

New waypoint on London FIR/UIR boundary near RINTI



NATS

Gateway Documentation:
Stage 4 Update and Submit
Airspace Change Proposal
ACP-2024-048

V1.0

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Change History

Issue	Month Year	Change in this issue
Issue 1	November 24	First issue

Roles

Action	Role	Date
Produced	Airspace Change Specialist Airspace & Future Operations	11/2024
Reviewed Approved	Airspace Implementation Manager Airspace & Future Operations	11/2024
Reviewed Approved	Airspace Concepts Manager Airspace & Future Operations	11/2024

Referenced Documents

Ref Number	Name and Link	
1.	Airspace Change Portal ACP-2024-048	Link
2.	Airspace Modernisation Strategy (AMS)	Link
3.	Air Navigation Guidance (2017)	Link

1. Introduction

1.1. Background

- 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.
- 1.1.2. At the Assessment Meeting, this Airspace Change Proposal (ACP) was assessed by the CAA as a scaled Level 3 change, and therefore follows the process requirements stipulated in CAP1616H. The scaled process requirements for this are documented in the Assessment Meeting minutes, published on the CAA ACP portal page (Ref 1).
- 1.1.3. The change sponsor for this change is NATS En Route Limited (NERL).

1.2. Drivers for Change

- 1.2.1. This proposal is driven by a request from the French Air Navigation Service Provider (ANSP) DSNA for a minor readjustment to the south easterly London to Reims cross border traffic flow to better suit their future operation. They require a new co-ordination point (COP) on the French/UK airspace boundary to be established for inclusion in the next phase of their Free Route Airspace (FRA) development programme.

1.3. Aims of the Proposal

- 1.3.1. As well as supporting French airspace modernisation plans, this change supports the UK plan for delivery of the Airspace Modernisation Strategy (AMS) by providing improved flight efficiency.

1.4. Assumptions and Constraints

- 1.4.1. The location of the new COP is agreed by all parties and is fully compatible with future FABEC led cross border improvement plans as known at this point..

1.5. Summary of Proposed Changes

- 1.5.1. DSNA are introducing a new COP (UTFAV) 2.5NM west of RINTI. This ACP proposes that departing traffic from London Gatwick (EGKK) and London Luton (EGGW) airports currently routing via RINTI, will file via the new COP. Connectivity within London FIR to the new point will be via flight plannable DCTs. This will provide flight plannable fuel efficiencies for this traffic.

1.6. Timeline for implementation

- 1.6.1. This ACP needs to be co-ordinated with changes initiated by French ANSP (DSNA).
- 1.6.2. It is intended to implement this ACP in May 2025 (AIRAC 25/05).

2. Stage 1: Define

2.1. Statement of Need

- 2.1.1. The Statement of Need (DAP1916) was submitted in October 2024 as below:

Objective:

Addition of a new co-ordination point (COP) on the London / France airspace boundary, to facilitate the introduction of FRA within French airspace and optimise FRA trajectories.

Issue/opportunity to be addressed:

DSNA Reims will be introducing Free Route Airspace. They have requested a new waypoint on London FIR/UIR boundary to the west of RINTI.

Current airspace design:

Currently, traffic from London Gatwick and London Luton airports route on L10 within London FIR/UIR to RINTI COP to join UL10 within French FIR/UIR. Traffic must have a requested flight level (RFL) of FL350 and above and only to specific short-haul destinations due to French operational requirements.

Current prevailing air traffic situation:

Departures from London Gatwick - approximately 3,700 per annum

Departures from London Luton - approximately 1,250 per annum

All traffic is above FL200 at current COP RINTI.

2.2. Current Day Scenario:

Airspace Design & Usage

- 2.2.1. Figure 1 shows the area within scope of this change proposal, as described in the Statement of Need.

