

Network Improvements on the UK Dover (DVR) Interface

Gateway Documentation:
Stage 1 Define
ACP-2025-006

NATS

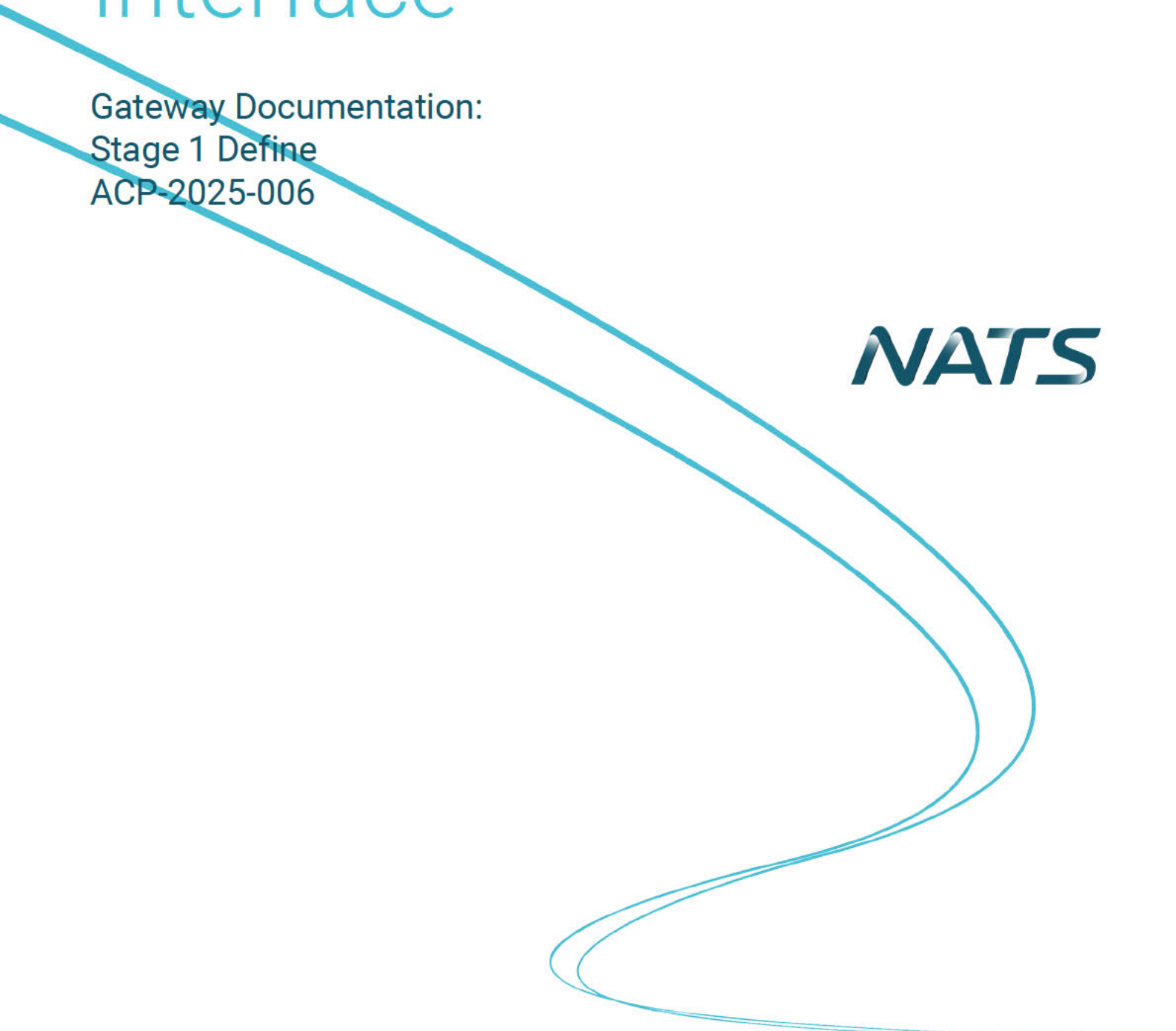
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Change History

Issue	Month Year	Change in this issue (most recent first)
Issue 1	June 2025	First issue

Roles

Action	Role	Date
Produced	Airspace Change Specialist Airspace Change Compliance & Delivery	June 2025
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Reviewed Approved	Airspace Implementation Manager Airspace and Future Operations	June 2025

Referenced Documents

Ref Number	Name	Link
1.	CAP1616: Airspace Change Process	Link
2.	CAP1616f: Guidance on Airspace Change Process for Permanent Airspace Change Proposals	Link
3.	Statement of Need	Link
4.	Assessment Meeting Minutes	Link
5.	Airspace Change Portal	Link
6.	ERNIP Part 2. ARN Version 2024 – 2030	Link
7.	Engagement Presentation	Link

1. Introduction

1.1. Background

- 1.1.1. This document forms part of the Stage 1 activities as set out in the CAP1616 Airspace Change Process ^(Ref 1) and CAP1616f Guidance on the Permanent Airspace Change Process ^(Ref 2).
- 1.1.2. NATS En-Route Ltd (NERL)¹ formally commenced an Airspace Change Proposal (ACP) in February 2025 through the submission of a Statement of Need (SoN) ^(Ref 3) to the Civil Aviation Authority (CAA). As per the Assessment Meeting minutes ^(Ref 4) this ACP is a Level 2 and the appropriate requirements of CAP1616 ^(Ref 1) will be followed. Both the SoN and Assessment Meeting materials can be found on the Airspace Change Portal ^(Ref 5).

¹ Within the NATS group, there are two divisions: NATS En-Route Ltd (NERL) and NATS Services Ltd (NSL). NERL provides air traffic services across the UK. Throughout this document NATS and NERL will be used to refer to the group or division as appropriate.

