Northern LTMA Region Airspace Change (OFJES, CLN CTA11/12, FL105+)

Gateway Documentation:
Stage 1 Define
Airspace Change Proposal
ACP-2025-023

Issue 1.0

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Change History

Issue	Month Year	Change in this issue
Issue 1.0	August 2025	Published on CAA portal

Roles

Action	Role	Date
Produced	Airspace Change Expert Operations Transformation	07/08/2025
Reviewed Approved	Airspace Implementation Manager Operations Transformation	07/08/2025
Reviewed Approved	Airspace Concepts Manager Operations Transformation	07/08/2025

Referenced Documents

Ref Num	Name and Link	
1.	Airspace Change Portal ACP-2025-023	Link
2.	Airspace Change Process CAP1616 (main document) and CAP1616f (detailed guidance)	Link to CAP1616 Link to CAP1616f

1. Introduction

1.1. Airspace change process

1.1.1. This document forms part of the document set required in accordance with the requirements of the UK Civil Aviation Authority (CAA) CAP1616 Airspace Change Process (Ref 2).

1.1.2. This airspace change proposal (ACP) is assessed by the CAA to be a scaled Level 2 For full details of the scaled process requirements, see the assessment meeting minutes and assessment meeting presentation on the CAA's airspace portal page (Ref 1).

1.1.3. The change sponsor is NATS En-Route Ltd (NERL) and, presuming approval of this ACP, we intend to implement the change on 19th March 2026 in line with AIRAC 03/2026.

1.2. History of this proposal

1.2.1. On 24 February 2022, an airspace change known as SAIP AD6 (ACP-2018-65) delivered new airspace and arrival routes (STARs) for London Luton Airport (LLA), and new controlled airspace (CAS) volumes at the northern edge of the London Terminal Manoeuvring Area (LTMA). This was successful, and improved safety in the region.

1.2.2. As the air traffic recovery from COVID continues, the base-step between CAS volumes CLN CTA11 (FL105) and CLN CTA12 (FL125) constrains controllers in their management of descent profiles, as they integrate arrival flows from the east (via waypoint OFJES) and from the south (via waypoint OXDUF).

1.2.3. This impacts ATC and cockpit workload because this CAS base constraint makes it more complex to merge the two flows.

1.3. Statement of Need (SoN)

1.3.1. The following text is extracted from the SoN for this proposal:

Objective: NATS seeks to mitigate high controller workload due to airspace congestion in commonly occurring traffic scenarios, to the north of the London TMA, for Luton Airport arrivals from the east. This will further improve aviation safety in the London TMA.

Issue to address: Luton Airport arrival flow convergence in this region causes congestion and ATC complexity. This has the potential to affect safety if left unresolved as traffic levels increase. This ACP intends to address the issue before safety is affected. A reduction in congestion and complexity would lead to ATC workload reduction and further improve safety in the region.

Current airspace design: Luton Airport arrivals from the east using BARMI[1], RINIS, XAMAN and TOSVA STARs via OFJES converge with arrivals from the south using UNDUG, TELTU and SIRIC STARs via OXDUF. Stream integration must occur in the area between OFJES and OXDUF. For STARs from the east, the base-step between CAS volumes CLN CTA11/12 constrains controllers in their management of descents as effectively as required, where there is a need for multiple vertical integrations between the two flows.

Current air traffic situation: Approximately half of Luton's arrivals use the STARs from the east, and about 30% use the STARs from the south. Therefore, this convergence/streaming integration covers c.80% of Luton arrivals. In 2023 there were c.65,000 Luton arrivals, in 2024 this rose to over 67,000. We expect this post-COVID recovery trend to continue and intend to modify the airspace design to further improve safety in the region.

[1] An alternate waypoint is now used for this STAR, see paragraph 2.2.5 on p.8 for details.

Consistent with AMS: This ACP intends to address a potential issue before safety is affected. This is consistent with the priority objective of the AMS to maintain and, where possible, improve the UK's high levels of aviation safety.