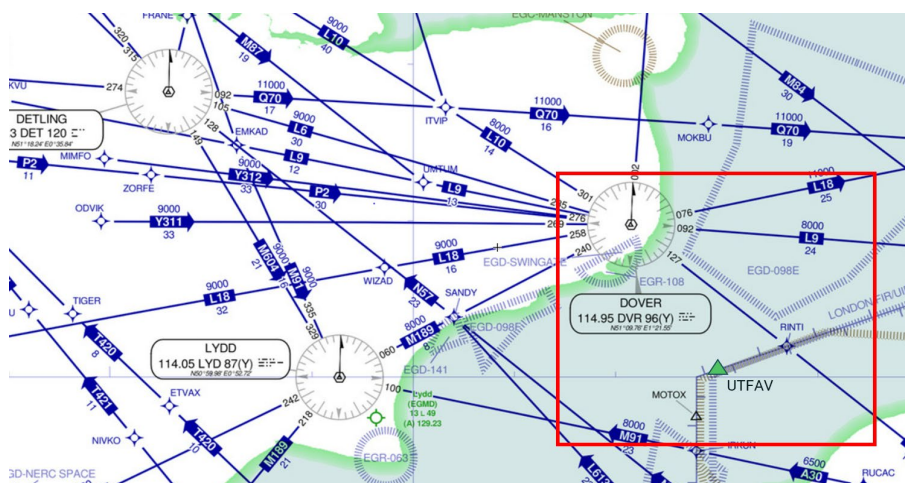


Figure 1 Area of Scope for proposed changes. UTFAV is the new French COP.

- 2.2.2. RINTI is a co-ordination point (COP) on the London/Paris FIR boundary, connected to ATS route L10. New COP 'UTFAV' is indicated by the green triangle in Figure 1, to the southwest of RINTI on the FIR border.
- 2.2.3. Currently, London Luton /London Gatwick departures with RFL (requested flight level) above FL345 are permitted to file via RINTI (this is due to onwards connectivity requirements in French airspace).

- 2.2.4. Traffic departing London Gatwick currently flight plans MIMFO/ODVIK – DVR - ATS Route L10 - RINTI, as shown in Figure 2. The track mileage for this section is 45.4NM.
- 2.2.5. Traffic using this route per annum: 3,715 flights. (1/12/23–1/11/24). London Gatwick traffic routinely shortcuts to bypass DVR, turning west of RINTI as shown.
- 2.2.6. Traffic typically routes via ODVIK and is FL153 at ODVIK. The minimum level at ODVIK is FL140.

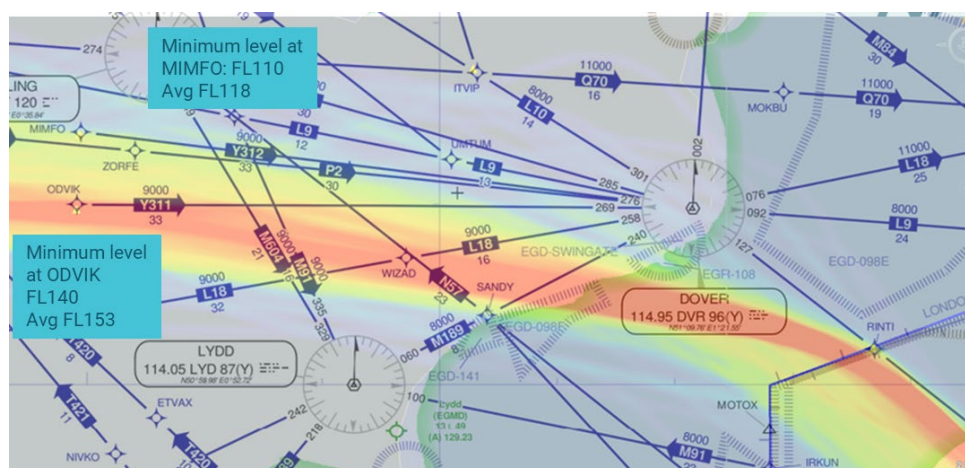


Figure 2 London Gatwick traffic via RINTI - extant airspace design and usage (traffic density: October 2024)

- 2.2.7. Traffic departing London Luton airport currently flight plans ITVIP- L10 - DVR - L10- RINTI, as shown in Figure 3. The track mileage for this section is 26.2NM.



