Northern LTMA region airspace change (OFJES, CLN CTA11/12, FL105+)

ACP-2025-023

Wednesday 09 July 2025

Stage 1 Assessment Meeting

[redacted]

Operations Implementation Manager
Airspace Change Expert

NATS
Operations Transformation

Agenda

- Introduction
- Statement of Need (discussion and review)
- Issues or opportunities arising from the proposed change
- Options to exploit opportunities or address issues identified
- Current day scenario
- Provisional indication of the level and process requirements
- Provisional process timescales
- Safety case requirements
- Next steps
- AOB

Statement of Need – ACP-2025-023

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

- 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, 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.
- 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.

Background

- On 24 February 2022, ACP-2018-65 (SAIP AD6) delivered new airspace and STARs for Luton Traffic, which separated arrivals to Luton and Stansted.
- Arrivals to LLA from the east now route westwards along STARs and CAS volumes at the northern edge of the LTMA, and arrivals from the south join that flow in an area to the east of the LLA hold known as ZAGZO.
- This separation of Luton and Stansted arrivals achieved its aim and improved aviation safety in the region, compared with the original arrangement where arrival holding facilities were shared between Luton and Stansted. This is detailed in that ACP's Stage 7 post-implementation review, however the CAA's response is not yet published at time of this meeting*
- The review agreed a data collection period of Sept 2022-Sept 2023, in which there were 63,000 LLA arrivals. The post-COVID aviation recovery is underway, with over 65,000 arrivals in the 2023 calendar year, and over 67,000 in 2024. From 01 Jan to 31 May 2025 there were already 300 more flights than the same period in 2024, before the main summer period starts.
- As this recovery continues, the interaction management between the two main arrival streams becomes more constrained vertically, causing complexity for the controllers. This constraint has the potential to affect safety if left unresolved.

*Note that the PIR material for SAIP AD6 was published in July 2024, additional work was requested by the CAA in late December 2024, this work was completed and published in March 2025.

