

Modernising Midlands Airspace

Gateway Documentation:
Stage 3 Consult/Engage
ACP-2025-013

NATS

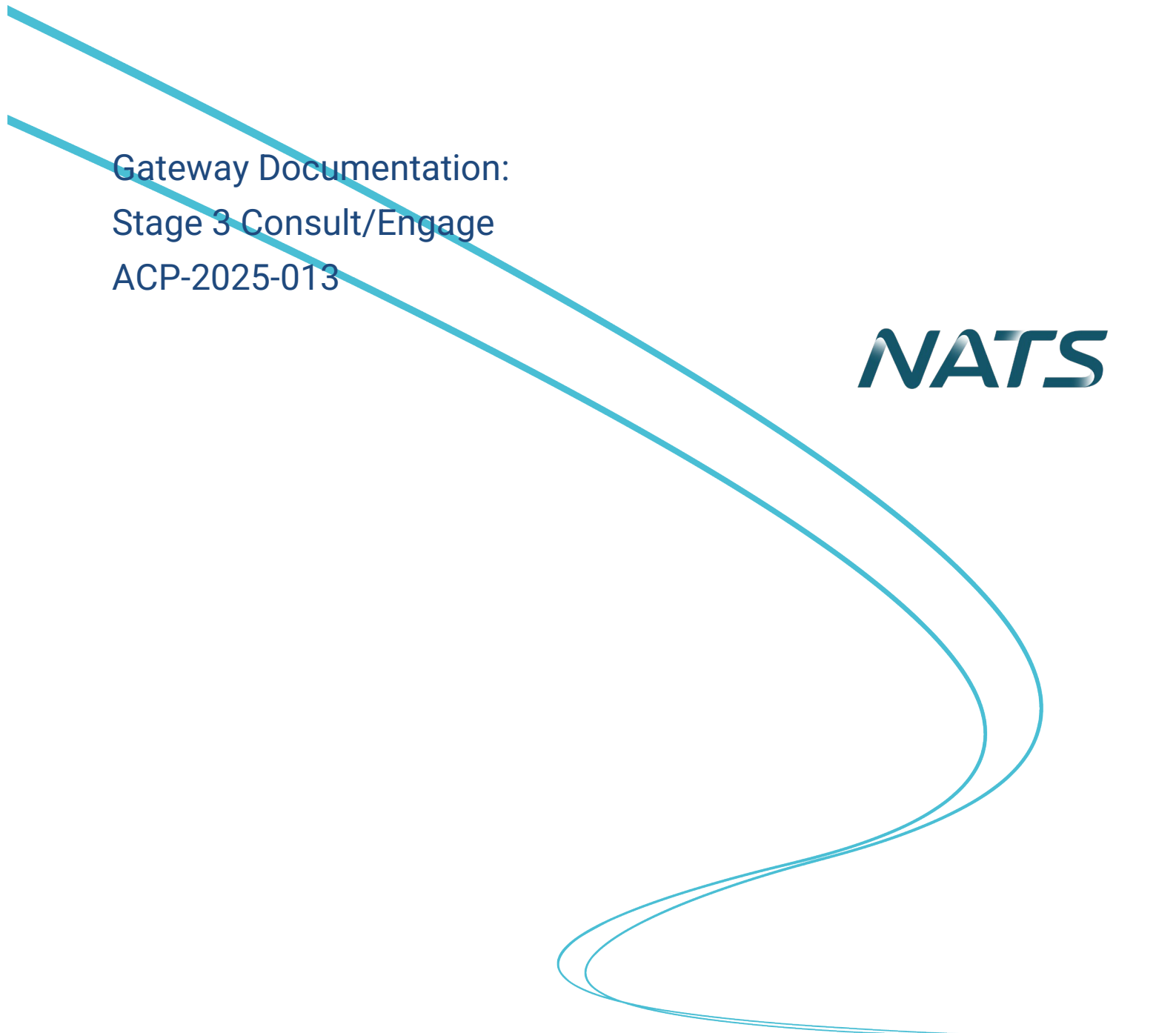
A decorative blue swoosh that starts from the left edge of the page, curves downwards and to the right, and then loops back towards the left, ending near the bottom right corner.

Table of Contents

1. Executive summary	4
2. Introduction	4
2.1 About this document, scope and background	4
2.2 Objective of this airspace change proposal	6
2.3 Why must this change happen now	6
2.4 Stakeholders	7
3. Current Airspace (Baseline)	8
3.1 Overview of current airspace	8
3.2 Airspace Usage	10
3.3 Forecast traffic	11
4. Proposed Changes	12
4.1 Justification	12
4.2 Proposed changes overview - 'Option 1 - 10 Parallel Routes'	13
4.3 Proposed Changes – ATS Routes	13
4.4 Proposed Changes – STARs	17
4.5 Proposed Changes – Departure connectivity and speed restriction removal	19
4.6 Proposed Changes – Controlled Airspace	20
4.7 Proposed Changes – Military airspace	21
4.8 Regulations, Policies and Harmonisation	24
4.9 AMS Alignment	24
5. Impact of this Proposal	26
6. Consultation Participation	30
7. Appendix A List of Stakeholders	31
8. Appendix B Design History	32
9. Appendix C Technical Details	34
10. Appendix D Consultation Questions	37
11. Appendix E Other Items	39
12. Appendix F Glossary	43

Change History

Issue	Month/Year	Changes this issue (most recent first)
Issue 1	08/2026	N/A – First Issue

Roles

Action	Role	Date
Produced	Airspace Change Airspace Change Compliance & Delivery	August 2026
Reviewed Approved	Operations Implementation Manager Airspace Development	August 2026
Reviewed Approved	Head of Airspace Development Transformation Strategy and Development	August 2026

Referenced Documents

Ref No	Name and description	Links
1.	CAP1711 Airspace Modernisation Strategy Version 2	Link
2.	CAP1616 Edition 5.1	Link
3.	Stage 1 Define document	Link
4.	Stage 2 Develop and Assess document	Link
5.	Air Navigation Guidance 2017	Link
6.	CAP 785B: Implementation and Safeguarding of Instrument Flight Procedures (IFPs) in the UK. Ed. 2, Version 2.	Link
7.	CAP1385: Performance-based Navigation (PBN): Enhanced Route Spacing Guidance, Ed. 2	Link
8.	SARG Policy 127 Policy for the classification of UK Airspace	Link
9.	SARG Policy 126 Policy for the design of Controlled Airspace Structures	Link
10.	SARG Policy 133 Policy for the establishment and operation of Special Use Airspace	Link
11.	CAP 740 UK Airspace Management Policy, Issue 10	Link

1. Executive summary

- 1.1.1 This Airspace Change Proposal (ACP) is sponsored by NATS and proposes changes to 'Midlands Airspace'. For this ACP, Midlands Airspace refers to the airspace sandwiched between the Manchester Terminal Control Area (MTMA) and the London Terminal Control Area (LTMA).
- 1.1.2 Separate ACPs are underway to modernise both the LTMA ([ACP-2020-043](#)) and the MTMA ([ACP-2019-77](#)) which will introduce systemised routings within the TMAs.
- 1.1.3 The aim of this ACP is to optimise the route network within Midlands Airspace in advance of the MTMA and LTMA changes, in line with the Airspace Modernisation Strategy (AMS, [Ref 1]). The key objectives are to:
- optimise the airspace using a hybrid-systemised design to enhance route capacity
 - reduce complexity and controller workload
 - provide environmental efficiencies where possible
- 1.1.4 This change is categorised under CAP1616 as a 'Level 2' change; this proposal will alter flight paths at/above 7,000ft (above mean sea level) only.
- 1.1.5 A single design option, "Option 1 – 10 Parallel Routes", is being progressed to consultation to optimise the use of the airspace and ensure compatibility with the MTMA and LTMA modernisation projects.
- 1.1.6 The proposed change is expected to increase airspace capacity, improve route predictability and reduce controller intervention. However, modelling also indicates a small increase of approximately 1.1kg of fuel burn and 3.4kg of CO₂e emissions per flight compared with the baseline scenario, together with an increase in the volume of controlled airspace required to support the design, which is described in more detail in Section 5.
- 1.1.7 Overall, the proposal delivers a strengthening business case over time, driven by reducing costs relative to the baseline scenario, with net quantified benefits increasing throughout the appraisal period and the annual net quantified impact in present value terms improving to approximately **£225,454** in 2038.
- 1.1.8 Stakeholders are invited to consider both the potential benefits and disbenefits when responding to this consultation; NATS is seeking your views and welcomes your feedback to develop this proposed airspace change.
- 1.1.9 The consultation for this ACP begins at 00:01hrs Monday 26th October 2026, and ends at 23:59hrs Sunday 20th December 2026, a period of 8 weeks.
- 1.1.10 This consultation document and the response questionnaire are available on the CAA's [Citizen Space consultation website](#).
- 1.1.11 If approved by the CAA, the earliest implementation of the proposed airspace change is Q4 2028.