1.4. Summary of proposed change, and intended outcome

1.4.1. We believe the way to do so is to implement an airspace change to amend the CAS base-step boundary between CLN CTA11 and CTA12, which would provide two more flight levels for the OFJES arrival flow.

1.4.2. The intended outcome is to give ATC more flexibility to safely merge the two traffic flows.

2. Current day scenario

2.1. Area of scope and airspace design

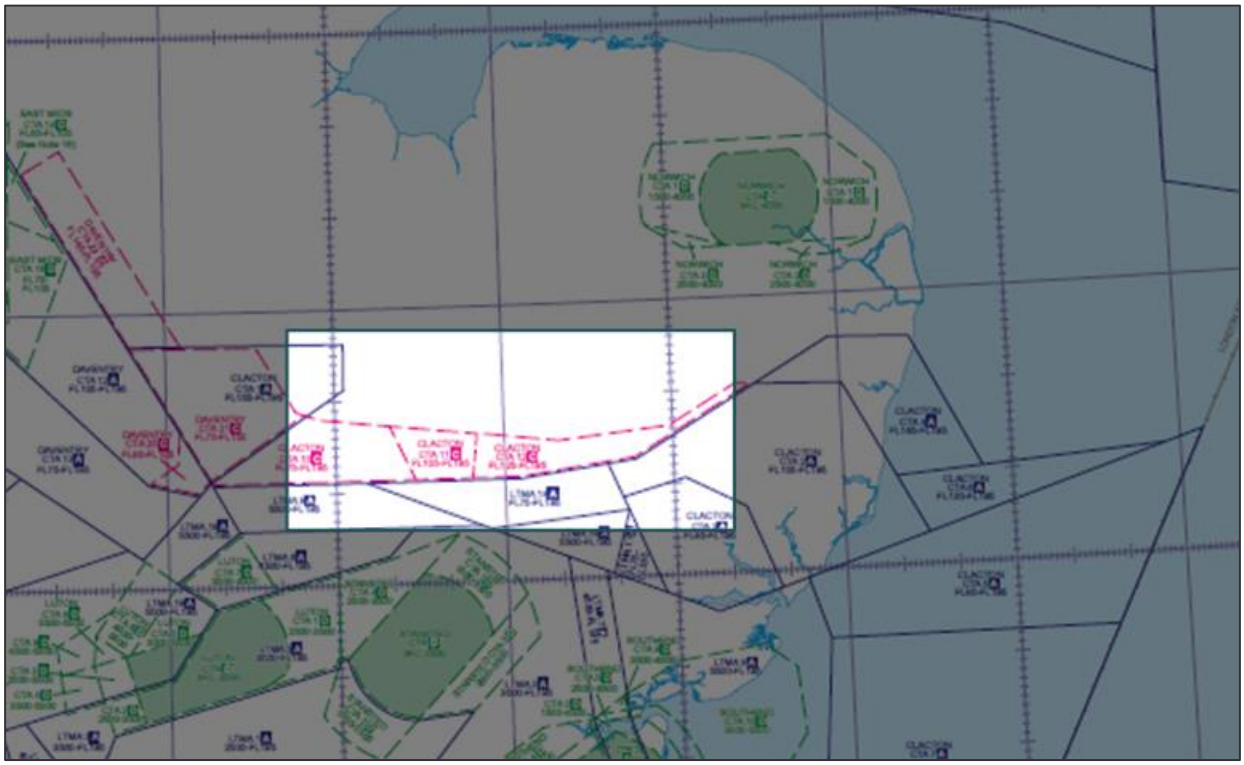

Figure 1 Region within scope, FL105 and above

2.1.1. An overview of the region within scope of this proposal is shown in Figure 1, at the northern edge of the LTMA near East Anglia.

2.1.2. The following diagrams show greater details of the air traffic flows, how those flows integrate, and the issue this causes at current traffic levels.