Figure 3 London Luton traffic via RINTI - extant airspace design and usage (traffic density: October 2024)

- 2.2.8. Traffic using this route per annum: 1,274 flights. (1/12/23–1/11/24). Traffic often takes a more direct routing, to the west of RINTI, as shown.
- 2.2.9. Traffic is typically FL235 at ITVIP. The minimum level at ITVIP is FL200.
- 2.2.10. easyJet and Wizzair are the most prevalent airlines, with 70% of all affected traffic.
- 2.2.11. Aircraft types are typically medium jets, primarily the Airbus A319/A320 or A20N/A21N models.
- 2.2.12. The relevant airspace is Class A to FL195, Class C above FL195. Within London UIR, air traffic services (ATS) are provided by NATS ANSP.

Operational efficiency, complexity, choke points, delays

- 2.2.13. As shown above, traffic routinely takes a tactical shortcut, in particular the London Gatwick traffic. A more efficient option would be a flight plannable routing which tracks this more direct route, to reduce track miles and enable flight plannable fuel savings.

2.3. Design Principles

- 2.3.1. The CAA assessed that this ACP is only required to utilise the mandatory design principles. Design options are evaluated against these.

Mandatory Design Principles (CAP1616 Ed.5)	
MDP Safety	The airspace change proposal must maintain a high standard of safety and should seek to enhance current levels of safety
MDP Policy	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	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.

3. Stage 2: Develop and Assess

3.1. Design Option Development:

- 3.1.1. As DSNAs have determined the location of the new COP as part of their FRA development, and requested the reallocation of traffic, there is a single design option for this ACP.
- 3.1.2. The proposal is to introduce new COP, UTFAV, 2.5NM west of RINTI. (Figure 4). Within London FIR, flight plannable direct routings (DCTs) will provide connectivity.
- 3.1.3. Figure 4 shows the new COP and current and proposed routings for London Gatwick traffic.

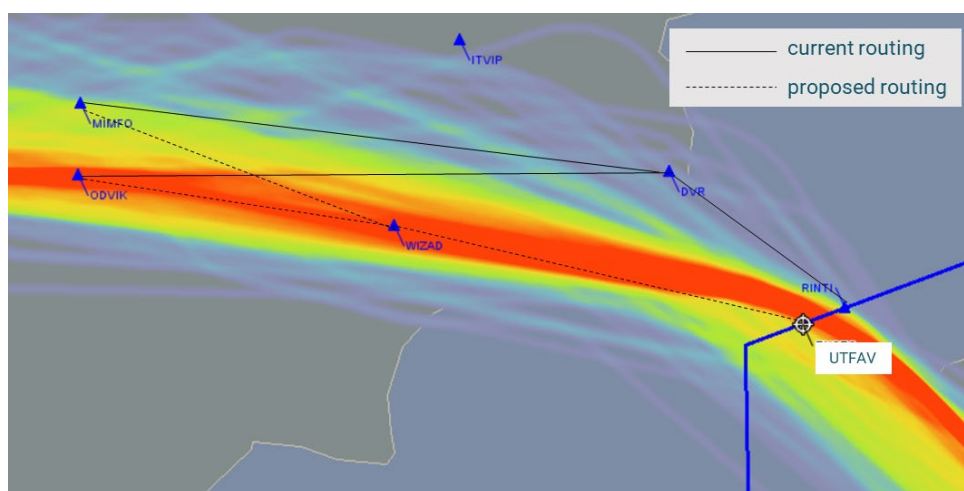


Figure 4 Design option for London Gatwick traffic

MIMFO DCT WIZAD DCT UTFAV = 42.2NM. This is 3.2NM shorter than current day. Approximately 2,500 flights per annum = flight plannable saving of 8,000 track miles p/a.

ODVIK DCT WIZAD DCT UTFAV = 41.3NM. This is 4.1NM shorter than current day. Approximately 1,200 flights per annum = flight plannable saving of 4,920 track miles p/a.

- 3.1.4. Figure 5 shows the new COP and current and proposed routings for London Luton traffic.