2. Overview of the Airspace Change Proposal

- 2.1.1. This ACP seeks to improve connectivity between the UK Air Traffic Service (ATS) route network and adjacent Flight Information Region (FIR) / Upper Information Region (UIR) boundaries by introducing new / revised ATS route, waypoints and / or co-ordination points (COPs). This ACP specifically focuses on the KONAN and VABIK COPs (circled in Figure 1) on the FIR / UIR boundary with France and Belgium.
- 2.1.2. Figure 1 shows the primary area of scope (purple box) but to facilitate connectivity and to create an efficient network design, flows could change across the map area. Changes would be FL75 and above.
- 2.1.3. Flow changes in France and Belgium airspace are outside the scope of this ACP.

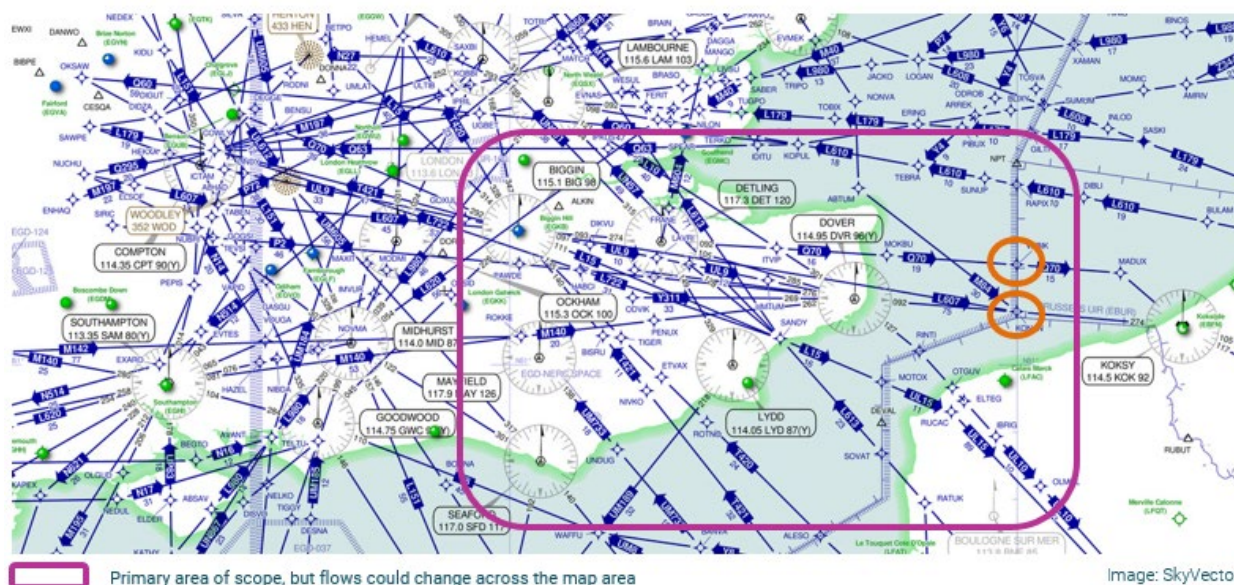


Figure 1 - Area of Scope. Primary area of scope (purple box), COPs (orange circles).

- 2.1.4. European Network Manager (NM) has identified the region as a network hotspot as it is creating inefficiencies within the network². The network bottleneck is currently managed dynamically, leading to high controller workload and inefficient flight profiles for a high volume of traffic.
- 2.1.5. Mitigating this hotspot will enable controller workload reduction, improved traffic presentation to adjacent Air Navigation Service Providers (ANSPs), enable more efficient flight planning and increased throughput.

² For further details see ERNIP Part 2 (Ref 6), proposal 105.010b.

3. Stakeholder Engagement

3.1. Identified Stakeholders and Stakeholder Mapping

3.1.1. NERL identified four stakeholder groups: neighbouring ANSPs; Top 10 airlines³ and Lead Operator Carrier Panel (LOCP)⁴ members; impacted airports; relevant National Air Traffic Management Advisory Committee (NATMAC) members. Table 1 explains how each group has been mapped, why, and therefore, how they have been engaged during Stage 1.

3.1.2. Table 2 to Table 5 lists all stakeholders, if the stakeholder responded to the engagement, and for relevant airlines and LOCP members if they attended the webinar.

Table 1 – Stakeholder Groups and Mapping

Stakeholder Group	Stakeholder Mapping	Rationale	Engagement Activities
Neighbouring ANSPs	Actively involved	Proposed change is on the London FIR / UIR boundary and so must align with neighbouring ANSPs.	Previous design workshops (see Table 6). Engagement materials sent via email.
Relevant airlines and LOCP members	Actively engage	Proposed change would have significant impact on their operation.	Webinar invite for 6th May 2025. Engagement materials sent via email.
Impacted airports	Keep informed	Proposed change will impact airlines departing these airports. There should be no impact on the airport itself.	Engagement materials sent via email.
Relevant NATMAC members	Keep informed	Proposed changes impact specific airlines and ANSPs, who have been identified separately. Representative groups included for wider distribution.	Engagement materials sent via email.

Table 2 - Neighbouring ANSPs

Stakeholder	Rationale	Responded to Engagement
DSNA	The French ANSP, responsible for ATC provisions for traffic south-east of the change area.	Yes
EUROCONTROL	ANSP for Maastricht UIR, responsible for ATC provisions for traffic east of the change area.	Yes
skeyes	The Belgian ANSP, responsible for ATC provisions for traffic east of the change area.	No

³ Based on CFMU planned data for the full year 2024.

⁴ The Lead Operator Carrier Panel (LOCP) is a regular forum hosted by NATS to inform and engage with their customers on a wide range of matters. It aims to work collaboratively with NATS' customers on technical aspects of airspace design, in support of the NATS airspace programmes.

