to targeted stakeholders addressed both ACPs, the communication channels used for promotion of the consultation consistently referenced both ACPs and consultation material, introductory video and webinar presentations addressed both proposals and the dependencies between them. A review of the responses shows that no concerns were raised by stakeholders regarding insufficient consultation information or materials. There is also no suggestion contained within the responses that stakeholders were unable to understand the material presented or the dependencies between this ACP and FRA D2 and their cumulative impacts. I am satisfied that the sponsor achieved their aims regarding concurrent consultation.</p>
B.2.2	<p>What steps did the change sponsor take to encourage stakeholders to engage in the consultation?</p>
	<p>The following steps were taken to encourage participation in the consultation:</p> <ul style="list-style-type: none"> <li>- Stakeholders being directly targeted, which included those with whom the sponsor already had a working relationship via earlier engagement, were sent a notification email on 6 September 2021 to inform them that the consultation had launched. This email provided information on how to respond via the online portal and the consultation documents that were available to download.</li> <li>- The consultation document together with supporting material comprising: an overview of the proposed options, a short introductory video, interactive map, flight profiles for some airports, Frequently Asked Questions (FAQ) document and a feedback form were available to view/complete via the citizen space platform.</li> <li>- The consultation was publicised on the NATS customer affairs website which is used to exchange information between NATS and their customer airlines and via the NATS.aero website which is available to the public.</li> <li>- A reminder email was sent on 11 October 2021 (5 weeks after consultation commenced) to those stakeholders who had not responded at that time. On 18 November 2021, towards the end of the consultation, a final reminder email was sent to encourage responses. These emails contained a link to the online consultation platform. The mid-point email included a link to a short introductory video on the proposed changes.</li> <li>- Additional emails were sent to high users of the airspace to encourage responses reminding them that their views were important to the sponsor in order to help inform the final airspace design.</li> <li>- The sponsor held 9 online video meetings (webinars) with targeted stakeholder groups comprising a presentation on the LAMP 2 LD1.1 and FRA D2 proposed changes and a Questions and Answers session. There were 41 attendees in total. Direct feedback on the proposals was not sought at the sessions as their purpose was to allow for two-way dialogue and to answer questions but follow</li> </ul>



	<p>up emails were sent to attendees including the link to the consultation material to encourage responses.</p> <ul style="list-style-type: none"> <li>- The sponsor held 3 open session webinars during the consultation which all stakeholders, whether individuals or organisations, were invited to attend. A total of 28 stakeholders attended. As with the webinars for targeted stakeholders, direct feedback on the proposals was not sought at the open sessions. After each webinar the sponsor emailed attendees thanking them for their attendance and encouraging them to provide a consultation response.</li> <li>- Consultation FAQs were available to view on the citizen space portal. In this document, the sponsor gave helpful direction to stakeholders on the relevance of the LAMP 2 LD1.1 and FRA D2 ACPs to them. Aviation stakeholders were advised that if they had operations above FL245 they should respond to both consultations. Stakeholders with sporting, recreational and GA interests were advised to respond to LAMP 2 LD1.1 but told that FRA D2 was only relevant if they flew above FL245. The sponsor stated that members of the general public/stakeholders on the ground were welcome to respond although neither proposal was likely to have any impact on them.</li> <li>- One stakeholder made proactive contact with the sponsor seeking further information on the proposal. They were offered a 1:1 meeting and provided with the specific information sought by email.</li> </ul> <p>The sponsor stated that as they were targeting an aviation expert audience, they were of the view that all their stakeholders would have internet access. As a result, the option to provide a consultation response by post was not offered. Given the nature of the sponsor’s stakeholder audience and that they had already been engaged by email during stages 1 and 2 of this ACP, this approach is satisfactory.</p> <p>Evidence has been provided by the sponsor to support all the steps taken above and reviewed by the CAA.</p>
B.2.3	<p>Was the change sponsor required to respond to any unexpected events and/or challenges?</p>
	<p>The sponsor addressed the ongoing impact of the Covid-19 pandemic with the sponsor forming the view that an online webinar format rather than in-person events was appropriate given social distancing and travel constraints. The sponsor had assessed that all industry stakeholders have internet access, it being their preferred channel for consultation and engagement. There were no unexpected events and/or challenges.</p>
B.3	<p><b>MATERIALS</b></p>
B.3.1	<p>What materials were used by the change sponsor during the consultation?</p>
	<p><u>Consultation document</u></p> <p>The consultation document was written in aviation technical language in English as the sponsor’s primary audience was an aviation expert audience. The document explained the aims and objectives of the change, gave a description of the current airspace, presented the proposed design options, outlined the potential impacts of the proposal for aviation stakeholders and explained how stakeholders could respond to the consultation. The dependencies between this ACP and FRA D2 were outlined and their cumulative impacts and benefits presented for stakeholders’ consideration. A reversion statement and supplementary technical data were included.</p>