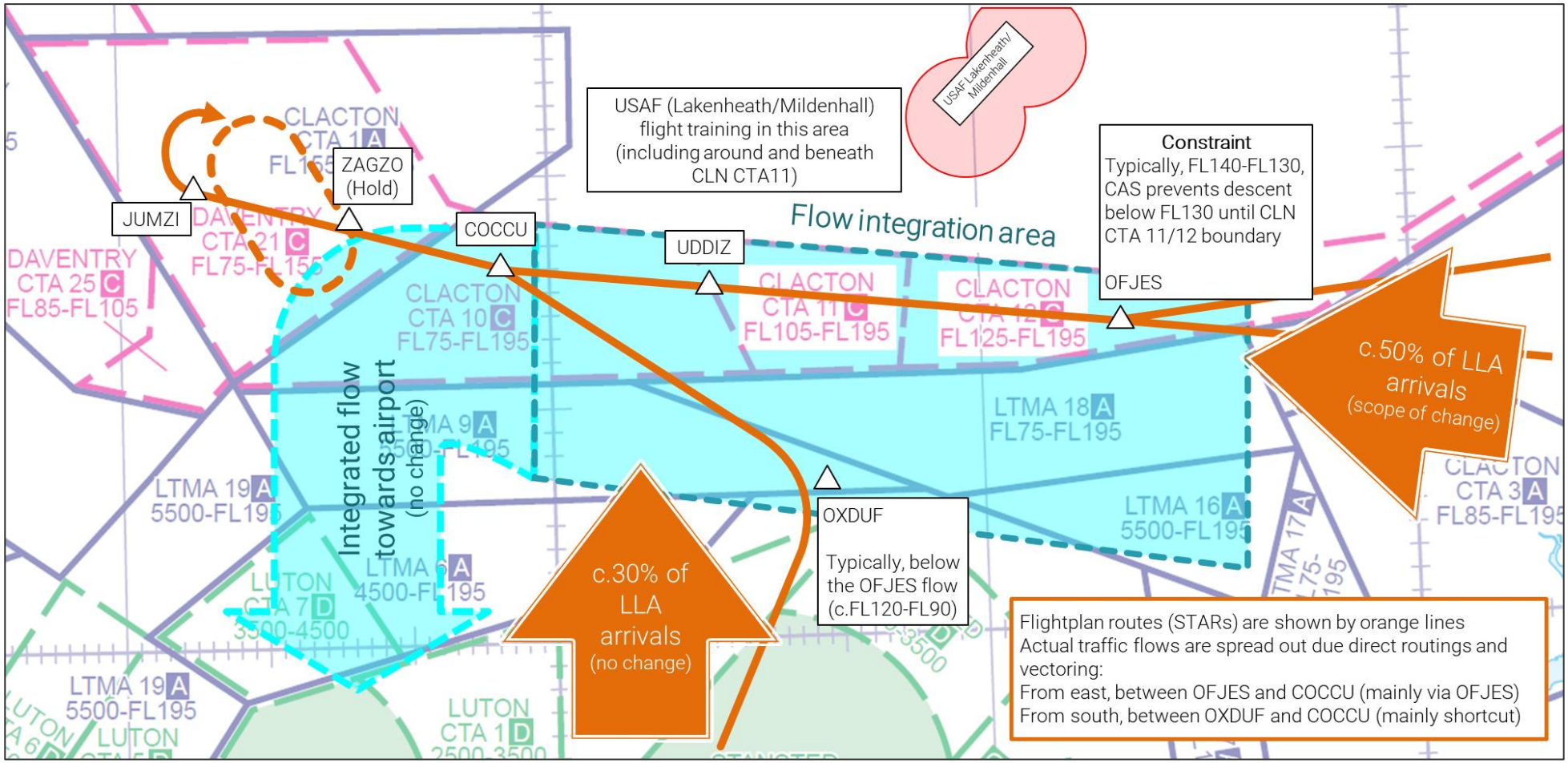

Figure 2 Schematic of relevant flows, the scope is CLN CTA11 and CTA12 in the region between OFJES and UDDIZ from FL105 and above

2.1.3. To the north of the region, the United States Air Force (USAF) operates two adjacent air bases, RAF[2] Lakenheath and RAF Mildenhall (see paragraph 2.5 on p.7).