2. Introduction

2.1 About this document, scope and background

- 2.1.1 This airspace change proposal is sponsored by NATS, the UK's national enroute provider of air traffic services.
- 2.1.2 The CAP1616 airspace change process [Ref 2] is summarised in Figure 1; we are currently at Stage 3 of the process – 'Consult/Engage'.

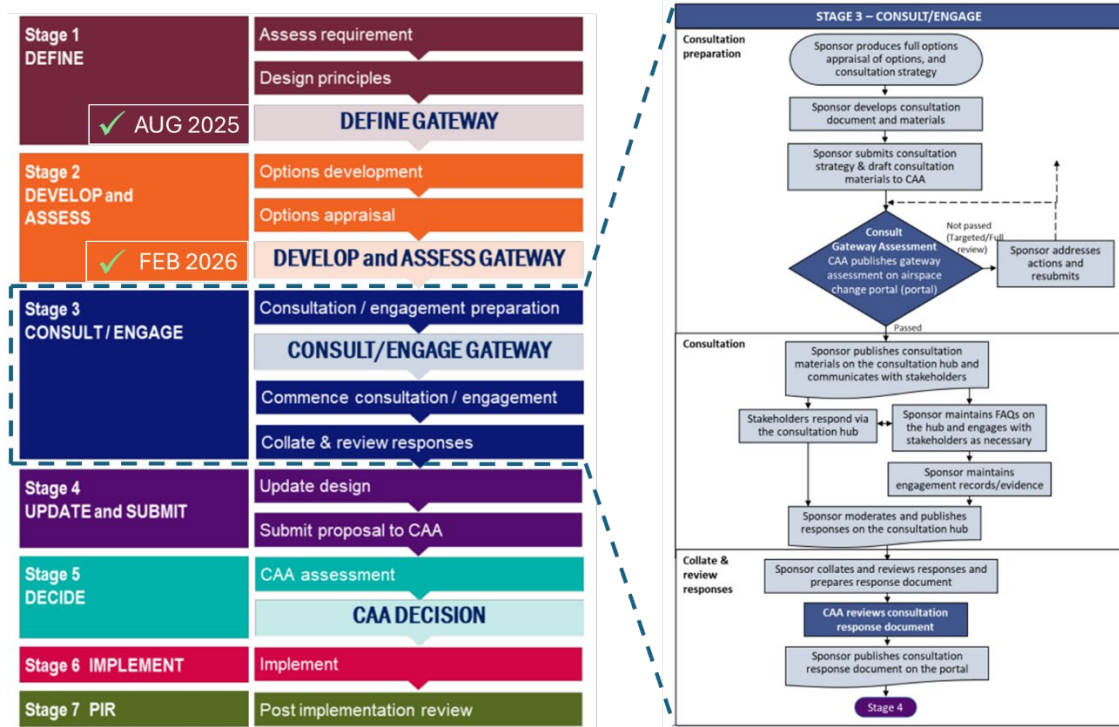


Figure 1: Overview of the airspace change process (left) and Stage 3 Consult/Engage (right). For this proposal, Stage 1 Define completed in August 2025, and Stage 2 Develop and Assess completed in February 2026. [CAP1616, Sept 2025].

- 2.1.3 For Stage 1 Define [Ref 3], we established the need for an airspace change. We engaged relevant aviation stakeholders to define the current-day scenario and agree the design principles underpinning this proposal.
- 2.1.4 For Stage 2 Develop and Assess [Ref 4], we developed the baseline scenario and two detailed design options which, alongside engagement feedback from aviation stakeholders, were evaluated against the design principles. A single viable option “Option 1 – 10 Parallel Routes” was progressed, and an Initial Options Appraisal was carried out to illustrate the qualitative benefits and impacts of this option.
- 2.1.5 The baseline (‘do nothing’) option was discounted in Stage 2, as it did not provide improvements in operational capacity, and resulted in a sub-optimal interface with the MTMA and LTMA.
- 2.1.6 Thus, this change proposal is limited to a single design option to optimise the use of the airspace and ensure compatibility with the MTMA and LTMA modernisation projects.
- 2.1.7 This Consultation Document is the main document supporting our consultation; it explains the background, impacts and benefits of this change proposal. Two complementary documents provide more details on how this consultation will be conducted and how the options were appraised:
- Stage 3 Consultation Strategy, which provides details on how we will conduct the consultation.
 - Stage 3 Full Options Appraisal, which provides analysis for the proposed change in comparison to the baseline (‘do nothing’) option, quantifying key benefits and impacts.
- 2.1.8 The Consultation Document, Consultation Strategy, and Full Options Appraisal, are the core Stage 3 documents (using the most up-to-date and credible information available) needed for stakeholders to understand this proposal, its background, and how we will consult.
- 2.1.9 The Consultation Document and Consultation Strategy can be found on the CAA’s [Citizen Space consultation website](#).
- 2.1.10 For the Full Options Appraisal and all previous stages of the airspace change process, including the Statement of Need (SoN), design principles and design options, please see the CAA’s [airspace change portal](#) page.

2.2 Objective of this airspace change proposal

- 2.2.1 The aim of this ACP is to modernise the airspace which interfaces between the LTMA and MTMA (referred to hereafter as 'Midlands Airspace'), see Figure 2.
- 2.2.2 The key objectives are to enhance route capacity and reduce complexity, providing environmental efficiencies where possible. This change aligns with the AMS [Ref 1].
- 2.2.3 Midlands Airspace is a complex area of airspace. Sandwiched between the MTMA and LTMA, there are 2 primary flows of traffic to the north and south which traverse the 'spine' of the country, and a high volume of traffic.
- 2.2.4 Current capacity within Midlands Airspace is restricted by the high level of controller workload, driven by high levels of tactical intervention required to maintain separation.
- 2.2.5 Separate ACPs are underway to modernise both the LTMA ([ACP-2020-043](#)) and the MTMA ([ACP 2019-77](#)) which will introduce systemised routings within the TMAs.
- 2.2.6 This ACP seeks to optimise the route network in advance of the MTMA and LTMA changes; this will be an enabling change for both MTMA and LTMA ACPs.