Table 3 - Relevant Airlines and LOCP Members

Stakeholder	Rationale	Attended Webinar Briefing	Responded to Engagement
Aer Lingus	Top 10 airline for traffic via VABIK.	No	No
Air Canada	Top 10 airline for traffic via VABIK.	No	No
Air India	Lead Operator Carrier Panel member.	No	No
Austrian Airlines	Lead Operator Carrier Panel member.	Yes	Yes
British Airways	Top 10 airline for traffic via both KONAN and VABIK.	Yes	No
British Business and General Aviation Association	Lead Operator Carrier Panel member.	No	No
Brussels Airlines	Top 10 airline for traffic via VABIK.	Yes	No
Cargolux	Lead Operator Carrier Panel member.	No	No
Condor	Lead Operator Carrier Panel member.	No	No
Delta	Top 10 airline for traffic via VABIK.	No	No
DHL Air	Top 10 airline for traffic via VABIK.	No	No
easyJet	Top 10 airline for traffic via KONAN.	Yes	Yes
Emirates	Top 10 airline for traffic via KONAN.	Yes	No
Eurowings	Lead Operator Carrier Panel member.	No	No
FedEx	Top 10 airline for traffic via VABIK.	No	No
Italia Transport Aero	Lead Operator Carrier Panel member.	No	No
Jet 2	Lead Operator Carrier Panel member.	Yes	No
Logan Air	Lead Operator Carrier Panel member.	No	No
Lufthansa	Top 10 airline for traffic via KONAN.	Yes	Yes
Qatar Airways	Top 10 airline for traffic via both KONAN and VABIK.	No	No
Ryanair	Top 10 airline for traffic via both KONAN and VABIK.	Yes	Yes
Singapore	Lead Operator Carrier Panel member.	No	No
Swiss International Airlines	Top 10 airline for traffic via KONAN.	Yes	Yes
TUI Airways	Top 10 airline for traffic via KONAN.	Yes	Yes
Turkish Airlines	Top 10 airline for traffic via KONAN.	No	No
United Airlines	Top 10 airline for traffic via VABIK.	No	No
Virgin Atlantic	Lead Operator Carrier Panel member.	Yes	Yes
Wizzair	Top 10 airline for traffic via KONAN.	No	No

Table 4 - Relevant Airports

Stakeholder	Rationale	Responded to Engagement
London Biggin Hill	Traffic from the airport will be impacted.	Yes ⁵
London City	Traffic from the airport will be impacted.	Yes
London Gatwick	Traffic from the airport will be impacted.	Yes
London Heathrow	Traffic from the airport will be impacted.	Yes
London Luton	Traffic from the airport will be impacted.	No
London Southend	Traffic from the airport will be impacted.	Yes
London Stansted	Traffic from the airport will be impacted.	Yes
RAF Northolt	Traffic from the airport will be impacted.	No

Table 5 - Relevant NATMAC

Stakeholder	Rationale	Responded to Engagement
Airlines UK	Members may be impacted.	No
British Airline Pilots Association (BALPA)	Members may be impacted.	No
Guild of Air Traffic Control Officers (GATCO)	Members may be impacted.	No
Honourable Company of Air Pilots (HCAP)	Members may be impacted.	No
Low Fare Airline	Members may be impacted.	No
Ministry of Defence (MoD) – Defence Airspace and Air Traffic Management (DAATM)	As per paragraph 1.24 of CAP1616 ^(Ref 1) , the MoD should be treated as an interested stakeholder. No expected impact on their operation.	Yes

3.2. Engagement Methodology

- 3.2.1. Due to the location of the proposed change on the FIR / UIR boundary, neighbouring ANSP collaboration was a pre-requisite. Therefore, prior to commencing this ACP, NERL had engaged with NM and neighbouring ANSPs to consider the desire and feasibility for change. Engagement has taken place within the EUROCONTROL 'Central High Project', involving DSNA, EUROCONTROL, skeyes and NATS, these are recorded in Table 6. These conversations remain ongoing.

⁵ Biggin Hill provided two MS From responses, these have been combined and treated as one response.

Table 6 - Early Engagement with Neighbouring ANSPs

Date	Activity Location
10/11/2022	Maastricht ACC
09/12/2022	NATS
27/01/2023	Paris DSNA
14/03/2023	Teams
26/04/2023	Maastricht ACC
07/06/2023	Brussels
19/10/2023	Reims ACC
13/12/2023	Maastricht ACC
20/01/2024	NATS
21/03/2024	Reims ACC
21/05/2024	Brussels
28/06/2024	Reims ACC
13/09/2024	Maastricht ACC
28/11/2024	Reims ACC
23/01/2025	Maastricht ACC
26/02/2025	Paris DSNA
24/03/2025	Brussels
23/04/2025	Reims ACC

- 3.2.2. During Stage 1, NERL engagement on the current day scenario and proposed design principles. This engagement ran from 6th May to 23:45 19th May 2025.
- 3.2.3. All stakeholders received an introduction email including the engagement presentation ^(Ref 7) and a link to the Microsoft Form questionnaire. All stakeholders, who hadn't yet responded, received a reminder email on 15th May.
- 3.2.4. Stakeholders could ask any questions via email.
- 3.2.5. "Actively engaged" stakeholders were also informed of the upcoming ACP at the LOCP⁶ briefing in April and emailed an invite to a webinar briefing (which took place on 6th May). In advance of the briefing, all invitees received the engagement materials. During this session, these materials were presented and there was an opportunity for questions and answers.
- 3.2.6. One other stakeholder enquired about the webinar. NERL explained this was for the stakeholders who would be directly impacted by the change; all the material presented were within the email they had received. NERL offered a bespoke briefing to the stakeholder, this offer was not accepted.

⁶ No briefing or detail regarding this ACP was provided at the April LOCP session, other than noting the ACP would be coming.