2.1.4. On the next page, Figure 3 shows a flight trajectory density diagram from 1-31 May 2025.

[2] The USAF leases these bases which are owned by the Royal Air Force. In effect, they are historic RAF stations which host USAF.

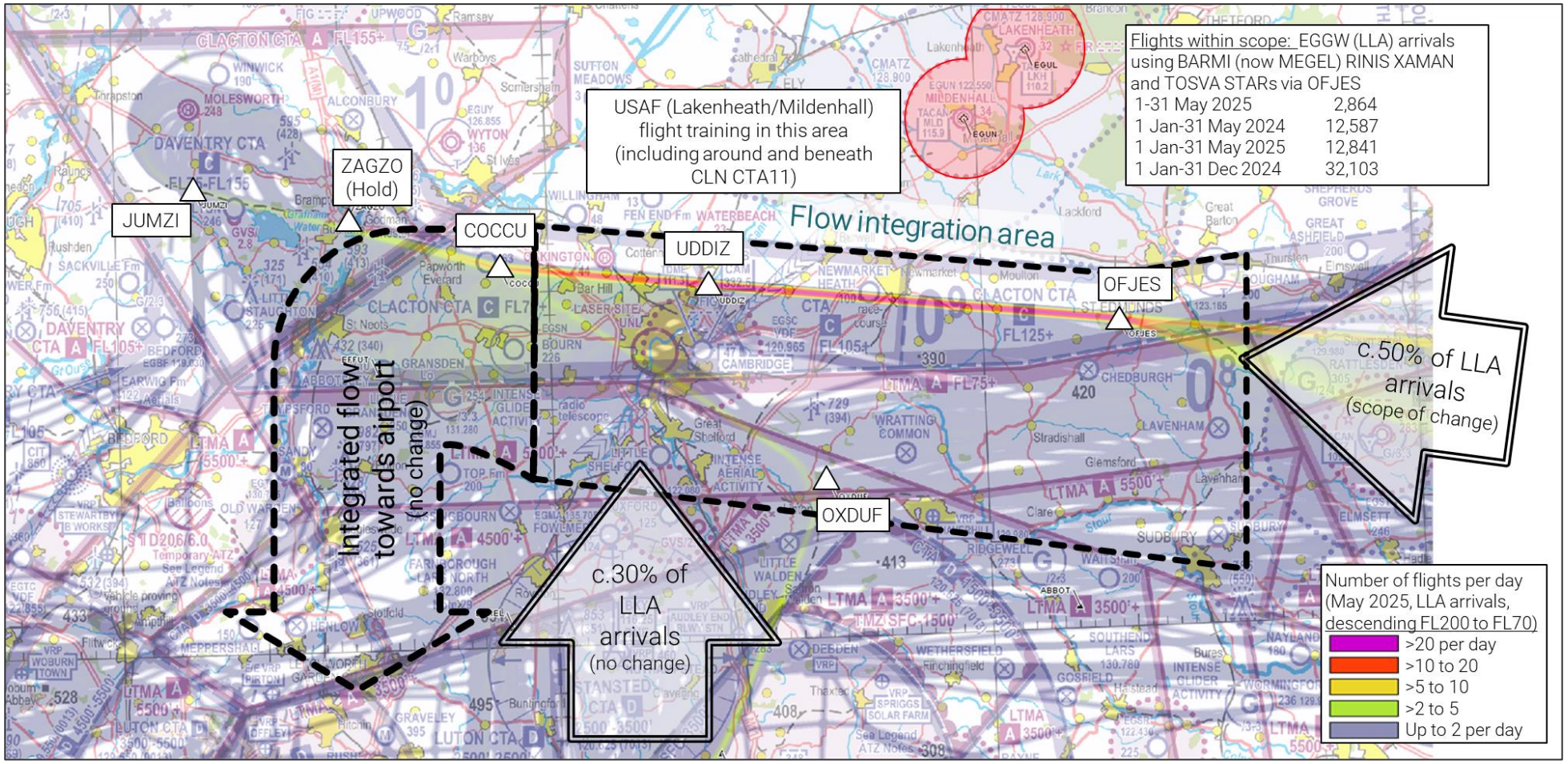

Figure 3 Flight trajectory density diagram covering the same region as Figure 2

2.1.5. Figure 3 shows a radar data sample of how the flows converge. From the east, most tend to follow the flightplan route via OFJES but there is a tactical spread which depends on the specific traffic situation at the time.