Opportunities and Issues Arising

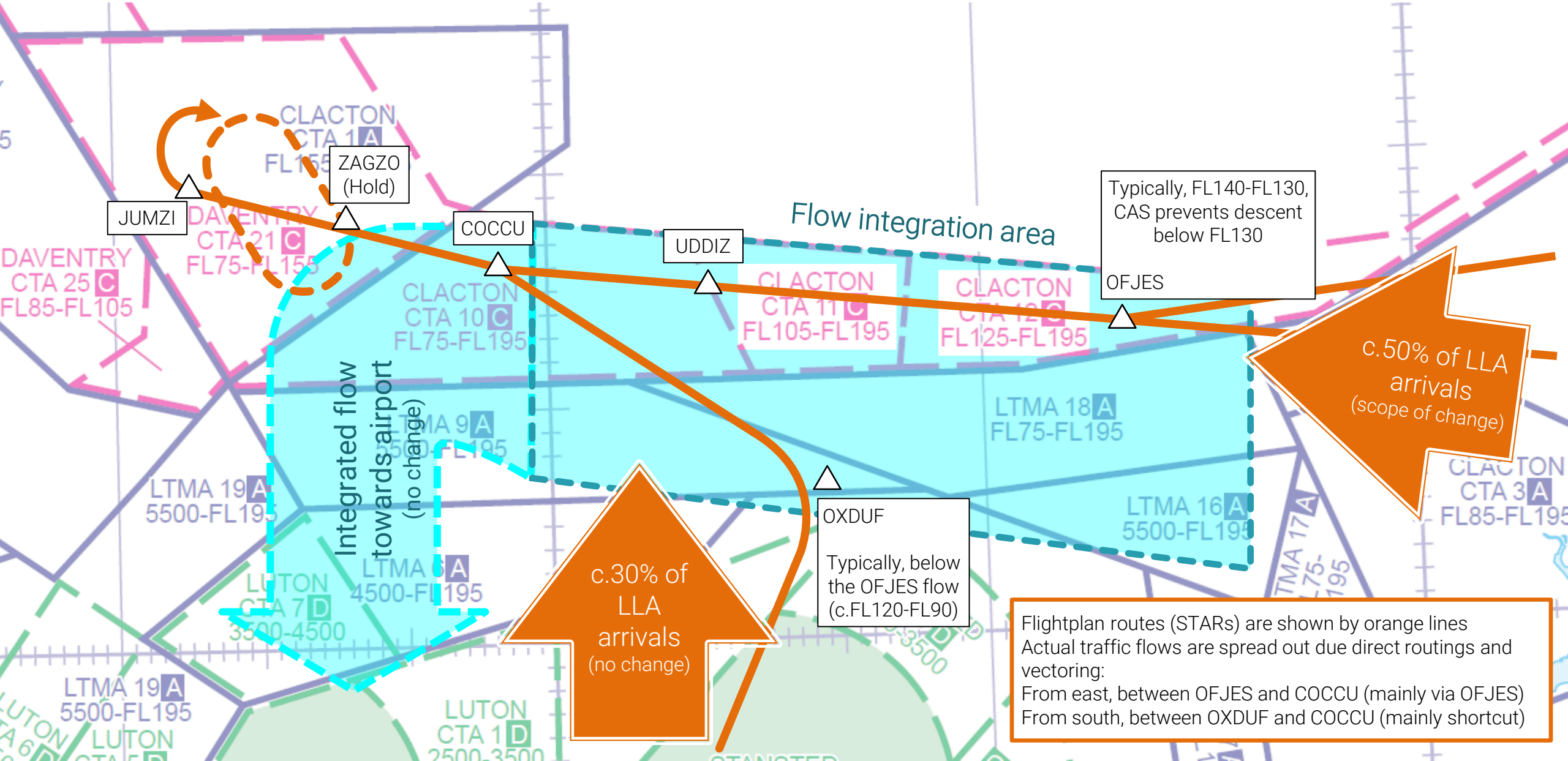
Main opportunity

- Safety would be maintained or improved by the timely resolution of a potential future issue

Minimal issues

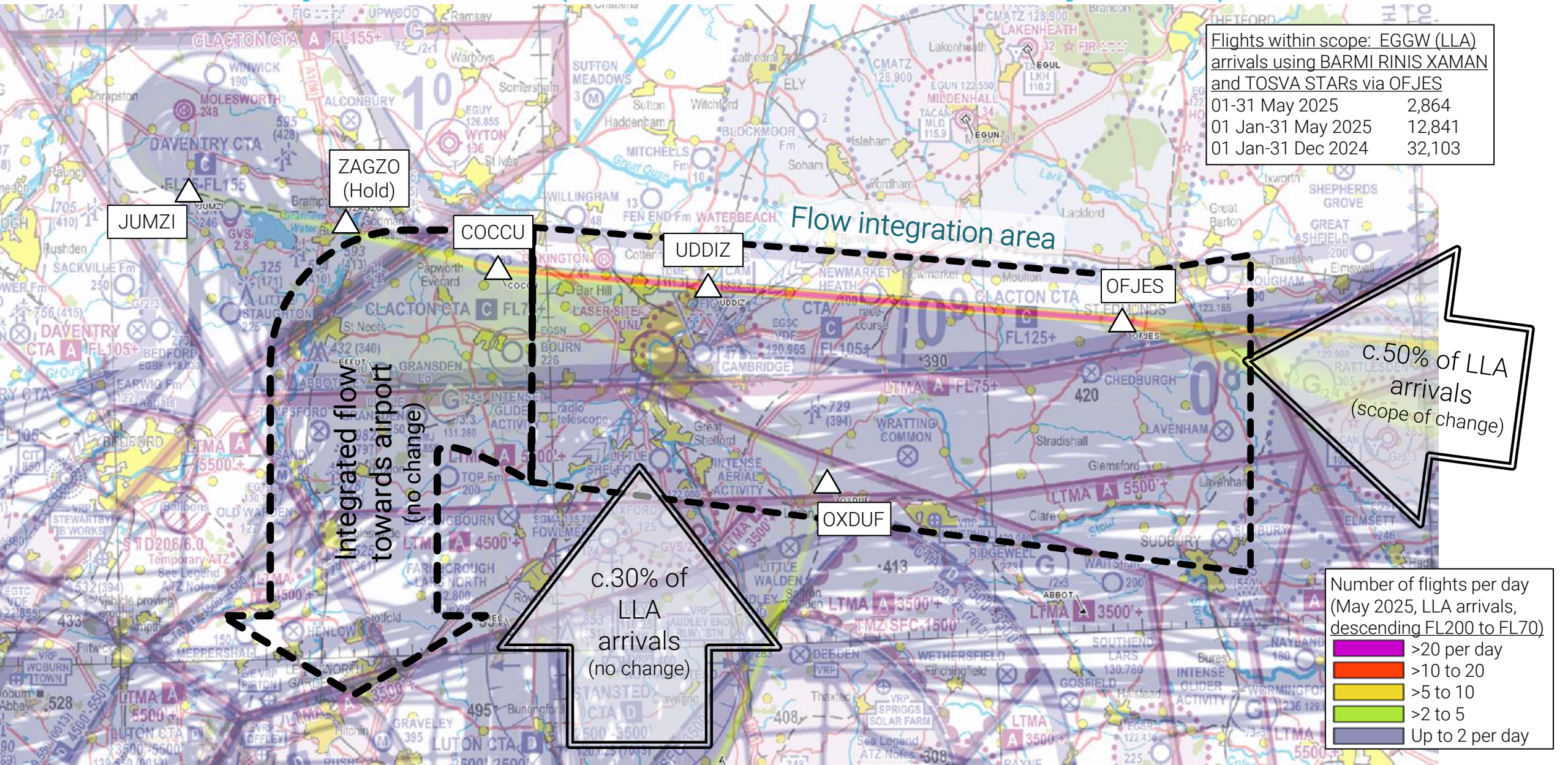
- Low predicted impacts on other airspace users (limited group of stakeholders)