3.3. Engagement Duration

- 3.3.1. The engagement period was Tuesday 6th May to 23:45 Monday 19th May 2025. Microsoft Forms would automatically close at this point and not allow any further responses.
- 3.3.2. All identified stakeholders were regular internet users, therefore this engagement occurred via online channels. Furthermore, the engagement materials and associated feedback questionnaire were succinct. Overall, this format allowed stakeholders to read, understand, and respond to the materials without being onerous. Therefore, a two-week engagement period was considered proportionate.
- 3.3.3. No stakeholder(s) objected to the engagement duration or requested additional time.

3.4. Engagement Participation

- 3.4.1. As depicted in Table 3, eleven stakeholder organisations (39% of those invited), attended the briefing on the 6th May 2025. One question was asked, this is included in Table 7 and identified by “(via webinar)” within the stakeholder column.
- 3.4.2. Of the stakeholders listed above (Table 2 to Table 5), sixteen (36%) provided a response. Fifteen responses were received via Microsoft Forms, and one response was received via email.
- 3.4.3. No responses were received from organisations or individuals not on the stakeholder list.
- 3.4.4. Two stakeholders emailed saying that the Microsoft Forms link was not working. On testing NERL confirmed that the link was working. However, those having issues were not on the original stakeholder list and had been forwarded the link via another member of their organisation, this appears to invalidate the link embedded into the email. Both stakeholder’s provided feedback, either via email or a working Microsoft Forms link. Whilst not ideal, NERL consider the engagement period to still be valid as the response rate was high; the original stakeholder contacts received working links; and any stakeholder was able to email a response with any questions or comments.
- 3.4.5. Feedback on the current day scenario and draft design principles are presented in Table 12 and Table 14, in chapters 4.5 and 5.3 respectively.
- 3.4.6. Some stakeholders also provided feedback not directly relating to the current day scenario or draft design principles, these are addressed in Table 7 below.

Table 7 - Other Feedback Received

Feedback	Stakeholder(s)	NERL Response
A more southerly routing than KONAN would be highly efficient for flight from the London area airports to central Europe, especially Switzerland. Of course this is subject to capacity in LFEE sector.	Swiss International Airlines	The distribution of traffic is design work which occurs within Stages 2 and 3 of CAP1616 ^(Ref 1) . This ACP is currently in Stage 1. Although a proposed concept for development was included in the engagement material, no formal design work has been undertaken at this stage. Stakeholders will be engaged and consulted on the design in due course.
After departing from London area airports, a continuous climb from 7,000ft to the filed cruising level would be highly beneficial for reducing noise and greenhouse gas emissions.	Swiss International Airlines	This will be considered as part of the design work which occurs within Stages 2 and 3 of CAP1616 ^(Ref 1) . This ACP is currently in Stage 1. Although a proposed concept for development was included in the engagement material, no formal design work has been undertaken at this stage. Stakeholders will be engaged and consulted on the design in due course.
Have observed increasing instances of wake-turbulence especially on this route (due to high volume of A380s) even if correctly separated. Operating through wake-spirals coming from A380 traffic in climb / decent can be very critical.	Austrian Airlines	NATS will continue to separate aircraft as per current separation standards, changes to these are outside of scope of this ACP.
Heathrow DET departure delays are an occurrence in today's operations, whether that be through combined departures from Heathrow, Luton, Stansted or Gatwick, or congestion within neighbouring FIR airspace.	London Heathrow	If the departure delays are as a result of this airspace, then they should be reduced by increased airspace capacity, as per "DDP Operational (Capacity)". Although a proposed concept for development was included in the engagement material, no formal design work has been undertaken at this stage. Stakeholders will be engaged and consulted on the design in due course.
Please engage with flight planning providers, as shifting a route more to the north could easily end up in filing the entire flight on completely other routing, which than has effect on the left/right separation principal (splitting) of SIDs out of LHR.	Austrian Airlines	The distribution of traffic is design work which occurs within Stages 2 and 3 of CAP1616 ^(Ref 1) . This ACP is currently in Stage 1. Although a proposed concept for development was included in the engagement material, no formal design work has been undertaken at this stage. Stakeholders will be engaged and consulted on the design in due course.

Feedback	Stakeholder(s)	NERL Response
Putting Heathrow / Gatwick traffic via a southerly COP, then into France, could result in capacity issues within French airspace.	Emirates (via webinar)	The number of COPs, and distribution of traffic is design work which occurs within Stages 2 and 3 of CAP1616 ^(Ref 1). This ACP is currently in Stage 1. Although a proposed concept for development was included in the engagement material, no formal design work has been undertaken at this stage. Stakeholders will be engaged and consulted on the design in due course.
Supportive of proposed changes / changes seem necessary	London City; London Heathrow; Ryanair	Thank you.
This proposal would need to demonstrate that capacity can be increased, both in terms of UK and neighbouring FIR airspace providers. Whilst this proposal targets the AC DVR sectors, Heathrow would request assurances that TMA SE sectors would also benefit, which in turn could reduce the number of MDIs/ATFM delays on Heathrow DET departures.	London Heathrow	For this ACP, capacity will be assessed via the "DDP Operational (Capacity)" design principle. The impact on the full design area will be considered, this may go beyond the AC DVR sector, depending on the design work which occurs within Stages 2 and 3 of CAP1616 ^(Ref 1). This ACP is currently in Stage 1. This ACP cannot impact assess the airspace designs of neighbouring ANSPs. However, designs will be done collaboratively, aiming to achieve the best overall design. The impact of the UK airspace change, on neighbouring ANSPs, will be assessed via the "DDP Technical (Other Aviation Stakeholders)" design principle.

4. Current Day Scenario

4.1. Airspace Design

4.1.1. This proposal is above FL75.

4.1.2. FL75 to FL195 is Class A, FL195+ is Class C.

4.1.3. As well as the London FIR boundary, there are number of airspace structures within the lateral and vertical boundaries of the area of scope (Figure 1), these are described in Table 8 and shown in Figure 2.