	<p><u>Consultation FAQs</u> One set of 9 FAQs that addressed both this ACP and the FRA D2 ACP. It appears that the sponsor updated this document on one occasion during the consultation in response to a question from an airline.</p> <p><u>Introductory video</u> - A short video of 2.5 minutes duration introducing both this ACP and the FRA D2 ACP. The video included an explanation of the current airspace structure, use of ground-based beacons to navigate and the benefits of using satellite navigation. A version of the video with subtitles was also available to view. The video was made available via the citizen space platform, and it was also shared with stakeholders in the reminder email circulated half-way through the consultation.</p> <p><u>Consultation response questionnaire</u> – Stakeholders were directed to access the questionnaire via the citizen space platform.</p> <p><u>Citizen Space platform</u> - The sponsor provided a comprehensive overview of the proposal and provided the introductory video, explanation of the geographical extent covered by the proposed changes, the consultation options, and Consultation Document. The following supporting materials were provided: Google interactive map showing the routes in more detail, Consultation FAQs, Consultation Strategy, Full Options Appraisal, and a link to the FRA D2 ACP suite of consultation materials.</p>	
B.3.2	Did the materials provide stakeholders with enough information to ensure that they understood the issue(s) and potential impact(s) on them?	Yes
	<p>The sponsor provided detailed documentation and information using a range of communication channels together with an interactive layered map for stakeholders to view. The sponsor explained the current airspace scenario and why doing nothing would not be a viable option as it would not fulfil the aims of the Airspace Modernisation Strategy (AMS). The sponsor addressed throughout their document set the concurrent progression of this ACP with the introduction of FRA D2 in the higher-level airspace, outlining the interdependencies with FRA D2 and inviting stakeholders to consider the cumulative benefits and impacts in order to understand the “bigger picture”. The sponsor was clear that this ACP does not have the potential to alter tracks over inhabited areas below 7,000 ft and that a separate ACP will be progressed to implement any changes that may be required such as network changes for amended arrival/departure routes proposed by Cardiff, Bristol, and Exeter Airports. The content of Appendix A to the consultation document included an explanation of the dependencies and interactions with FASI-S airports. Although the consultation was aimed at an aviation expert audience, key technical terms including flight levels, systemisation and separation, the use of Co-Ordination Points (COPs) and SUA were explained clearly. The sponsor stated their intention to seek dispensation from the CAA’s Buffer Policy to deliver specific initiatives of the AMS. Considerations applicable to each of the LAMP 2 LD1.1 interfaces with airports and airspace were described.</p>	
B.4	<b>LENGTH</b>	
B.4.1	Please confirm the start/end dates and the duration of the consultation below	
	<p>Start: Monday 6 September 2021</p> <p>End: Monday 29 November 2021</p> <p>Duration: 12 weeks and 1 day</p>	
B.4.2	If duration was less than 12 weeks, what was the justification?	N/A