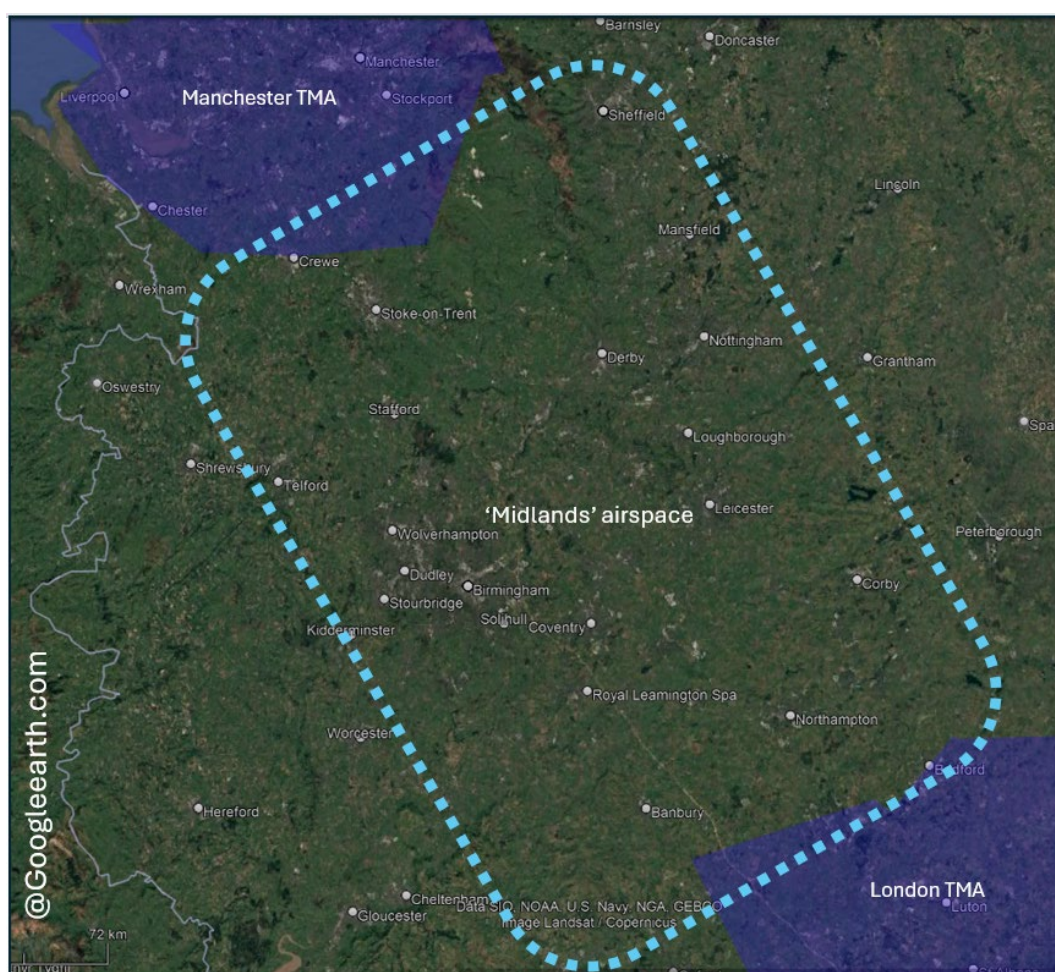


Figure 2: The aim of this airspace change proposal is to modernise the region of airspace between the LTMA and the MTMA – “Midlands’ airspace.

2.3 Why must this change happen now

Increasing capacity

- 2.3.1 The number of airspace users using UK airspace is forecasted to increase significantly in the coming years. If the airspace is not upgraded, it may not be able to accommodate this growth, (including growth driven by permitted new airports and runway capacity), leading to increased delays and congestion. This airspace change proposal will introduce modern routes and systemisation that should increase the effective capacity of the airspace to

alleviate this problem. By optimising these routes, the airspace can accommodate more aircraft without compromising safety or efficiency.

Efficiency

- 2.3.2 The current airspace design can lead to congestion and delays, particularly during peak times. By redesigning flight paths and utilising advanced navigation technologies, the airspace can be used more efficiently through systemisation. This involves implementing Performance Based Navigation (PBN) to improve the accuracy and predictability of flight paths, allowing for better management of air traffic and reducing the likelihood of delays.

2.4 Stakeholders

- 2.4.1 A stakeholder is a third party with an interest in an airspace change proposal.
- 2.4.2 This ACP is categorised under CAP1616 as a Level 2 change; changes to flight paths will take place at/above 7,000ft (above mean sea level) only. Therefore, the primary focus of this consultation is aviation stakeholders as follows:
- Aircraft operators accounting for approximately 80% of the traffic in the airspace region
 - Airports associated with departure and arrival flows to/from the revised route network.
 - General Aviation
 - Computerised Flight Plan Service Providers (CFSPs)
 - Military
 - Relevant National Air Traffic Management Advisory Committee (NATMAC) members
- 2.4.3 Any individual or organisation may submit a response to this consultation, but our targeted communications to inform organisations and individuals will be limited to the aviation stakeholders listed in Appendix A List of Stakeholders.
- 2.4.4 Due to the altitude at which changes are proposed, some of the content in this document includes commonly understood aviation terms and technical language without further explanation. However, we have ensured that sufficient information is written in plain English such that non-aviation stakeholders can also understand this airspace change proposal and the anticipated impacts; a Glossary of Terms is additionally provided in Appendix F Glossary to provide readers with a quick reference for the terminology used.
- 2.4.5 A summary of our previous stakeholder engagement is provided in the Consultation Strategy document (available on the CAA's [Citizen Space consultation website](#)). For details of all stakeholder engagement, see our Stage 1 and Stage 2 publications on the CAA's [airspace change portal](#).

2.5 Other ACPs

- 2.5.1 Engagement with the military identified two future military airspace changes within the proposed change area as follows:
- [ACP-2024-028](#) Holbeach AWR Airspace Change to Enable Current and Future Assets. This ACP seeks to extend the vertical and lateral limits of Danger Area EGD207 to the northeast of The Wash. There is no anticipated impact to the Midlands ACP with this change.
 - Redesignation of the EAMTA from a Military Training Area (MTA) to a Danger Area (DA). Whilst this is not currently an active ACP, there is likely to be a future proposal to convert the EAMTA to a Danger Area. NATS confirmed that the Midlands design has been future proofed for such changes with routes providing at least 5nm+ spacing from the EAMTA to account for any future buffers that may be added.
- 2.5.2 Engagement with East Midlands airport identified a correction which has been made to DTY CTA 12/13 boundary ([OTH-2025-007](#)). There is no anticipated impact to the Midlands ACP with this change.

3. Current Airspace (Baseline)

3.1 Overview of current airspace

- 3.1.1 The following section describes the current airspace which forms the baseline ('do nothing') option. It should be noted that 'doing nothing' is useful as a baseline for comparison, but it does not provide improvements in operational capacity, or optimise the interface with the MTMA and LTMA, or deliver against the AMS objectives. As such, it is not considered a viable option.
- 3.1.2 Within current airspace, the route structure consists of Air Traffic Service (ATS) Routes, flight plannable Direct Routes (DCTs) and Standard Arrival Routes (STARs). Historically, route design was based on a track defined by ground-based navigation aids, resulting in route convergence at the geographical location of the ground stations. To keep aircraft safely separated on such routes, traffic is routinely dispersed using headings, which requires a high level of controller intervention.
- 3.1.3 Figure 3 shows the ATS route structure within the change region. Specifically, the ATS routes within scope of the proposed change are: L10, L15, L151, L28, L612, L613, L8, M14, M605, M868, M87, N38, N57, N58, N601, N859, N862, P155, P16, P18, P6, P72, Q3, Q36, Q37, Q38, Q39, Q4, Q41, Q75, T418, T420, UL28, UL612, UM65, UN57, UN601, UN859, UP16, UP6, Y124, Y250, Y321, Y53, Z197. As shown in the diagram, the current airspace has multiple converging routes; in particular northbound traffic routes converge at TNT and southbound traffic routes converge at HON, increasing the complexity in this region.

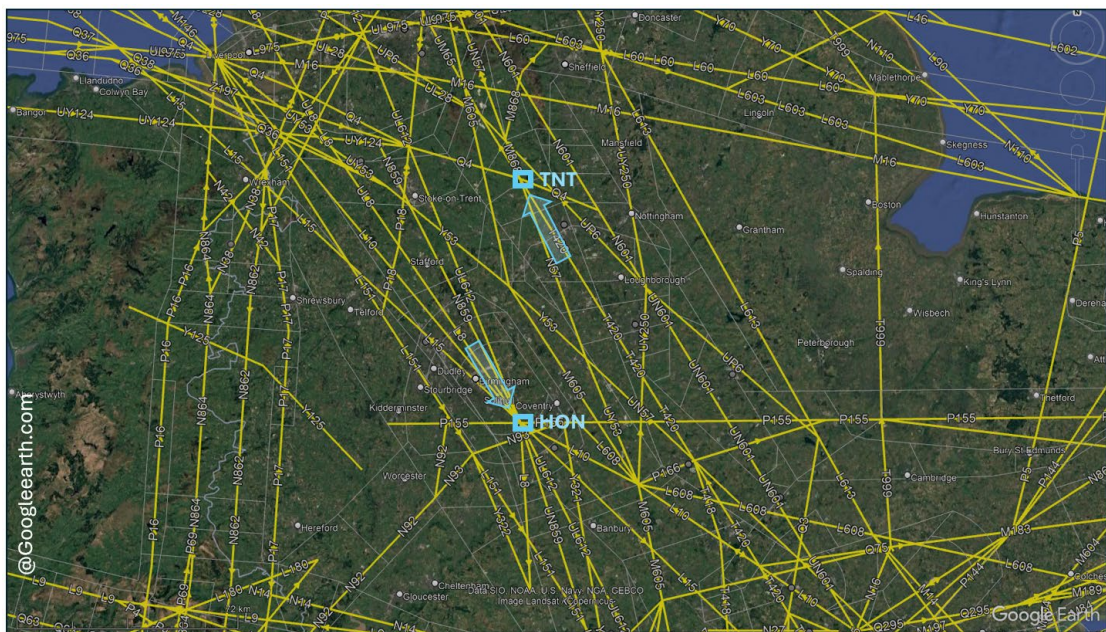


Figure 3: Current ATS route structure. Southbound routes converge at HON and northbound routes converge at TNT. [UK AIP, Dec 2025].