Table 8 - Airspace Structures

Airspace Structure	Lower Limit	Upper Limit
Clacton CTA 7	FL65	FL195
Clacton CTA 9	FL105	FL195
Worthing CTA 1	FL65	FL195
Worthing CTA 2	FL75	FL195
Worthing CTA 3	FL75	FL195
Worthing CTA 5	FL105	FL195
London TMA 1	2,500ft (ALT)	FL195
London TMA 3	3,500ft (ALT)	FL195
London TMA 7	4,500ft (ALT)	FL195
London TMA 8	5,500ft (ALT)	FL195
London TMA 20	4,500ft (ALT)	FL195

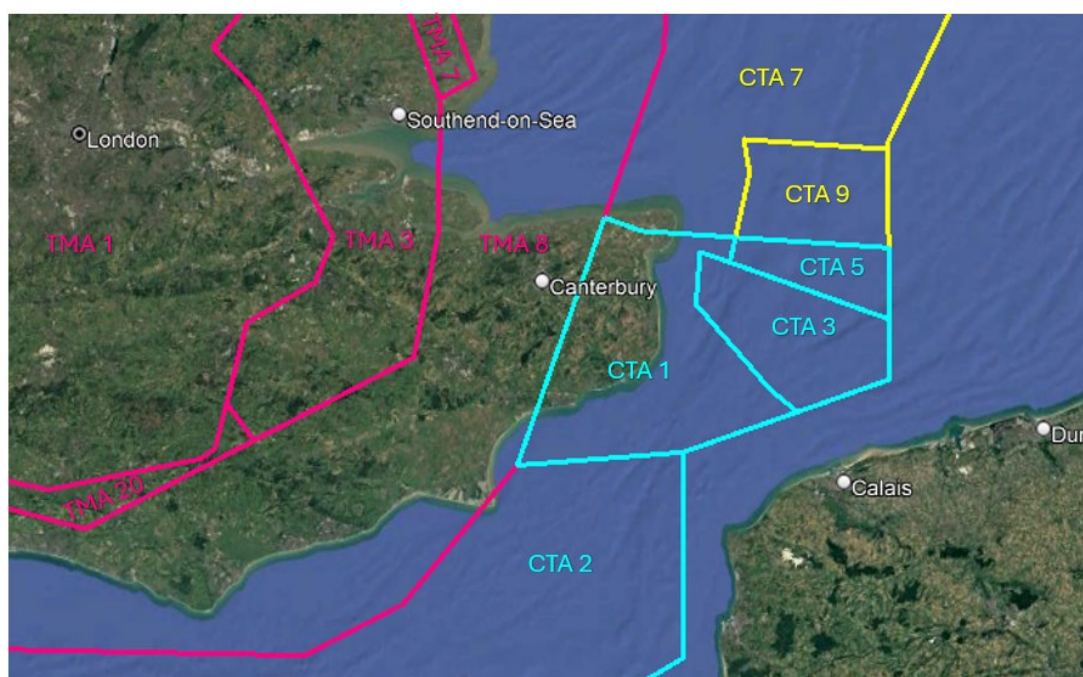


Figure 2 - Airspace Structures: Clacton CTAs (yellow), Worthing CTA (pale blue) and London TMAs (raspberry). Source: Google Earth Pro.

4.1.4. Figure 3 shows the routes passing through either KONAN or VABIK, and therefore, impacted by this proposal. These are described in Table 9.

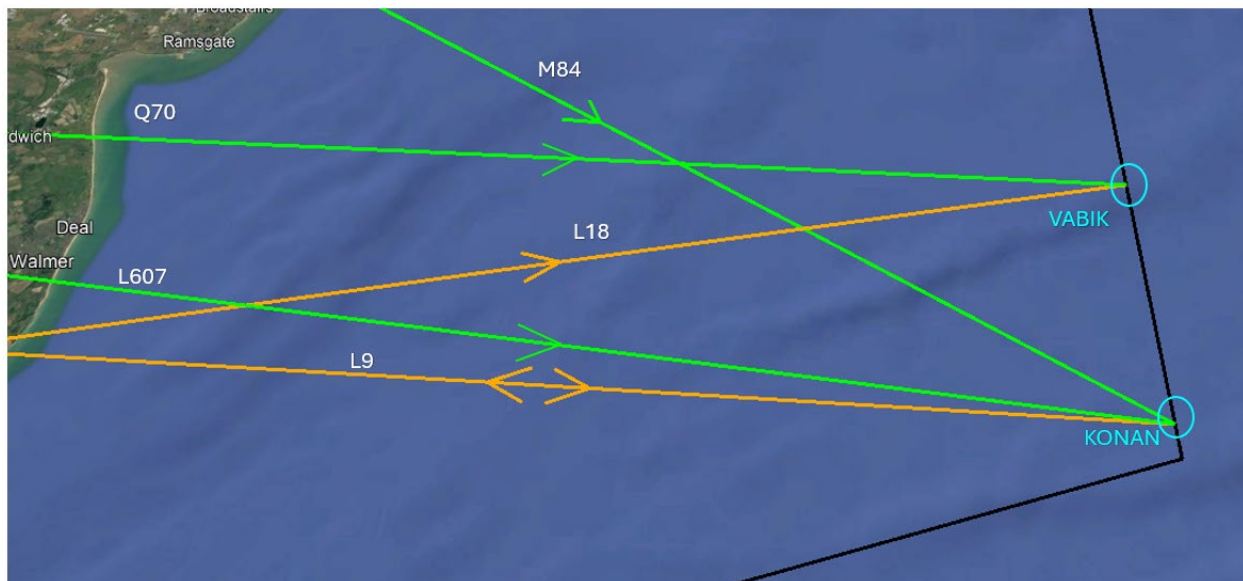


Figure 3 - Existing ATS Routes via KONAN or VABIK. Upper ATS routes (green), lower ATS routes (orange), COPs (pale blue), and FIR / UIR boundary (black). Source: Google Earth

Table 9 - Existing Routes Passing Through KONAN or VABIK

COP	Route Name	Lower Limit	Upper Limit	Direction
VABIK	Q70	FL105	FL460	Eastbound only
	L18	FL105	FL245	Eastbound only (between DVR and VABIK)
KONAN	M84	FL105	FL460	Eastbound only
	L607	FL245	FL460	Eastbound only
	L9	FL75	FL245	Bi-directional

4.1.5. There are three main traffic groups currently using either KONAN or VABIK, these are:

- London TMA departures;
- Brussels TMA arrivals;
- and network overflights.