	N/A	
B.4.3	Was the period of consultation proportionate?	Yes
	The period of consultation met the CAP 1616 Table C1 consultation length requirement. The consultation was targeted at aviation stakeholders. Consultees had been engaged at earlier stages in the CAP 1616 process and so the proposals were already familiar to most stakeholders. No major holiday seasons fell within the consultation period. The duration was proportionate.	
B.5	GENERAL	
B.5.1	Was the conduct of the consultation aligned with the consultation strategy?	Yes
	The sponsor made an adjustment to the timing of their final reminder notification from that planned in the strategy but other than that the conduct of the consultation aligned with the consultation strategy.	
B.5.2	Has the change sponsor categorised the responses in accordance with CAP 1616?	Yes
	Inconsistencies in the way in which the Step 3D categorisation had been conducted, including some inconsistencies with the response categorisation for the aligned FRA D2 ACP were drawn to the attention of the change sponsor. The sponsor reviewed their categorisation and submitted Step 3D Collate and Review Responses Document V1.1. The CAA was satisfied that the updated categorisation had been conducted fairly.	
B.5.3	Has the change sponsor correctly identified all the issues raised during the consultation and accurately captured them in the consultation response document?	Yes
	The raw consultation data has been downloaded from the citizen space portal and reviewed. The sponsor correctly identified issues raised during the consultation and accurately captured them in their consultation response document.	
B.5.4	Does the consultation response document detail the change sponsor's response to the identified issues?	Yes
	<p><u>Controlled airspace (CAS) – Control Area (CTA) 5</u></p> <p>The sponsor consulted on raising the southern portion of Berryhead (BHD) CTA 5 from FL85 to FL105. Requests were made to retain the base of CTA 5 at FL85 to retain seamless connectivity within CAS for light unpressurised aircraft active in the area. MoD DAATM stated that stepped base levels at BHD CTA 5 introduce additional complexity for controllers and aircrew but were cognisant of the requirement on NATS, through the ACP process, to consider introducing the minimum amount of CAS. The BGA stated that releasing</p>	

more airspace than was being taken would be of benefit to gliding in the area.

Sponsor's response: This feedback has resulted in a revision to the design. The base of BHD CTA 5 will remain as it is currently at FL85 to facilitate better connectivity for unpressurised aircraft operating in the area. This has resulted in a small reduction in the total amount of CAS being released by this proposal. The overall reduction in CAS will be beneficial to the GA community.

#### Airspace structures – Temporary Reserved Area (TRA)

MoD DAATM agreed that the northern boundary of the Boscombe Advisory Radio Area (ARA) be changed to match the amended TRA boundaries (TRA 002). Post-consultation engagement evidence has been provided to confirm the MoD's position on this.

Sponsor's response: This has resulted in a minor design change with co-ordinates to be added to the Aeronautical Information Publication (AIP).

#### Potential impact of proposed network connectivity changes on Brize Norton

MoD DAATM stated that, after consultation with RAF Brize Norton ATC and aircrew representatives, the proposed changes were supported but requested further engagement with the sponsor to ensure identified impacts could be suitably mitigated.

Sponsor's response: No design changes have resulted. Engagement has taken place with RAF Brize Norton on the changes to the Cotswolds Control Areas (CTAs). Routes and associated waypoints for Brize arrivals and departures will move approx. 1.5nm north. The current arrival and departure procedures for Brize are being republished by RAF Brize Norton to align connectivity with the proposed network at the revised waypoints. Suitable procedures and levels have been agreed. A draft Letter of Agreement (LoA) between NATS en route and RAF Brize Norton has been submitted to the CAA.

The sponsor conducted post-consultation engagement with MoD DAATM and RAF Brize Norton in a meeting held online on 18 January 2022. Engagement evidence has been provided. The minutes of this meeting show that RAF Brize Norton were going to discuss with RAF Fairford, and report back to the sponsor, the impact of extending CTA6 to the north and lowering its base to FL95 for fast climbing aircraft departing RAF Fairford. The sponsor states that this issue has been mitigated with a tactical solution which would allow faster climbing aircraft to avoid potential level offs.

The CAA's Technical Regulator has advised that this solution must be incorporated within the LoA with RAF Brize Norton. This is addressed by way of a condition in B.6.2 below.

#### Special Use Airspace (SUA) - CAA Buffer Policy

The MoD stated that they did not support the use of internal lateral and vertical buffers within Danger Areas due to the operational impact on range and trial operations in the majority of the Danger Areas within LAMP 2 LD1.1/FRA D2 airspace. However, the MoD were amenable to working with the sponsor to find alternative solutions. The MoD have stated that if dispensation from the CAA's Buffer Policy is not given, they would wish to discuss with the sponsor what the extended ASM protocols would involve as any impact on MoD activity would need to be assessed.

Sponsor's response: No design changes. Dispensation is requested from the CAA's 2014 SUA - Safety Buffer Policy for Airspace Design Purposes to support the airspace designs for this proposal and that of FRA D2. Applying the criteria specified in the Policy would have a significant impact to route flight plan availability. Dispensation is sought for the standard buffer requirement used for SUA activity, other than high energy manoeuvres, to be 1nm. This request is supported by the MoD. Alternative options can only be determined on completion of the Stage 5 ACP process. The sponsor has addressed ASM protocols in [FRA D2 Update Design](#) stating that if dispensation is not granted, the extended use of ASM booking protocols would aim to maintain or improve airspace capacity, but this would likely restrict access to SUA compared to the current situation.