- 3.1.4 Arrivals to the LTMA, MTMA and the Midlands group airports¹ connect to the route network via STARs. The STARs that are within scope of the proposed change are listed below and illustrated in Figure 4:
- Birmingham airport (EGBB): HEMEL 1B (shown in orange).
 - East Midlands airport (EGNX): HEMEL 1E (shown in white).
 - Liverpool John Lennon airport (EGGP): ELVOS 1L and LESTA 1L (shown in blue). These STARs are also used by aircraft arriving at Hawarden airport (EGNR).

¹ The Midlands group airports are EGBB (Birmingham), EGBE (Coventry), and EGNX (East Midlands).

- London City airport (EGLC): HON 1C and LISTO 1C (shown in green). These STARs are also used by aircraft arriving at London Biggin Hill airport (EGKB).
- London Gatwick airport (EGKK): DISTIG 1G (shown in light green).
- London Heathrow airport (EGLL): NUGRA 2H, HON 2H and TOBID 1X² (shown in purple). These STARs are also used by aircraft arriving at Denham aerodrome (EGLD) and RAF Northolt (EGWU).
- London Luton airport (EGGW): LISTO 1N (shown in pink).
- London Southend airport (EGMC): LISTO 1S (shown in red).
- London Stansted airport (EGSS): LISTO 1L (shown in light blue). This STAR is also used by aircraft arriving at Cambridge City airport (EGSC).
- Manchester airport (EGCC): ELVOS 1M and LESTA 1M (shown in dark blue).

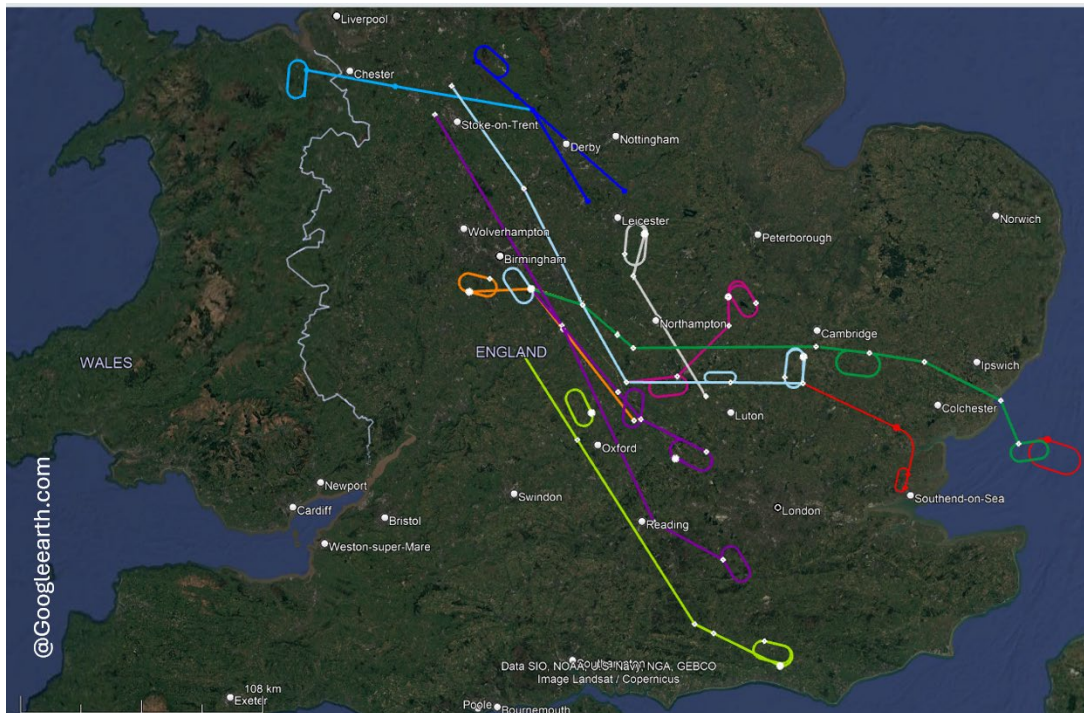


Figure 4: Current STARs within scope of the proposed change. [UK AIP, Dec 2025].

3.1.5 The controlled airspace (CAS) and military airspace volumes that are within scope of the proposed change are listed below and illustrated in Figure 5:

- Midlands Control Area (CTA): Class C, FL195-FL245.
- Daventry (DTY) CTA 1 – CTA 20: Class A airspace, various bases up to FL195.
- Daventry (DTY) CTA 21 – CTA 25: Class C airspace, various bases up to FL195.
- Temporary Reserved Area (TRA) 003: FL195-FL245. Hours: Mon-Fri 0830-1800 (0730-1700). This airspace is activated at other times by NOTAM (Notice to Air Missions).
- East Anglian Military Training Area (EAMTA): EAMTA High FL285-FL660, EAMTA Low FL245-FL285. This airspace is activated by NOTAM.
- Area of Intense Aerial Activity (AIAA) Lincolnshire (LINCS): SFC (surface) to FL130. Peak activity: Mon-Fri 0900-1700 (0800-1600). Whilst this is not controlled or restricted airspace, due to the intense military activity pilots are strongly advised to make use of an ATS whilst transiting the area.

² Not available for flight planning - for stack swapping purposes only.

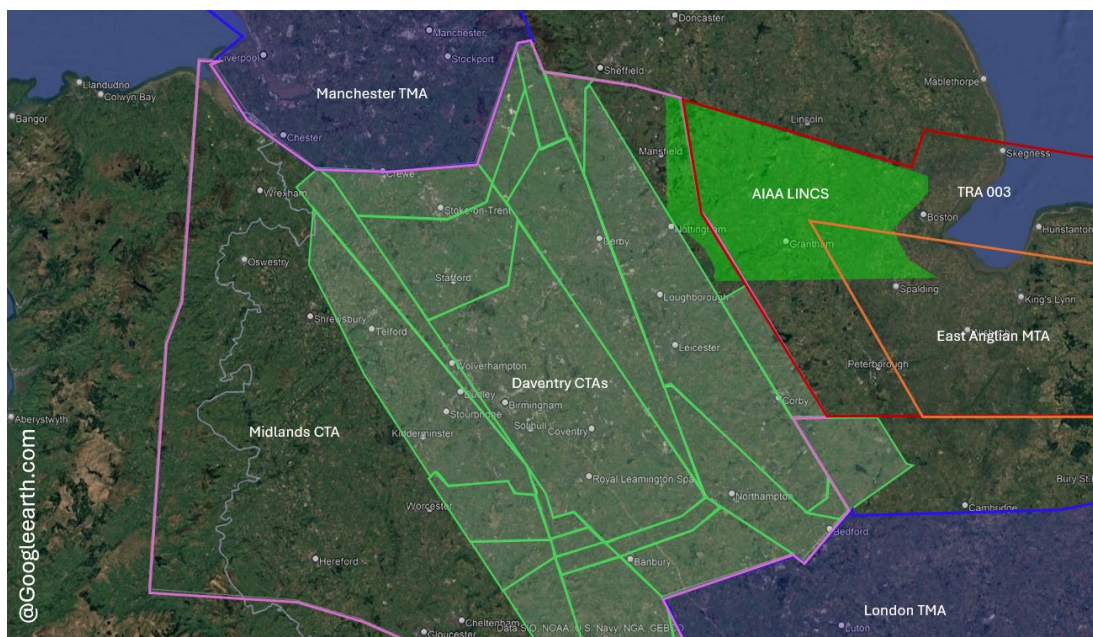


Figure 5: Current CAS and military airspace volumes within scope of the proposed change. [UK AIP, Dec 2025].

3.2 Airspace Usage

3.2.1 Within current airspace, the traffic primarily follows either a northbound (to the east) or southbound (to the west) flow.

3.2.2 The northbound traffic flow includes:

- Departures from Farnborough airport, the LTMA, Solent group³ and Wessex group⁴ airports.
- Arrivals into Birmingham airport, East Midlands airport, the MTMA and northern UK/Irish airports.
- Northbound London Flight Information Region (FIR)/ Upper Information Region (UIR) overflights.

3.2.3 The southbound traffic flow includes:

- Arrivals into Farnborough airport, the LTMA, Solent group and Wessex group airports.
- Departures from Birmingham airport, East Midlands airport, the MTMA and northern UK/Irish airports.
- Southbound London FIR/ UIR overflights.