4.2. Airspace Usage

- 4.2.1. Approximately 213,000 flights flight planned through either KONAN or VABIK in 2024⁷, Table 10 breaks these down into specific sub-categories.

Table 10 - Traffic via KONAN or VABIK

Traffic Sample	KONAN Flights (per Annum)	VABIK Flights (per Annum)
All traffic via KONAN or VABIK	c. 196,000	c. 17,000
LTMA ⁸ departing traffic via KONAN or VABIK	c. 144,000	c. 4,000
London Heathrow ⁹ departures via KONAN or VABIK	c. 65,000	c. 3,000
London Gatwick ¹⁰ departures via KONAN or VABIK	c. 30,000	c. 100

- 4.2.2. Table 10 shows that the majority of traffic is LTMA departing traffic. This creates complexity due to the close proximity of the LTMA airports to the London FIR / UIR boundary, resulting in multiple interactions / crossing traffic flows within a small region.
- 4.2.3. The overall demand and relative proportion of LTMA traffic within this area could potentially increase further if London Heathrow and / or London Gatwick's planned expansion is realised.
- 4.2.4. Due to volume of data, it is only possible to process and visualise trajectory data for up to one month. As a busy summer month, August is deemed representative. Therefore, the trajectories of all traffic via KONAN or VABIK in August 2024 is shown in Figure 4. It shows that traffic is spread out from north of VABIK, past KONAN and down towards RINTI; rather than two distinct flows through VABIK and KONAN.

⁷ Based on CFMU planned data for the full year 2024.

⁸ EGSS, EGGW, EGLC, EGLL, EGKK, EGKB

⁹ London Heathrow traffic could increase due to planned expansion. For further details, of their plans, see the airports' website: <https://www.heathrow.com/company/about-heathrow/expansion>

¹⁰ London Gatwick traffic could increase due to planned expansion. For further details, of their plans, see the airports' website: <https://www.gatwickairport.com/company/future-plans.html>

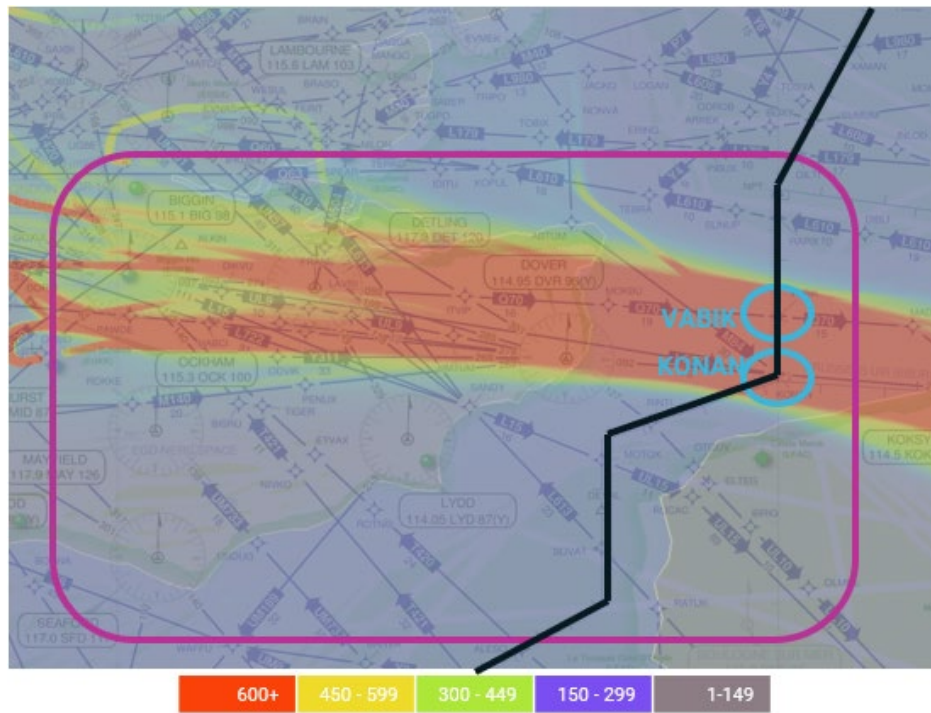


Figure 4 - Traffic via KONAN or VABIK. Primary area of scope (purple box), FIR / UIR boundary (black line), COPs (blue circles). Source: CMFU actual, August 2024, overlaid onto SkyVector.com World Hi map.

- 4.2.5. Traffic flight plans to cross the boundary at up to Flight Level (FL)510, with most traffic crossing the boundary at FL245 or above¹¹.
- 4.2.6. The main traffic in the area are commercial airlines. Table 11 shows the top airlines flight planning via either KONAN or VABIK COPs and the percentage of traffic they represent¹².

¹¹ Based on subject matter expert (SME) information.

¹² Based on CFMU planned data for the full year 2024.