#### Airspace structures - Co-ordination points (COPs)

Brest ACC requested the implementation of new high-level COPs SALCO Sud and SALCO Nord as part of this ACP rather than at the post-LAMP 2 D1.1 implementation date proposed in the consultation as changes to their system deployment timeline would now permit the use of the two new COPs in alignment with the planned LAMP 2 LD1.1/FRA D2 implementation in 2023.

Sponsor's response: The design has been revised to implement these COPs as part of this ACP. This will reduce complexity for both London Airspace Control (LAC) and Brest by enabling improved traffic flow around this busy southern interface, enable tactical environmental gains, further reduce the lateral and horizontal CAS required for this ACP and simplify the network.

This implementation required the sponsor to re-orientate the arrival/departure routes for Bristol and Cardiff Airports and re-align/introduce new Standard Arrival Routes (STARs) for these two Airports. As consulted upon, these changes affect the initial portion of the STARs and do not change any routes below 7,000ft. The sponsor achieved a reduction in the amount of CAS required due to the re-orientation of the arrivals and made an amendment to the design consulted on for the boundary of TRA 001 by reducing its size slightly. At consultation the sponsor stated that it may be necessary to change/truncate some existing Standard Instrument Departure (SIDs) and Standard Arrival Routes (STARs). In their final submission, the sponsor has proposed two SID truncations to existing conventional SIDs for Bristol Airport to interface with the proposed enroute network and one for Cardiff Airport. These changes are summarised in Tables 11 to 14 [LAMP 2 D1.1 Step 4B Submit Airspace Change Proposal](#) No changes have been proposed post-consultation to arrival and departure flight profiles for Exeter Airport.

The sponsor conducted post-consultation engagement on these revisions with Bristol and Cardiff Airports in a meeting held online on 7 January 2022. The sponsor also engaged with MoD DAATM, the BGA and General Aviation Alliance (GAA) by email to inform them of the proposed changes. The GAA did not respond but all the other stakeholders engaged with on these revisions supported the proposals. Engagement evidence has been provided by the sponsor in support.

#### Airspace structures – Military Danger Area (MDA)

UK Danger Area EG D201 (Aberporth Range) complex is used routinely for UK military training activity. MoD DAATM responded to the consultation with a design change for a further option for new SUA segment K for EG D201 to ensure lower-level activity could be used in the area with less of an impact to the route network providing the most flexible use of the airspace for both the sponsor and the

MoD.

Sponsor's response: An adjustment to the proposed dimensions of segment K has been incorporated in the final design. It will be introduced permanently capped at FL145 so General Air Traffic (GAT) can always safely flight plan over it to ensure lower-level activity can be used in segment K with less impact on the MoD. This option provides the most flexible use of the area for both NATS and the MoD while retaining operational capability both now and in the future. Given the negligible difference in track mileage between the 2 options (0.2nm) and the infrequent predicted use, the amendment will not have a significant effect on the overall assessed environmental impacts of the proposal.

Please refer to CAA Environmental Assessment for consideration of overall assessed environmental impacts.

The sponsor conducted post-consultation engagement to present and agree a revised design with the MoD and QinetiQ in a meeting held on 13 January 2022. Engagement evidence has been provided by the sponsor in support.

North Wales Military Training Area (NWMTA)

MoD DAATM stated that they would not accept any changes to the dimensions of the NWMTA or the introduction of an internal buffer.

Sponsor's response: The sponsor has submitted to the CAA a Letter of Agreement (LoA) with the MoD defining the co-ordination procedures to be applied regarding the shared use of airspace that traverses the NWMTA and the D201 complex.

FRA connectivity – methodology used to assign FRA arrival and departure points

IAA ANSP were concerned that historical data would not reflect actual performance, particularly for Dublin departures having the capability to reach higher flight levels, currently restricted through level capping. BA disagreed with making assumptions based purely on BADA modelling and recommended talking to individual operators regarding how different aircraft can perform in different operating environments. Cardiff Airport's view was that the modelling sources are excellent methods for creating arrival and departure points but that everything referred to was based on historical performance and there may be an opportunity to consider performance of future aircraft capabilities.