3.2.4 Figure 6 illustrates the current traffic flows and traffic density for a typical busy summer week (EUROCONTROL CFMU traffic data, 1st – 7th August 2025, 10,012 flights).

³ The Solent group airports are EGHH (Bournemouth) and EGHI (Southampton).

⁴ The Wessex group airports are EGLK (Blackbushe), EGTD (Dunsfold), EGTF (Fairoaks), EGHL (Lasham), EGVO (Odiham).

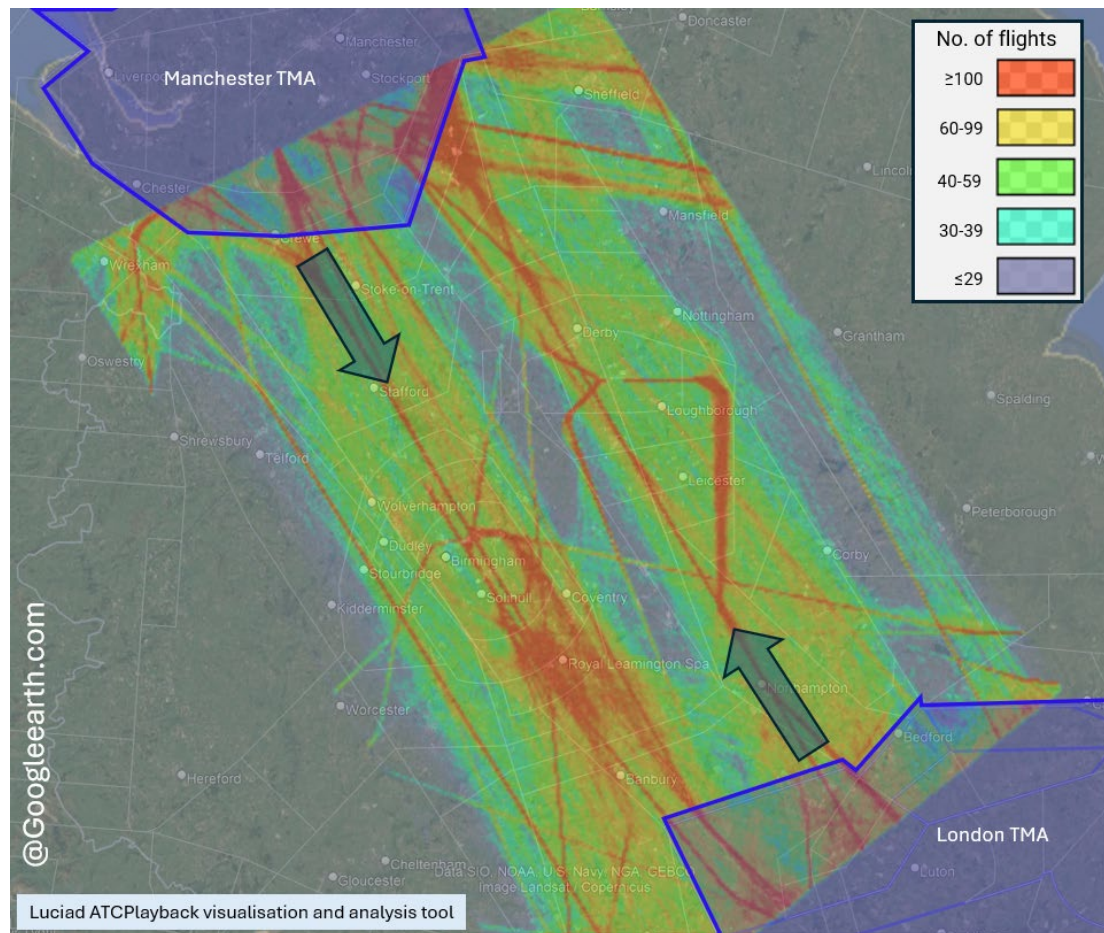


Figure 6: Flight density plot illustrating radar data for flights in the proposed change area (Aug 1st-7th 2025, 10,012 flights).

3.3 Forecast traffic

3.3.1 In 2025, approximately 473,141 aircraft used the airspace within the proposed change area (EUROCONTROL CFMU traffic data), with 1,136 kt fuel burn and 3,610 kt CO₂e.

3.3.2 Based on the 2025 traffic figures, forecast traffic⁵ from 2029 (year 1⁶) to 2038 (year 10) is provided and presents the 'do nothing' scenario, see Table 1.

Table 1: Baseline ('do nothing') scenario – traffic growth, fuel burn and CO₂e emissions

Year	Traffic	Fuel Burn (kt)	CO ₂ e (kt)
2025 (current day)	473,141	1,136.07	3,610.84
2029 (year 1)	482,023	1,169.54	3,717.22
2030	483,238	1,174.94	3,734.39
2031	484,452	1,180.34	3,751.55
2032	485,666	1,185.74	3,768.72
2033	486,880	1,191.14	3,785.89
2034	488,095	1,196.55	3,803.06
2035	489,309	1,201.95	3,820.23
2036	490,523	1,207.35	3,837.40
2037	491,737	1,212.75	3,854.57
2038 (year 10)	492,951	1,218.15	3,871.74

⁵ Future annual traffic volumes were derived from the NATS Long Term Forecast (November 2025) and projected to 2029 and 2038. The forecast is based on EUROCONTROL STATFOR and Department for Transport (DfT) methodologies, supplemented by NATS intelligence to provide a refined estimate of future UK airspace demand.

⁶ The proposed Midlands Airspace change is currently anticipated to be implemented no earlier than November 2028, providing deconfliction with other operational deployments scheduled for 2028. Consequently, 2029 was adopted as the first year of implementation, in preference to modelling a partial implementation year covering only the final two months of 2028. The assessment therefore covers Year 1 (2029) and the subsequent 10-year appraisal period through to 2038 for both the baseline and proposed change scenarios.

4. Proposed Changes

4.1 Justification

- 4.1.1 Our existing airspace has not been designed to modern standards and still has routes based on ground based navigational infrastructure which leads to significant controller intervention.
- 4.1.2 This airspace change proposal is a step towards systemising UK airspace in the central spine of the country. Systemisation reduces the need for tactical intervention from controllers, allowing aircraft to follow their planned routes and optimise their profiles for time and fuel savings.
- 4.1.3 Although delivered via separate ACPs, this proposal for Midlands Airspace and the ACP for the MTMA modernisation project ([ACP-2019-77](#)) are intricately linked, together providing a holistic design solution across a large geographical area and providing a future state with which the LTMA modernisation project ([ACP-2020-043](#)), can connect.
- 4.1.4 Without providing systemised airspace within this central region of the country, we are limited in our ability to modernise airspace both to the north and the south; once the proposed change for Midlands Airspace is deployed, it will form the foundation for the future MTMA and LTMA airspace changes.
- 4.1.5 Without airspace systemisation, complexity in UK airspace will continue to increase due to forecast traffic demand, which could result in more delay.
- 4.1.6 As described in Section 2, two detailed design options were assessed during Stage 2. “Option 1 – 10 Parallel Routes” scored more favourably against the agreed design principles and was therefore progressed as the single proposal for this consultation. A full summary of the assessment and scoring is provided in Appendix B Design History.
- 4.1.7 The purpose of this consultation is to allow you to give your feedback on our proposal; the details are presented in the following sections and describe the changes proposed to:
- ATS routes
 - STARs
 - Departure connectivity and speed restriction removal
 - Controlled airspace
 - Military airspace

4.2 Proposed changes overview: 'Option 1 - 10 Parallel Routes'

4.2.1 This proposal has 10 parallel ATS routes, which are route-separated (or 'systemised') by design. There are 5 southbound routes, and 5 northbound routes.

4.2.2 The benefits of this proposal are as follows:

- Enhanced predictability for LTMA/MTMA arrival and departure flows
- Significantly reduces the use of controller intervention, increasing airspace capacity
- Optimises flight profiles for traffic transiting the airspace
- Provides 4 separate routes for LTMA departures, providing increased airspace capacity through reduced complexity/controller workload
- Provides future growth potential for the LTMA, MTMA and surrounding airfields.
- Reduces complexity on busy northbound air traffic control sectors, therefore reducing delay
- Fully compatible with the design work in the MTMA modernisation project

4.2.3 It should be noted that the names of any new volumes of airspace/ procedures/ routes within this proposal are 'working names' only, and are subject to change during the design process. Finalised names will be provided, following any consultation-led design updates, within the final ACP submission at Stage 4.