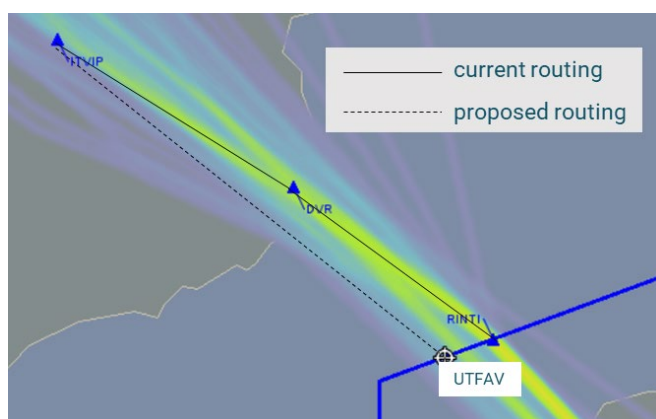


Figure 5 Design option for London Luton traffic

ITVIP DCT UTFAV = 24.8NM. This is 1.4NM shorter than current day. Approximately 1,275 flights per annum = flight plannable saving of 1,785 track miles p/a.

- 3.1.5. The new COP and DCT routings should enable flight plannable track mileage savings of approximately 14,705 NM per annum over current day. This will enable flight efficiencies.

3.2. Design Principle Evaluation

- 3.2.1. The design option was qualitatively assessed against the design principles. All design principles are assessed to be met, and the design option was progressed to Stage 3, Consult/Engage.

Table 1 – Design Principle Evaluation & Proposal Impacts

MDP Safety	MET	This change will maintain current safety levels. Traffic will flight plan as per tactical operation today.
MDP Policy	MET	<p>This proposal maintains safety, in conjunction with AMS 'end' Safety:</p> <p>Supports the implementation of Free Route Airspace and meets international obligations to reduce CO₂e emissions.</p> <p>Reduces the requirement for controller intervention to provide shorter routings, supporting AMS end 'Simplification'.</p> <p>Optimises flight efficiency by providing short flight plannable routings (AMS 'end' Environmental sustainability).</p>
MDP Environment	MET	<p>This change optimises flight efficiency by reducing track miles for the affected routings, which will enable flight plannable fuel & CO₂e savings. This is in line with the environmental objective to contribute to the reduction of global emissions (ANG 2017).</p> <p>No impacts on aircraft noise or local air quality emissions as all changes are above 7000ft.</p>

3.3. Habitats Regulation Assessment

- 3.3.1. Q1. Are there any changes to air traffic patterns or number of movements expected below 3,000 feet due to the airspace change proposal?
- 3.3.2. No. The changes are all above 7000ft and affect traffic over the sea. The Habitats Regulation Assessment is not required.

4. Stage 3: Consult / Engage

4.1. Engagement Strategy

- 4.1.1. This engagement strategy describes the objectives, intended audience, engagement materials and engagement activities, which demonstrates how we facilitated effective engagement with our relevant stakeholders for this change proposal.
- 4.1.2. This is a Level 3 ACP, with a single design option, which primarily replicates tactical activity undertaken today.
- 4.1.3. The drivers for change are to complement the introduction of Free Route Airspace within France, and to enable flight plannable environmental benefits.
- 4.1.4. Given the nature of the change proposed, it was agreed with the CAA that targeted engagement with relevant stakeholders is appropriate for this change proposal, rather than full consultation.

4.2. Objectives

- 4.2.1. The objectives of the engagement are:
 - to share design options in their formative stage with relevant stakeholders, informing stakeholders of the impacts of each design option
 - to obtain their views on the proposals and consider any feedback in the design.