Sponsor's response: The sponsor has reviewed the methodology used to determine FRA arrival and departure points as a result of the feedback received. The methodology used is a combination of 2019 traffic levels and standing agreed levels, not just BADA. Calculations were made using flight plan data and actuals. The design allows flexibility for future review as aircraft performance changes in the future –it is assumed any future changes can be made to FRA designation through a Level 0 airspace change proposal in accordance with CAP 1616 guidance.

Please refer to CAA Environmental Assessment for further consideration of this issue.

Division Flight Level (DFL)

BA considered that FL245 allows for maximum utilisation by both overflight traffic as well as departing and arriving traffic and is closely aligned with FRA D1 which transitions at FL255 although they questioned why FRA D1 is not consistent with a FL245 boundary. TUI

	<p>Airlines stated that the DFL should be in line with other FRA implementations.</p> <p>Sponsor’s response: In <a href="#">FRA D2 Update Design</a> and <a href="#">FRA D2 FOA V.2</a>, the sponsor has stated that it is NATS’ preference to establish FRA at FL245 and above in line with the LAMP 2 D1.1 preferred option 6 due to the interdependency with the LAMP 2 D1.1 design. No specific reference appears to have been made to the FRA D1 DFL.</p> <p><u>Revisions and technical amendments made post-consultation not on account of feedback</u></p> <p>The sponsor outlined in the consultation material the need to made changes to the volume of CAS. CAS requirements have been reviewed post-consultation and the sponsor has made what are referred to as some very minor amendments to the volume of CAS with a negligible impact to those described in the consultation document resulting. These changes include both the release of some CAS and the expansion of some CAS. A table setting out these revisions has been provided within the sponsor’s <a href="#">LAMP 2 D1.1 Step 4A Update Design</a> (Table 2)</p> <p>The sponsor has also outlined minor technical amendments that have developed post-consultation. The sponsor states that these do not result in significant design changes and are of a largely nomenclature nature. No names were reserved with iCARD for waypoints and route names prior to consultation. These have been secured post-consultation. Nomenclature changes have been outlined within the sponsor’s <a href="#">LAMP 2 D1.1 Step 4A Update Design</a> (Tables 3 – 9) and <a href="#">LAMP 2 D1.1 Step 4B Submit Design</a> (Tables 11 – 15 and 17).</p> <p>Re-alignment of the start point of STARS at the Northern Interface for Manchester and Liverpool arrivals and truncation of SIDs and re-alignment of the start point of STARS with the airports at the Eastern Interface have been made. The sponsor has removed contingency holds PLYMO and MERLY and has replaced the current contingency hold (OKESI) used for Heathrow arrivals with new hold (OCTIZ) to align with the revised route structure. The sponsor has submitted evidence that they have notified London City airport of the changes that apply to them. It is not possible to verify whether other relevant airports have received similar notification. The sponsor should ensure that notifications are provided.</p> <p>The CAA (Technical Regulator) agrees that these revisions are of a technical nature.</p> <p><u>Letters of Agreement</u></p> <p>Twenty-seven draft LoAs have been referenced. Those not already finalised and signed will need to be prior to implementation. This is addressed by way of a condition in B.6.2 below.</p>	
B.5.5	Is the change sponsor’s response to the issues raised appropriate/adequate?	Yes
	Revisions were made to the final airspace design considering the areas of concern raised by stakeholders as addressed at B.5.4 above. The sponsor has articulated their rationale within their submission. The sponsor conducted post-consultation engagement as discussed at B.5.4 above and has provided evidence of this engagement to the CAA. The sponsor has submitted twenty-seven draft Letters of Agreement to mitigate the impact of the airspace change on airspace users’ operations.	
B.5.6	Is the formal airspace change proposal aligned with the conclusions of the consultation response document?	Yes