4.3 Proposed Changes – ATS Routes

4.3.1 This airspace change proposes to introduce 10 parallel ATS routes, 'systemised routes', within Midlands Airspace between the MTMA and LTMA.

4.3.2 Traffic routing to and from the LTMA/MTMA may flight plan one of these 10 ATS routes, according to their departure/destination and/or UK entry/exit fixes.

4.3.3 The new systemised route structure, see Figure 7, is composed of:

- 5 routes supporting the southbound flow of traffic: Q36, Q37, Q38, L612, and Y124.
- 5 routes supporting the northbound flow of traffic: T420, N57, N601, P72, and L613.
Note: some opposite direction traffic flows will also be accommodated on these routes.

4.3.4 To support the current traffic demand, and future traffic growth, the new systemised route structure will apply an RNAV 1 navigation performance specification⁷ and the commensurate Performance-based Navigation (PBN) route spacing [Ref 7] associated with this performance specification. All routes are separated from each other by design; 6.8nm lateral separation is provided between each southbound route (routes 1 to 5), and also between each northbound route (routes 6 to 10). Between routes 5 and 6 a wider separation of 8nm is provided to ensure safe separation between the opposite direction traffic flows.

4.3.5 The new systemised route structure will be wholly contained within CAS; the lower/upper vertical limit of each route/route portion will be provided with the finalised design at Stage 4, and is contained within FL70 – FL460.

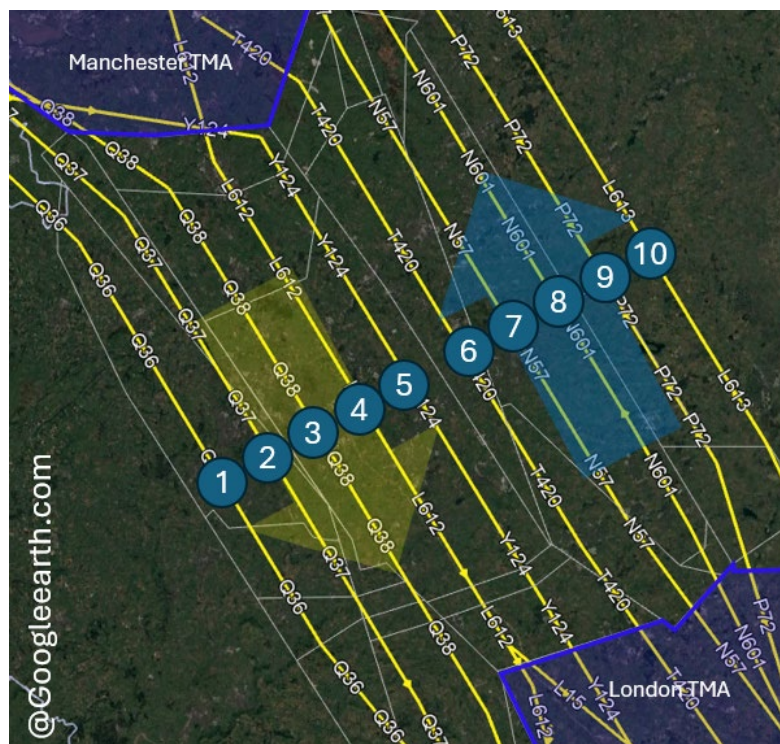
4.3.6 Other traffic overflying the airspace volume (FL200+) will be permitted to flight plan more efficient trajectories by means of flight plannable DCTs (as per current operations). This creates a 'hybrid-systemised' environment whereby the systemised route structure supports the complexity of climbing/ descending traffic between the TMAs, and the flight plannable DCTs provide more environmentally efficient direct routings for the less complex overflight traffic.

4.3.7 Additional ATS routes will also require amendment to support the new systemised route structure, as shown in Figure 8 and listed in Table 2. These ATS route changes are primarily minor changes to route alignment, route length (truncation or extension), or the

⁷ The legislative requirements for the navigation specification of the UK ATS network are available on the CAA website [here](#).

removal/addition of route waypoints as part of this change. Full details of any route waypoint changes will be provided, following any consultation-led design updates, within the final ACP submission at Stage 4, and do not change the impacts of the new route design shown herein.

- 4.3.8 As part of this change, where there is opportunity to do so, route designation will be rationalised by withdrawing those routes with 'U' designators and simplifying the upper/lower route naming under a single route designation.



Southbound routes 1-5	
Route 1 Q36 – RNAV 1	Farnborough airport, Gatwick airport, Solent group ⁸ , and Wessex group ⁹ arrivals.
Route 2 Q37 – RNAV 1	MTMA departures to the south/southwest.
Route 3 Q38 – RNAV 1	Heathrow airport arrivals. Route 3 is also available for low level transits, (FL85-FL145).
Route 4 L612 – RNAV 1	MTMA departures to the southeast, and Leeds Bradford, Humberside, Newcastle and Teesside, airport departures.
Route 5 Y124 – RNAV 1	London Biggin Hill, London City, London Luton, Southend, and London Stansted airport arrivals.

Northbound routes 6-10	
Route 6 T420 – RNAV 1	MTMA arrivals.
Route 7 N57 – RNAV 1	LTMA and southern UK departures to airports in the Republic of Ireland and Northern Ireland.
Route 8 N601 – RNAV 1	LTMA and southern UK departures to certain airports in the Scottish FIR.
Route 9 P72 – RNAV 1	LTMA and southern UK departures to certain airports in the eastern/northern Scottish FIR. Leeds Bradford, Humberside, Newcastle, and Teesside airport arrivals.
Route 10 L613 – RNAV 1 (bi-directional)	London FIR overflights (as today). Some southbound traffic is additionally supported on this route: high-level London City airport arrivals from Scotland (FL335+).

Figure 7: (Left) Illustration of the proposed systemised route structure. (Right) Descriptions of proposed southbound (routes 1-5) and northbound (routes 6-10) route usage.

⁸ The Solent group airports are EGHH (Bournemouth) and EGHI (Southampton).

⁹ The Wessex group airports are EGLK (Blackbushe), EGTD (Dunsfold), EGTF (Fairoaks), EGHL (Lasham), EGVO (Odiham).

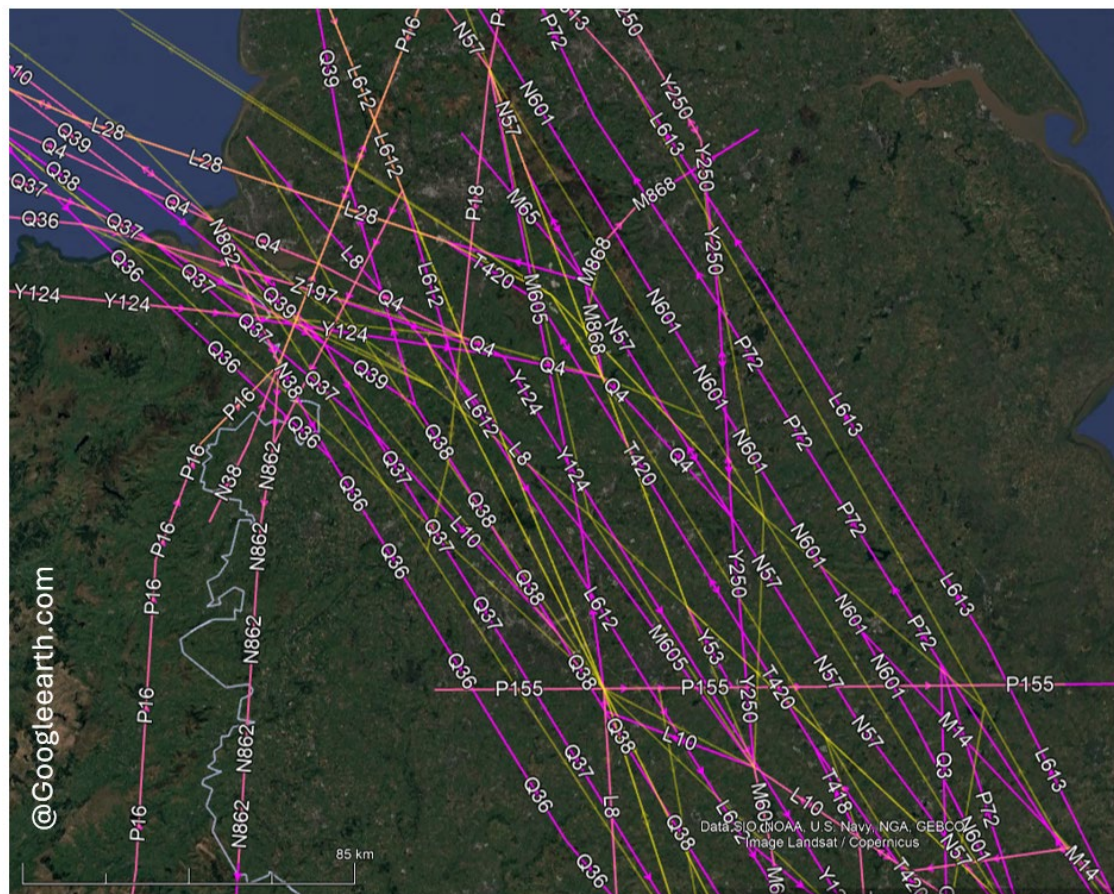


Figure 8: Proposed changes to ATS routes. Current ATS routes are shown in yellow. New/revised ATS routes are shown in pink.