Current Day Scenario (relevant flows shown)



Flightplan routes (STARs) are shown by orange lines
Actual traffic flows are spread out due direct routings and vectoring:
From east, between OFJES and COCCU (mainly via OFJES)
From south, between OXDUF and COCCU (mainly shortcut)

Current Day Scenario (LLA arrivals 01-31 May 2025)



Initial background for Engagement and Development

- 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 arrival flows from the east and from the south
- The principal concept for development involves increasing the number of flight levels available to the controller for arrivals from the east, allowing simpler flow integration – arrivals from the east often level off through the use of stepped descents on passing the base-step, impacting ATC and cockpit workload
    - We intend to mitigate this workload by making vertical integration simpler
- We included the text “FL105+” in the name of our ACP because our initial concept envelope exceeds FL100, to minimise impacts on other airspace users
- Transponder use is mandatory for all aircraft FL100+, rendering them ‘visible’ on radar
    - This assists with stakeholder identification, and evidence of usage in the region
- Operational procedures have been updated to the fullest extent possible, to mitigate the issue

Initial concept for development

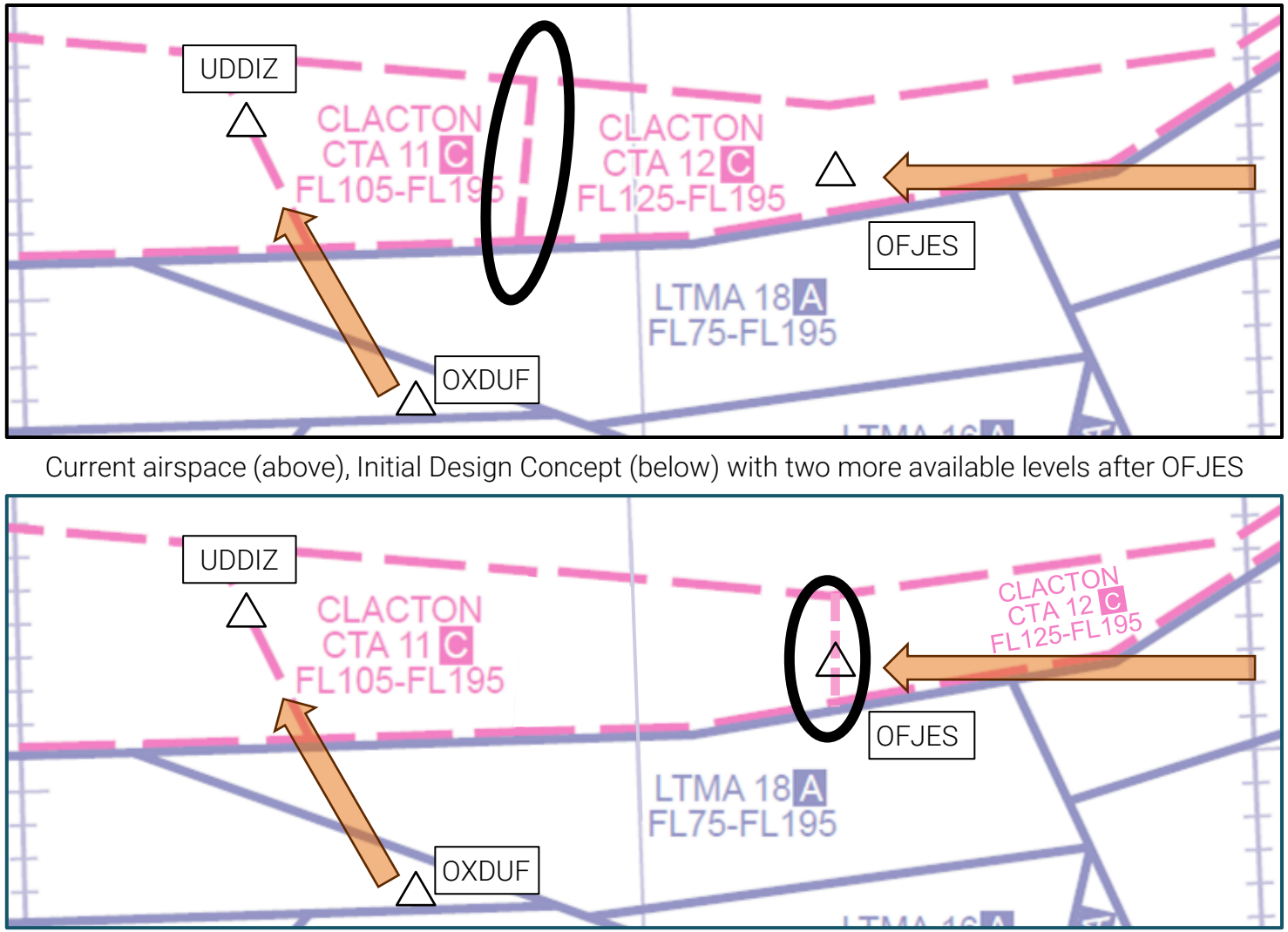
Design considerations: provide more levels for OFJES arrivals, simplifying ATC integration task with OXDUF arrivals (which would not change)