4.3. Engagement Audience (Stakeholders)

- 4.3.1. Given the nature and location of the change proposed, with minimal impacts and some minor flight efficiency benefits, NERL have limited relevant stakeholders to:
 - DNSA: the French ANSP requested the change. Engagement with DSNA has been through emails and Teams meetings to determine the change requirements and develop the change proposal. They did not receive the engagement briefing pack as they were separately engaged with.
 - Ministry of Defence (MoD): engaged through Defence Airspace and Air Traffic Management (DAATM). DAATM 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.
 - easyJet and Wizzair: these 2 airlines comprise 70% of traffic on the affected routes. In the interests of minimising stakeholder fatigue, and the small scale of the proposed changes, it is assessed that feedback from these 2 airlines on the proposed changes would be proportionate as a representation.
- 4.3.2. Outside of the formal ACP engagement, NERL will inform airlines through the Lead Operator Carrier Panel (LOCP), which is usual practice for the introduction of direct routings and similar scale changes which do not require an ACP. This will be done at the next meeting, 4 December 2024.
- 4.3.3. Only the organisations listed were formally contacted for feedback. However, NERL welcomes feedback from any individual or organisation which considers the changes within this ACP may impact them.

4.4. Engagement materials

- 4.4.1. A briefing pack was produced for stakeholders, describing the scope of the proposed changes, and the drivers for change. The current day scenario is described, including airspace design and airspace usage for the last 12 months, using radar data.
- 4.4.2. The single design option is described, and diagrams used to indicate change. A qualitative assessment of the impacts is provided. See Annex A: Engagement Material.

4.5. Engagement Activity

- 4.5.1. The briefing pack was sent via email to stakeholders on 7 November 2024. Stakeholders were given 2 weeks to provide feedback on the proposed changes, with responses requested by 21 November.
- 4.5.2. This is deemed proportionate for this engagement given the nature of the proposed changes. There were no public or school holidays within the time period.

4.6. Engagement Summary & Response

- 4.6.1. We received responses from all stakeholders, shown in Table 2:

Table 2 Component 1: Engagement feedback

Stakeholder	Response	Comments
MoD	Support	Response via email: The MoD have no major concerns or objections and expect the impacts on MoD operations will be negligible.
easyJet	Support	Response via email: Requested further information (lat/longs for UTFAV), which were provided via email. They further responded they are happy the waypoint is added; that it will provide fuel savings and will provide a positive benefit.
WizzAir	Support	Response via email: Stated that the change would be beneficial. Provided some detail on required flight levels at RINTI which are linked to DSN procedures and not the proposed changes. Further detail was provided via email and no further comment was received.

5. Stage 4: Update & Submit

5.1. Final Design Option & Impacts

5.1.1. We received no feedback which may impact the design, so we progress the design as described in Section 3.

5.1.2. Following the engagement, the final design options are summarised in Table 3. Appendix B describes the AIP Changes required.

Table 3 Summary of proposed airspace changes & impacts

Current structure / routing	Proposed structure / routing	Summary of Change/Impacts
MIMFO - ATS Route Y312 - DVR - ATS Route L10 - RINTI	MIMFO – new DCT - WIZAD – new DCT - UTFAV	New COP (UTFAV). The new flight plannable DCTs reduces track mileage (3.2NM per flight) and enables flight plannable fuel/CO ₂ e benefits for approx.2,500 flights per annum. This is approximately 8,000 track miles per annum.
ODVIK - ATS Route Y311 - DVR - ATS Route L10 - RINTI	ODVIK – new DCT - WIZAD – new DCT - UTFAV	New COP (UTFAV), new flight plannable DCTs. Reduces track mileage (4.1NM per flight) and enables flight plannable fuel/CO ₂ e benefits for approx. 1,200 flights per annum. This is approximately 4,920 track miles per annum.
ITVIP - ATS Route L10 - DVR - ATS Route L10 - RINTI	ITVIP – new DCT - UTFAV	New COP (UTFAV), new flight plannable DCTs. Reduces track mileage (1.4NM per flight) and enables flight plannable fuel/CO ₂ e benefits for approx. 1,275 flights per annum. This is approximately 1,785 track miles per annum.