	Yes, the sponsor is progressing consultation option 6 as their final design. This was the sponsor's preferred option, and it was supported by 80% of respondents to the consultation. Revisions were made to the design on account of consultation feedback. Technical amendments have been developed post-consultation. These revisions and amendments have been explained and post-consultation engagement activities referenced.	
B.5.7	Public Evidence Session Summary	N/A
	A Public Evidence Session may be convened by the CAA for a Level 1 airspace change. This ACP has been categorised as a Level 2A change.	
<b>B.6</b>	<b>RECOMMENDATIONS/CONDITIONS/PIR DATA REQUIREMENTS</b>	
B.6.1	Are there any Recommendations which the change sponsor <b>should try</b> to address either before or after implementation (if approved)? If yes, please list them below.	N/A
	<b><i>GUIDANCE NOTE:</i></b> Recommendations are something that the change sponsor <b>should try</b> 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.	
B.6.2	Are there any Condition(s) which the change sponsor <b>must fulfil</b> either before or after implementation (if approved)? If yes, please list them below.	Yes
	<ul style="list-style-type: none"> <li>- The solution which would allow faster climbing aircraft departing RAF Fairford to avoid potential level offs to be incorporated in the Letter of Agreement with RAF Brize Norton.</li> <li>- All relevant airports, not already notified, to be notified of the re-alignment of the start points of STARS and SID truncations at the Northern Interface and the Eastern Interface.</li> </ul> <p>All Letters of Agreement/Memoranda of Understanding to be finalised, agreed, and signed prior to implementation.</p>	
B.6.3	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.	Yes



	<p><b><u>STAKEHOLDER OBSERVATIONS</u></b></p> <p>The change sponsor is required to collate related stakeholder observations (enquiry/complaint data) and present it to the CAA. Any location/area from where more than 10 individuals have made enquiries/complaints must be plotted on separate maps displaying a representative sample of:</p> <ul style="list-style-type: none"> <li>• aircraft track data plots; and</li> <li>• traffic density plots</li> </ul> <p>The plots should include a typical days-worth of movements from the last month of each standard calendar quarter (March, June, September, December) from each of the years directly preceding and following implementation of the airspace change proposal.</p>
--	---

<b>PART C – Consultation Assessment Conclusion(s)</b>		
C.1	Does the consultation meet the CAA’s regulatory requirements, the Government’s guidance principles for consultation and the Secretary of State’s Air Navigation Guidance?	Yes
	<p>The fundamental principles of effective consultation are targeting the right audience, communicating in a way that suits them, and giving them the tools to make informative, valuable contributions to the proposal’s development. I am satisfied that these principles have been applied by the change sponsor before, during and after the consultation. I am also satisfied that the change sponsor has conducted this consultation in accordance with the requirements of CAP 1616, that they have demonstrated the Government’s consultation principles and that the consultation has:</p> <ul style="list-style-type: none"> <li>• Taken place when the proposal was at a formative stage – evidenced by the consultation strategy which stated that there was scope to change the proposal based on stakeholder feedback. This Gunning principle is evidenced by the revisions made by the sponsor to their final airspace design on account of stakeholder feedback.</li> <li>• Presented the consultation material clearly and outlined the potential impacts that needed to be considered – evidenced by the consultation document which, although aimed at an aviation expert audience, explained key technical terms clearly and was written in plain English. The sponsor provided stakeholders with a suite of materials that included an introductory video and a Google interactive map showing the routes in more detail. The sponsor addressed throughout their consultation materials the concurrent progression of this ACP with the introduction of FRA D2 in the higher-level airspace, outlining the interdependencies with FRA D2</li> </ul>	

	<p>and inviting stakeholders to consider the cumulative benefits and impacts presented in order to understand the “bigger picture”. The sponsor facilitated video meetings (webinars) with targeted stakeholder groups comprising a presentation on the LAMP 2 LD1.1 and FRA D2 proposed changes and a Questions and Answers session.</p> <ul style="list-style-type: none"> <li>• Provided a sufficient timeframe to allow considered responses – evidenced by a consultation duration of 12 weeks which is the accepted standard for consultation length outlined in CAP 1616. Considering the consultation was targeted at an aviation expert audience and that consultees were already familiar with the proposals, having been engaged at earlier stages in the CAP 1616 process, the duration was proportionate.</li> <li>• Taken into account the product of the consultation – evidenced by revisions made to the final airspace design on account of stakeholder feedback which are explained within the sponsors Step 4A: Update Design: Consultation Response Document.</li> </ul>
--	---

**Level 2A ACP**

<b>PART D – Consultation Assessment sign-off</b>			
	<b>Name</b>	<b>Signature</b>	<b>Date</b>
Consultation assessment completed by Airspace Regulator (Engagement and Consultation)	██████████		<b>28/09/2022</b>
Consultation assessment approved by Manager Airspace Regulation	██████████		<b>21/10/2022</b>
Consultation assessment conclusions approved by Head AAA	██████████		<b>28/10/2022</b>