Table 2: Summary of the proposed changes to ATS routes.¹⁰

ATS Route	Description of change	ATS Route	Description of change
L10	Realigned	Q3	Realigned
L15	Truncated, Realigned	Q36	Extended, Realigned
L151	Withdrawn	Q37	Extended
L28	Realigned, upper limits amended	Q38	Extended, Realigned
L612	Realigned	Q39	Extended
L613	Realigned	Q4	Extended, Realigned
L8	Realigned	Q41	Additional waypoints
M14	Extended	Q75	Additional waypoints
M605	Realigned	T418	Realigned
M868	Truncated, Realigned	T420	Extended, Realigned
M87	Extended	UL28	Withdrawn
N38	Realigned	UL612	Withdrawn
N57	Realigned	UM65	Realigned, 'U' designator removed
N58	Additional waypoints	UN57	Withdrawn
N601	Realigned	UN859	Truncated
N859	Truncated	UP16	Withdrawn
N862	Additional waypoints	UP6	Withdrawn
P155	Additional waypoints	Y124	Extended, Realigned
P16	Additional waypoints, upper limits amended	Y250	Realigned
P18	Extended	Y321	Truncated
P6	Truncated	Y53	Truncated, Realigned
P72	Extended, Realigned	Z197	Extended, Realigned

¹⁰ Following any consultation-led updates, a full review of ATS route designation within the change area will be undertaken; where appropriate route designation will be rationalised by withdrawing those routes with 'U' designators and simplifying the upper/lower route naming under a single route designation.

4.4 Proposed Changes – STARs

4.4.1 One new STAR will be introduced, and a number of existing STARs will require amendment to provide alignment with, and connectivity to, the new route network.

4.4.2 All proposed changes to STARs are minor adjustments:

- withdrawing those that are no longer required;
- relocating the start point of the procedure to align with proposed network changes;
- adjusting tracks to provide the required route separations and;
- optimising tracks to provide shorter routings where appropriate.

4.4.3 All proposed changes to STAR profiles are at/above FL100.

4.4.4 The proposed changes will not affect any current STAR speed restrictions.

4.4.5 The proposed changes will not affect any Holding Points or Holding Procedures.

4.4.6 In total, 1 new STAR is introduced, 13 existing STARs are revised, 2 existing STARs are withdrawn, and all STARs are redesigned to an RNAV 1 specification¹¹, as summarised in Table 3 and illustrated in Figure 10 and Figure 11. RNAV 5 traffic will be accommodated through existing (unchanged) RNAV 5 STAR routings.

Table 3: Proposed changes to STARs. 1 new STAR is introduced, 13 existing STARs are revised, and 2 existing STARs are withdrawn. All STARs will utilise the RNAV 1 specification.

Airport	Current STAR	New/Revised STAR	Proposed Change
EGBB	HEMEL 1B	HEMEL 2B	Realigned, renamed and revised to an RNAV 1 specification
EGNX	HEMEL 1E	HEMEL 2E	Realigned, renamed and revised to an RNAV 1 specification
EGGP/EGNR	ELVOS 1L	HAD 1L	Realigned, renamed and revised to an RNAV 1 specification
	LESTA 1L	n/a	WITHDRAWN – All traffic to use new HAD 1L
EGLC, EGKB	HON 1C	KIS 8C	Realigned, renamed and revised to an RNAV 1 specification
	LISTO 1C	KIS 1C	Realigned, renamed and revised to an RNAV 1 specification
	n/a	TED 1C	New RNAV 1 STAR for EGLC FL335+ arrivals via L613
EGKK	DISTIG 1G	KEV 1G	Realigned, renamed and revised to an RNAV 1 specification
EGLL/EGGW/EGLD	NUGRA 2H	PET 1H	Realigned, renamed and revised to an RNAV 1 specification
	HON 2H	PET 2H	Realigned, renamed and revised to an RNAV 1 specification
	TOBID IX	PET 1X	Realigned, renamed and revised to an RNAV 1 specification
EGGW	LISTO 1N	KIS 1N	Realigned, renamed and revised to an RNAV 1 specification
EGMC	LISTO 1S	KIS 1S	Realigned, renamed and revised to an RNAV 1 specification
EGSS/EGSC	LISTO IL	KIS 1L	Realigned, renamed and revised to an RNAV 1 specification
EGCC	ELVOS 1M	HAD 1M	Realigned, renamed and revised to an RNAV 1 specification
	LESTA 1M	n/a	WITHDRAWN – All traffic to use new HAD 1M

¹¹ Most aircraft within the UK are RNAV 1 equipped (or better). The PBN equipage for arrivals to the impacted airports is provided in Appendix C Technical Details.

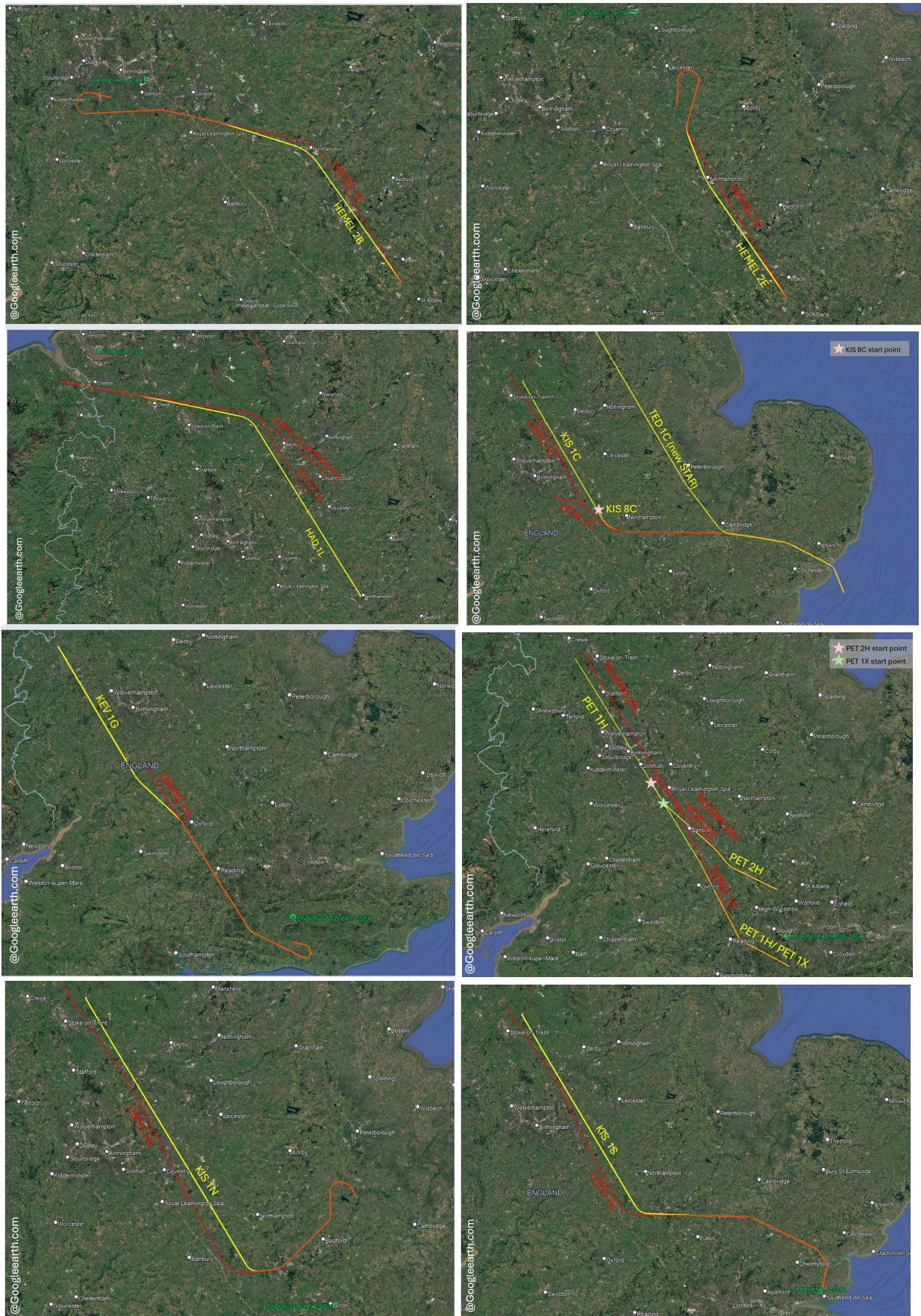


Figure 9: Current STARs are shown in red, proposed STAR changes are shown in yellow. (From the top, left to right) Birmingham and East Midlands airports. Liverpool John Lennon and London City airports. London Gatwick and London Heathrow airports. London Luton and Southend airports.