Table 11 - Top Airlines via KONAN or VABIK COPs

Top Airlines via KONAN		
Airline	Flights per annum	Percentage of KONAN Traffic
British Airways	c. 29,900	15.8%
Ryanair	c. 25,600	13.5%
easyJet	c. 17,600	9.3%
Lufthansa	c. 14,500	7.6%
Wizz Air	c. 9,300	4.9%
Emirates	c. 4,400	2.3%
Turkish Airlines	c. 4,200	2.2%
Swiss	c. 4,000	2.1%
Qatar Airways	c. 3,700	2.0%
TUI Airways	c. 3,500	1.9%
Total	c. 116,700	c. 61.6%
Top Airlines via VABIK		
Airline	Flights per annum	Percentage of VABIK Traffic
Brussels Airline	c. 2,600	16.8%
Ryanair	c. 2,400	15.3%
DHL Air	c. 2,000	12.5%
United	c. 1,200	7.5%
British Airways	c. 800	7.4%
Aer Lingus	c. 700	4.4%
Fed Ex	c. 700	4.4%
Qatar Airways	c. 500	3.2%
Air Canada	c. 500	3.0%
Delta Air Lines	c. 300	2.2%
Total	c. 11,700	c. 76.7%

- 4.2.7. A vast range of aircraft use the routes including turboprop-powered regional airlines to heavy wide-bodied aircraft. Most of the traffic is medium range airliners such as the B737 and A320 families¹³.

4.3. Operational Inefficiencies

- 4.3.1. The volume of traffic flight planning via either KONAN or VABIK creates a choke point on the boundary. This has been identified by NM and agreed by NERL.

¹³ Based on CFMU planned data for the full year 2024.

- 4.3.2. Traffic is currently tactically vectored across the boundary, resulting in significant volumes of traffic deviating from their flight plan vertically and / or laterally. This increases both controller and pilot workload.

4.4. Environmental Impacts

- 4.4.1. As per, 4.3.2, aircraft are routinely deviated from their planned flight paths due to the high traffic density in the area. This can result in increased track mileage or reduced cruising heights, both of which can increase greenhouse gas emissions.
- 4.4.2. The ACP focuses on traffic flows above 7,000ft, and is not anticipated to change traffic patterns below 7,000ft. Therefore, in line with CAP1616f ^(Ref 2), other environmental impacts are not considered within the current day scenario.

4.5. Feedback from Stakeholder Engagement

- 4.5.1. Of those who replied via Microsoft Forms, fourteen (93%) of respondents agreed with the current day scenario. The response via email did not specify either way and is not included in the above statistic.
- 4.5.2. Within the feedback, only one amendment was suggested, as listed in Table 12.

Table 12 - Stakeholder Feedback on Current Day Scenario

Feedback	Stakeholder(s)	NERL Response
Situation is true, but almost in every case radar-vectoring provided by ATC and seldom in own navigation.	Austrian Airlines	NERL agrees that currently the majority of traffic is given ATC radar-vectoring, rather than remaining on their flight planned route. NERL believes this is reflected in Figure 4 and hopes to alleviate this issue via this change. No change to current day scenario.

4.6. Final Current Day Scenario

- 4.6.1. No changes were made to the current day scenario post-engagement. Therefore, the scenario presented in chapters 4.1 to 4.4 will be the current day scenario taken forward within this ACP.

5. Design Principles and Priorities

5.1. Introduction

- 5.1.1. Sponsors must develop a list of design principles with input from stakeholders.
- 5.1.2. In the first instance, NERL drafted a list of design principles. The feedback questionnaire allowed stakeholders to provide feedback on the proposed design principles, with a final set of design principles being produced as a result of the feedback.

5.2. Draft Design Principles

- 5.2.1. There are three Mandatory Design Principles (MDP) set out in CAP1616f^(Ref 2) which are compulsory for all permanent airspace changes.
- 5.2.2. Additionally, CAP1616f^(Ref 2) includes Discretionary Design Principles (DDP) which can be selected and altered as per the needs of the specific ACP. The change sponsor can also create Bespoke Design Principles (BDP). In this instance, three DDPs were proposed and no BDPs.
- 5.2.3. NERL opted to prioritise the draft design principles using an A, B, C scale. Where “A” is the top priority and must be met; “B” is the second priority, after “A” is achieved; and “C” design principles are to be considered after both “A” and “B”.
- 5.2.4. NERL proposed that safety and capacity would be “A”, environment would be “B” and then all other design principles would be given a “C” priority.
- 5.2.5. Table 13 shows the draft design principles, as taken forward to stakeholder engagement.
- 5.2.6. DDP Operational (Capacity) has been proposed as this ACP aims to increase potential sector throughput by reducing ATCO workload.
- 5.2.7. DDP Environmental (Greenhouse Gas Emissions) has been proposed as increasing the COPs and FIR / UIR interface should improve flight routings (height and / or track miles).
- 5.2.8. DDP Technical (Other Aviation Stakeholders) has been proposed as coordination is required with adjacent ANSPs.

Table 13 – Draft Design Principles

Design Principle	Priority	Description
Mandatory Design Principles		
MDP Safety	A	The airspace change proposal must maintain a high standard of safety and should seek to enhance current levels of safety.
MDP Environment	B	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.
MDP Policy	C	The airspace change proposal should not be inconsistent with relevant legislation, the CAA's airspace modernisation strategy (AMS) or Secretary of State and CAA's policy and guidance.
Proposed Discretionary Design Principles		
DDP Operational (Capacity)	A	The airspace change proposal should provide the greatest capacity benefits.
DDP Environmental (Greenhouse Gas Emissions)	B	The airspace change proposal should minimise greenhouse gas emissions at or above 7,000ft.
DDP Technical (Other Aviation Stakeholders)	C	The airspace change proposal should consider the impacts on air navigation service providers (ANSPs) and other aviation stakeholders such as nearby airport operators.

5.3. Feedback from Stakeholder Engagement

5.3.1. Of those who replied via Microsoft Forms, all respondents agreed with the wording of the draft design principles. Thirteen (87%) agreed with the proposed prioritisation of the design principles. The response via email did not specify either way and is therefore excluded from the above statistic.