2.1.6. Arrivals from the south via OXDUF spread between the flightplanned route and a tactical spread towards COCCU. Only the OFJES flow from the east is within scope of this proposal, there would be no change to the OXDUF flow from the south.

2.1.7. This diagram only shows civilian air traffic using the air route network. USAF military flights operating in the vicinity of Clacton CTA11 are not shown.

2.2. Airspace usage, airlines, fleet mix, STARs and airspace volumes

2.2.1. Air traffic services (ATS) in the region are provided by NERL, the air navigation service provider (ANSP).

2.2.2. In the year 2024 there were 32,103 commercial airline flights in scope, all of which were LLA arrivals, using the OFJES arrival flow from the east.

2.2.3. Of these flights in scope, the most common airlines were Wizzair group (58.8% of that flow), EasyJet (17.7% of that flow) and Ryanair (7.1% of that flow).

Wizzair and EasyJet both use the Airbus A320 family of aircraft types in their fleets (76.5% of that flow), with Ryanair using the Boeing 737 family (7.1% of that flow).

Combined, these three airlines make up 83.6% of the OFJES arrival flow.

2.2.4. In 2023 there were c.65,000 Luton arrivals, in 2024 this rose to over 67,000. We expect this post-COVID recovery trend to continue.

2.2.5. The relevant STARs are EGGW London Luton, MEGEL1N, RINIS1N, XAMAN1N and TOSVA1N. There would be no change to any of these STARs under this proposal.

Note: on 20th February 2025 there was a technical change to one of the STARs via OFJES. Previously, this STAR started at BARMI (offshore to the far northeast, not shown in Figure 2 and Figure 3), but since AIRAC 02/2025 it was truncated to start at MEGEL (also offshore to the northeast and not shown). That technical change has no impact on this proposal, except for references to BARMI (2024) and MEGEL (2025) should be considered the same STAR/traffic flow for this purpose.

2.2.6. Clacton CTA11 (Class C, base FL105) and Clacton CTA12 (Class C, base FL125) are the two airspace structures within the scope of change.

2.3. Operational efficiency, complexity, choke points, delays, safety

2.3.1. The base-step between CAS volumes CLN CTA11/12 (Class C) constrains controllers in their management of descents as effectively as required, where there is a need for multiple vertical integrations between the arrival flows from the east (OFJES) and from the south (OXDUF).

2.3.2. This causes ATC and pilot workload, increasing complexity.

2.3.3. If we do not make a change now, traffic will continue to increase and ATC complexity will build, with the potential for a future increase in risk.

2.3.4. Safety is at the heart of everything we do, so when we identify a potential future safety issue, we act.

2.4. Non-aviation stakeholders and environmental matters

2.4.1. The scope of this airspace change is FL105 and above, which is well above the 7,000ft altitude below which environmental matters such as local air quality, noise, tranquillity and biodiversity impacts must be considered.

2.4.2. Metrics for greenhouse gas emissions are not expected to change under this proposal. Qualitative justification will be provided in Stages 2 and 3.

2.5. Military training and logistics in the region

2.5.1. To the north of the region, the United States Air Force (USAF) operates two adjacent air bases, RAF Lakenheath and RAF Mildenhall. They conduct fast-jet flight training and heavy logistics freight aircraft, among other military operations, in the vicinity of Clacton CTA11 and CTA12. They have several flight procedures defined beneath and/or adjacent to the CAS in this area.

3. Design Principles Engagement

3.1. Identification of Key Stakeholders

3.1.1. At this stage, stakeholders are limited to airspace users most likely to be impacted by the change. Military airspace users fall into this group.