5.1.3. RINTI will be retained for traffic on B3 at <FL195.

5.2. Regulations, Policies and Harmonisation

5.2.1. The following regulations and policies will be complied with in delivery of this airspace change:

Policy	Adherence
UK Airspace Modernisation Strategy (Ref 1)	<p>Design options have been evaluated against the 'ends' of the AMS.</p> <p>Safety: the final design will maintain current safety levels.</p> <p>Environment: Facilities more efficient flight plannable routings for commercial airspace users.</p> <p>Simplification: reduces complexity and workload by reducing the need for tactical intervention from ATC.</p>

5.3. Anticipated Operational Impacts

Air Navigation Service Providers (ANSP)

- 5.3.1. This change is being implemented to support French Free Route Airspace, in conjunction with DSNA ANSP. The COP location and traffic routing has been agreed with DSNA. Letters of Agreement will be revised in line with the proposed changes. Draft versions showing the changes are supplied to the CAA with this submission.

Military Impacts

- 5.3.2. No anticipated impacts

Commercial Airspace Users

- 5.3.3. This change will have minimal operational impact for airspace users. Airlines utilising affected routes will benefit from reduced track mileage and flight plannable fuel efficiencies. The two airlines most affected by the proposal have shown support.

Relevant Airports

- 5.3.4. This change will have minimal operational impact for airports. The provision of a shortcut route direct to UTFAV will provide flight efficiencies for London Gatwick and London Luton filing this route. There will be no changes to airport procedures.

Other Airspace users

- 5.3.5. There will be no impacts on other airspace users.

5.4. Safety

- 5.4.1. The current airspace design is based on historical SIDs, which used to end at DVR. The SIDs have since been truncated for more efficient routings. Traffic is now routinely tactically directed to a more direct routing, which this ACP will replicate.
- 5.4.2. Service Improvement feedback from the Operational Units has identified this change would raise no issues within the terminal and en-route environment. The new flight plannable routes would reduce controller workload and drive better route consistency.
- 5.4.3. The required system updates would ensure current safety levels are retained, and RINTI would be removed from the available direct route options.

5.5. Environmental Assessment

- 5.5.1. As described in Table 3, the new COP and flight plannable DCTs will reduce the track mileage for affected traffic by 1-4NM per flight. This will enable flight plannable fuel and CO₂e efficiencies for all traffic utilising these routes.
- 5.5.2. Based on current traffic levels, this is approximately 14,700 NM per annum.

5.6. List of Supplementary documents

- 5.6.1. The following documents provide further information on the proposed designs and are supplied to the CAA with this submission:
- Draft LoAs showing amendments - Paris and Reims
 - Engagement evidence pack
 - Aerodata spreadsheet

6. Appendix A: Glossary

Acronym	Definition
ACP	Airspace Change Proposal - the formal process by which changes to the design or structure of airspace are proposed and evaluated. This process involves collaboration between stakeholders, regulatory authorities, and the public to assess the potential impacts of proposed changes and make informed decisions, currently under CAP1616..
AIP	Aeronautical Information Publication – contains static aeronautical data, which is updated regularly, on the regulation, procedures, and other information pertinent to flying aircraft in the particular country to which it relates. The AIP is made up of three parts relating to general, en route and aerodrome information.
ANSP	Air Navigation Service Provider - an organisation or agency responsible for managing and providing air traffic control, navigation, and other air traffic services within a specific airspace region.
AMS	Airspace Modernisation Strategy - produced by the CAA and Department of Transport, it sets out the ends, ways and means of modernising UK airspace through a series of 'delivery elements' that will modernise the design, technology and operations of airspace.
ATC	Air Traffic Control - a service provided by ground-based controllers to guide and manage the movement of aircraft within airspace. ATC ensures safe separation between aircraft, issues clearances, and provides assistance to pilots, contributing to the overall safety and efficiency of air travel.
ATS	Air Traffic Service - a system that provides for the safe and efficient movement of aircraft within airspace.
COP	Coordination point – waypoint on the FIR boundary between neighbouring ANSPs
FL	Flight level - a standard measure of altitude used in aviation, particularly in high-altitude cruising. Flight Level is expressed in hundreds of feet and is based on a standard atmospheric pressure at sea level.
UIR	Upper Information Region -flight information region in upper airspace

7. Appendix B: AIP Changes

ENR 4.4 NAME-CODE DESIGNATORS FOR SIGNIFICANT POINTS

Add new point as per Aerodata spreadsheet:

UTFAV: 51°01'07.8322"N 001°33'06.7482"E

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