5.3.2. Eight changes or additions were suggested, these are listed in Table 14.

Table 14 - Stakeholder Feedback on Design Principles

Feedback	Stakeholder(s)	NERL Response
Additional design principle proposed: Network performance.	easyJet	Covered within "DDP Operational (Capacity)" as increased capacity would reflect improved network performance. No change to proposed design principles or prioritisation.
Additional design principle proposed: Operational efficiency.	easyJet	Covered within "DDP Environmental (Greenhouse Gas Emissions)" as improved operational efficiency would result in improved flight plans and reduced greenhouse gas emissions. No change to proposed design principles or prioritisation.
Additional design principle proposed: Operational needs of other ANSPs.	DSNA	Covered within "DDP Technical (Other Aviation Stakeholders)". No change to proposed design principles or prioritisation.

Feedback	Stakeholder(s)	NERL Response
Additional design principle proposed: Provide maximum benefit to airspace users.	Virgin Atlantic	Airspace users will benefit via "DDP Operational (Capacity)" and "DDP Environmental (Greenhouse Gas Emissions)". However, there is a balance between most optimal routings and airspace capacity. Therefore, it is not practical to provide maximum benefits to airspace users via always providing the most optimised routing, as this could result in a reduction in capacity / increased delays. No change to proposed design principles or prioritisation.
Ensure no reduction in capacity.	London Biggin Hill Airport	This airspace change will result in no reduction to capacity. Instead, the planned ATC workload reduction, could result in an increase in airspace capacity. Capacity impacts will be assessed via "DDP Operational (Capacity)" No change to proposed design principles or prioritisation.
Noting the 'DDP - Technical' states coordination is required with adjacent ANSPs as rationale for inclusion, I would ask that this includes liaison with 78 Sqn at Swanwick (through DAATM) in order that can assess any potential impact for traffic operating within their SE sector.	DAATM	Due to the volume of civilian traffic in the airspace, the MOD have minimal traffic movements and only operate planned activities within this area. Therefore, the impact on them is considered lower than the impact on other ANSPs and an additional MOA DP is not considered to add value. However, they will be considered via the "integration" requirement of the AMS, within "MDP Policy" and as "other aviation stakeholders" within "DDP Technical (Other Aviation Stakeholders)". No change to proposed design principles or prioritisation.

Feedback	Stakeholder(s)	NERL Response
Prioritisation should be: MDP Safety: A MDP Policy: B MDP Environment: C DDP Operational (Capacity): A DDP Technical (Other Aviation Stakeholders): B DDP Environmental (Greenhouse Gas Emissions): C	London Southend Airport; TUI Airways	This suggestion proposes changes the priority for Policy, Environment and Technical, which are each addressed below. The SoN ^(Ref 3) explains the objective of this ACP is to improve connectivity across the London FIR / UIR. This will enhance connectivity and improve fuel efficiency and reducing greenhouse gas emissions. Policy – This ACP will review, and where possible, align with current policies. Increasing the priority above the environmental DPs, would not align with the SoN. Environment – Due to the large volume of traffic, improving the environmental impact of the airspace is of significant importance due to the compound benefits and aligns with the SoN. Technical – Whilst neighbouring ANSPs are a vital component of this change, NERL must prioritise getting the best possible design for the UK airspace portion. Other aviation stakeholders, who operate within the airspace will see benefits via “DDP Operational (Capacity)”, “MDP Environment” and “DDP Environmental (Greenhouse Gas Emissions)”. As a result, NERL believe a “C” prioritisation allows all “Other Aviation Stakeholders” to be considered but without being detrimental to the UK portion of the design. Furthermore, NERL notes that 13 out of 15 (87%) of respondents¹⁴ agreed with the NERL proposed prioritisation. No change to proposed design principles or prioritisation.
Suggests that DDP A is reworded to “The airspace change proposal shall provide the greatest capacity benefits”	London Heathrow	“DDP Operational (Capacity)” currently includes the term “should” rather than “shall”. Whilst “shall” would be desirable to NERL, this change must be aligned with neighbouring ANSPs, the design is not fully within NERL’s control. Therefore, “shall” may not be realistic. However, the importance NERL is placing on this DP is reflected by its “A” prioritisation. No change to proposed design principles or prioritisation.

¹⁴ The response via email did not specify if they agreed or not with the prioritisation and is therefore excluded from the above statistic.

5.4. Final Design Principles

5.4.1. As a result of the feedback (described in Table 14) there was no change to the wording of the design principles; no additional design principles were added; and the prioritisation remained unchanged.

5.4.2. Table 15 shows the final design principles, which will be taken forward to Stage 2.

Table 15 - Final Design Principles

Design Principle	Priority	Description
Mandatory Design Principles		
MDP Safety	A	The airspace change proposal must maintain a high standard of safety and should seek to enhance current levels of safety.
MDP Environment	B	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.
MDP Policy	C	The airspace change proposal should not be inconsistent with relevant legislation, the CAA's airspace modernisation strategy (AMS) or Secretary of State and CAA's policy and guidance.
Discretionary Design Principles		
DDP Operational (Capacity)	A	The airspace change proposal should provide the greatest capacity benefits.
DDP Environmental (Greenhouse Gas Emissions)	B	The airspace change proposal should minimise greenhouse gas emissions at or above 7,000ft.
DDP Technical (Other Aviation Stakeholders)	C	The airspace change proposal should consider the impacts on air navigation service providers (ANSPs) and other aviation stakeholders such as nearby airport operators.

6. Summary and Next Steps

6.1. Summary

- 6.1.1. During the engagement period, stakeholders were presented NERL's current day scenario and draft design principles for their review and feedback.
- 6.1.2. A total of sixteen responses were received.
- 6.1.3. As a result of the feedback no changes were made to the current day scenario; no changes were made to the wording of the design principles; no new design principles were added; and there were no changes to the prioritisation of the design principles.

6.2. Next Steps

- 6.2.1. Alongside the design principles, SME input will be used to inform and influence the design options, design principle evaluation, and initial options appraisal during Stage 2.
- 6.2.2. The Stage 2 gate is planned for November 2025.

[End of Document]