3.1.2. USAF has close proximity and is a regular user of airspace around/beneath the area of this ACP at high flight levels in the region. Lakenheath Radar Approach Control, known as RAPCON, serves as a combined air traffic services unit (ATSU) for both RAF Lakenheath and RAF Mildenhall. USAF is a key stakeholder.

3.1.3. DAATM is the Defence Airspace and Air Traffic Management unit of the MoD. It is a focal point for all aviation matters which may impact military airspace and operations, collecting feedback from all branches of the military which may be impacted, to provide a single response. DAATM is a key stakeholder.

3.1.4. The region is rarely used by general aviation (GA) at flight levels relevant to this proposal, and impacts on other stakeholders are expected to be low[3]. We acquired initial evidence of minimal airspace occupancy by flights other than known airways traffic, USAF or MoD traffic[3]. However, there will be an engagement strategy provided during Stage 3 which will include identification of relevant GA organisations for wider engagement.

3.1.5. This ACP does not depend on the specific airlines or aircraft types of the commercial air traffic arriving from OFJES. However, there will be an engagement strategy provided during Stage 3 which will include identification of relevant airlines (see paragraph 2.2.3 above) and other relevant aviation organisations for wider engagement.

3.1.6. There are no non-aviation stakeholders relevant to this proposal (see section 2.4 above).

3.2. Summary of Early Engagement with Key Stakeholders

3.2.1. As part of the initial exploration of this proposal, in February and May 2025 we held online meetings[3] to brief these military airspace users on our plans for an airspace change.

3.2.2. These engagements identified that the change has the potential to impact RAPCON operations[3].

3.2.3. We used that feedback to develop five design principles: three Mandatory Design Principles (MDPs) common to all ACPs, and two Discretionary DPs (DDPs) based on the needs of our key stakeholders and our own objectives.

3.2.4. The MoD and USAF, via DAATM, subsequently provided confirmation[3] that these five DPs were acceptable, therefore the final DP list for this ACP matches the proposed DPs.

[3] See separate document "Stage 1 Engagement Evidence" at the CAA's airspace change portal under Ref 1.

4. Design principles list

MDP Safety	MDP1	The airspace change proposal must maintain a high standard of safety and should seek to enhance current levels of safety.
MDP Policy	MDP2	The airspace change proposal should not be inconsistent with relevant legislation, the CAA's airspace modernisation strategy or Secretary of State and CAA's policy and guidance.
MDP Environment	MDP3	The airspace change proposal should deliver the Government's key environmental objectives with respect to air navigation as set out in the Government's Air Navigation Guidance 2017.
DDP Technical (Ministry of Defence requirements)	DDP1	The airspace change proposal should be compatible with the requirements of the Ministry of Defence.
DDP Technical (Controlled airspace)	DDP2	The volume and classification of controlled airspace required for the provision of air traffic control services to IFR flights should be the minimum necessary to deliver an efficient airspace design, taking into account the needs of other airspace users.

Table 1 Design Principles, as engaged with MoD and USAF via DAATM, and agreed with same

5. Conclusion and next steps

5.1. Conclusion

5.1.1. We used engagement feedback from our key stakeholders to inform the development of appropriate design principles. These are presented above, and will allow a robust evaluation of design options.

5.2. Next steps

5.2.1. Due to the specific circumstances of this ACP, material relating to Stages 1 and 2 will be published simultaneously, with draft Stage 3 material submitted for approval also.

5.2.2. Presuming Stage 1 is passed at the combined gateway assessment meeting on 29th August 2025, the CAA will also assess our Stage 2 submission at the same gateway.

5.2.3. Likewise, presuming our Stage 2 submission passes, the CAA will then assess our draft Stage 3 submission (which is not published on the portal at the time of assessment, as per standard CAP1616 process).

5.2.4. Presuming our draft Stage 3 submission passes, the CAA will notify us that all three stages have passed, and we will prepare to commence formal engagement.

[End of Document]