Concept: extend CLN CTA11 (base FL105) east to OFJES, reduce CLN CTA12 by equivalent volume

Outcome: two more levels would be available to ATC, west of OFJES

Impacts: Minimised on other airspace users – least CAS required

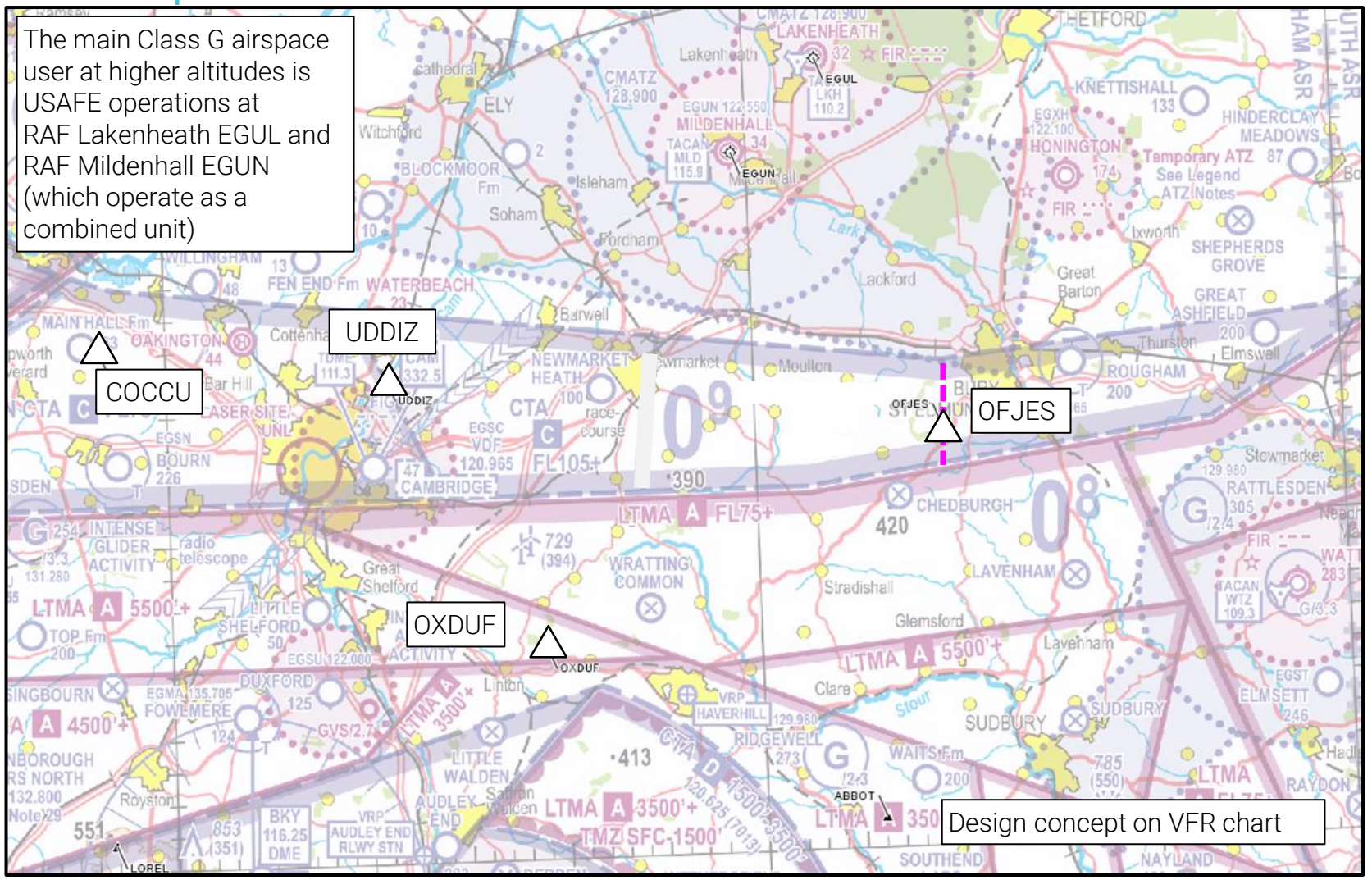
Simple: no change to overall lateral dimensions or STARs, with which users of this region are familiar



Current airspace (above), Initial Design Concept (below) with two more available levels after OFJES

Initial concept for development

VFR chart mock-up of design concept



Provisional Level, Process and Timeline Discussion

Level 3 change requested

- No predicted impact on non-aviation stakeholders (no change below 7,000ft)
- Low impact on commercial aviation stakeholders (minor change to vertical profile of some LLA arrivals)
- Low impact on other airspace users (pre-engagement exploratory discussion with MoD USAFE via DAATM where design concepts were discussed)

Engagement Strategy – targeted to relevant aviation stakeholders, 4-week period

- Further engagement with MoD (USAFE via DAATM), building on pre-engagement exploratory meetings
- Engage/inform London Luton Airport and Cambridge Airport
- Engage/inform relevant airlines (two airlines cover >75% of LLA arrivals from east, minimal impact)
- Engage/inform relevant GA groups (noting impacts below FL100 would be negligible) including relevant NATMAC member organisations

Discussion topics:

- No predicted environmental impact (fuel/CO_2e, noise, HRA not required)
- Engage using evidence of other airspace users in the region FL100+
- Target implementation – 19 Mar 2026 (AIRAC 03/2026)

Target AIRAC 03/2026

Significant event	Date	Notes/Assumptions
Assessment Meeting and associated admin	Wed 09 Jul 2025	This presentation was sent in advance
Stage 1 Define complete	Wed 16 Jul 2025	Confirmation of level, agreeing the minutes, upload presentation to portal etc
Stages 2-3 Develop & Assess, HRA and Engage	Mon 21 Jul 2025	Engagement preparation 4 weeks engagement period Consider feedback ACP writing and reviewing
Stage 4 Submit ACP	Fri 26 Sep 2025	
Stage 5 Decide	CAA decision Fri 28 Nov 2025	AIS deadline Fri 12 Dec 2025
Target Implementation AIRAC	Thur 19 Mar 2026	AIRAC 03/2026 (Single AIRAC cycle)

Safety Case Requirements

- Simplifying flow integration mitigates the potential for a future increase in safety risk

Next Steps

- Complete Stage 1 of CAP1616:
  - Agree Assessment Meeting minutes – confirm there is no need for HRA
  - Upload redacted minutes and presentation to portal
  - Agree timeline, and statement of CAA's provisional level

- Continue with further stages of CAP1616h for Level 3 (presuming L3 allocated)
  - Confirm stakeholder list
  - Engage, and acquire feedback
  - Submit ACP documentation in line with CAP1616h

AOB, questions

Thank you