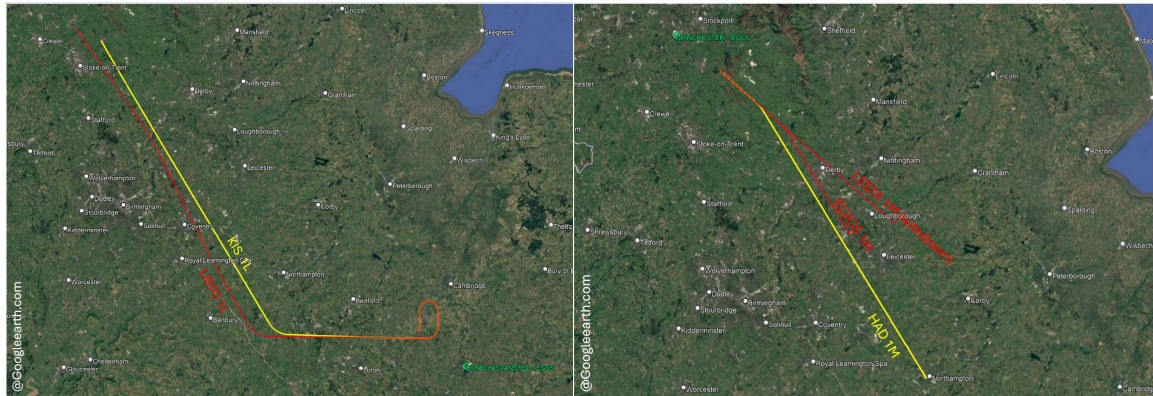


Figure 10: Current STARs are shown in red, proposed STAR changes are shown in yellow. (left to right) London Stansted and Manchester airports.

4.5 Proposed Changes – Departure connectivity and speed restriction removal

- 4.5.1 To provide departure connectivity to the new route network, new flight plannable DCTs will be provided from the endpoints of several airport SIDs (Standard Instrument Departures) within the impacted area, see Table 4.
- 4.5.2 An analysis of flight paths from all impacted SIDs has been undertaken to determine that, below 7,000ft, the lateral path from the SID endpoint to the new ATS route will be consistent with the current operation; details of this analysis is provided in Appendix C Technical Details
- 4.5.3 Some aircraft on SIDs in the UK are speed-restricted above FL100. Historically, these speed restrictions were designed to support a traffic mix in which older aircraft types (such as the BAe146 and E145) operated. These older aircraft climb much slower than more modern aircraft (such as the B737 and A320), so there was a frequent possibility of catch-up scenarios between older slower-climbing aircraft followed by newer faster-climbing aircraft. With fleet-mix changes over the years, most aircraft now have similar climb speeds, and these speed restrictions are considered largely unnecessary. Removal of the speed limitation currently rests with controllers who advise the aircraft to remove the speed restriction on first contact.
- 4.5.4 For this airspace change, it is proposed that the following SIDs have the FL100-FL260 speed profile note, which is displayed on their SID charts, removed, expediting traffic and further reducing controller radio transmissions and workload: EGGP NANTI, EGCC LISTO, and EGCC SANBA.

Table 4: To provide departure connectivity to the new route network, new flight plannable direct routings are provided from the endpoints of the following impacted SIDs. The removal of SID speed restrictions FL100-FL260 (where applicable) is also shown.

Airport	Impacted SIDs	Other
EGBB	ADMEX 1M	
EGGP	NANTI 2T NANTI 2V	FL100-FL260 speed restriction removed.
EGLC	BPK 1A BPK 1H	
EGLL	ULTIB 1J ULTIB 1K UMLAT 1F UMLAT 1G	
EGGW	OLNEY 2B OLNEY 2C	
EGCC	LISTO 2S LISTO 2Z LISTO 2R LISTO 2Y SANBA 1R SANBA 1Y	FL100-FL260 speed restriction removed. FL100-FL260 speed restriction removed.

4.6 Proposed Changes – Controlled Airspace

4.6.1 All changes to ATS routes and STARs will be contained within CAS, consistent with the CAA Policy for the Design of Controlled Airspace Structures [Ref 9]. As such, new CAS volumes and revisions to existing CAS volumes are proposed to support the new route network; for a summary illustration of all proposed changes to airspace volumes please see Figure 15.

4.6.2 3 new CTAs are proposed, which are illustrated in Figure 11:

- **New DAV CTA 26**, from FL155 to FL195, Class C airspace. This change supports a revised ATS route in lower airspace: P72 (route 9).
- **New DAV CTA 27**, from FL125 to FL195, Class C airspace. This change supports revised ATS routes in lower airspace: P72 (route 9) and Y250.
- **New DAV CTA 28**, from FL105 to FL195, Class C airspace. This change supports revised ATS routes in lower airspace: P72 (route 9) and Y250.

4.6.3 The introduction of the new route network will require a net increase of $\sim 315.8\text{nm}^2$ of additional CAS to deliver the anticipated benefits. However, the proposed additional CAS is above FL100 and in airspace which is not regularly used by VFR (Visual Flight Rules) aircraft or gliders. The new airspace is designated as Class C; this classification permits access to General Aviation (GA) traffic, and is the lowest level of airspace classification considered appropriate due to the volume and complexity of traffic. As such, it is considered that access for GA will not be significantly changed from today.

4.6.4 Within the proposed change area, CAS volumes and classifications have been reviewed by operational Subject Matter Experts (SMEs) as part of the design process. Due to the complexity and density of traffic within Midlands Airspace, no opportunities have been identified, at this stage, to provide airspace simplification and release portions of CAS (airspace give-back).



CTA	Levels	Airspace Classification	Approx. area
New DAV CTA 26	FL155-FL195	Class C	+98.1nm ² (new CAS)
New DAV CTA 27	FL125-FL195	Class C	+95.4nm ² (new CAS)
New DAV CTA 28	FL105-FL195	Class C	+75.4nm ² (new CAS)

Figure 11: (Left) Illustration of the proposed 3 new CTAs – New DAV CTA 26, New DAV CTA 27 and New DAV CTA 28. (Right) Levels, airspace classifications and approx. area of the proposed new CTAs.

4.6.5 Revisions to 3 existing CTAs are proposed, which are summarised in Table 5 and illustrated in Figure 12:

- **Revised DAV CTA 11**: revised lateral boundary ($\sim 1.2\text{nm}^2$ reduction in area), no changes to levels or airspace classification. This change realigns the DAV CTA 11 boundaries to accommodate New DAV CTA 26 and ensures the boundaries align with corresponding changes to Air Traffic Control (ATC) sectorisation.
- **Revised DAV CTA 22**: revised lateral boundary ($\sim 48.1\text{nm}^2$ increase in area), no changes to levels or airspace classification. This change supports a revised ATS route in lower airspace: P72 (route 9).
- **Revised Midlands CTA**: revised lateral boundary, no changes to levels or airspace classification. This change supports revised ATS routes in upper airspace: P72 (route 9) and Y250.

Table 5: Levels, airspace classification and area of the proposed revised CTAs.

CTA	Levels	Airspace Classification	Approx. area change
Revised DAV CTA 11	FL85-FL195 (no change)	Class A (no change)	-1.2nm ² (reduction)
Revised DAV CTA 22	FL145-FL195 (no change)	Class C (no change)	+48.1nm ² (increase)
Revised Midlands CTA	FL195-FL245 (no change)	Class C (no change)	Not calculated, as all UK airspace between FL195 and FL660 is Class C.

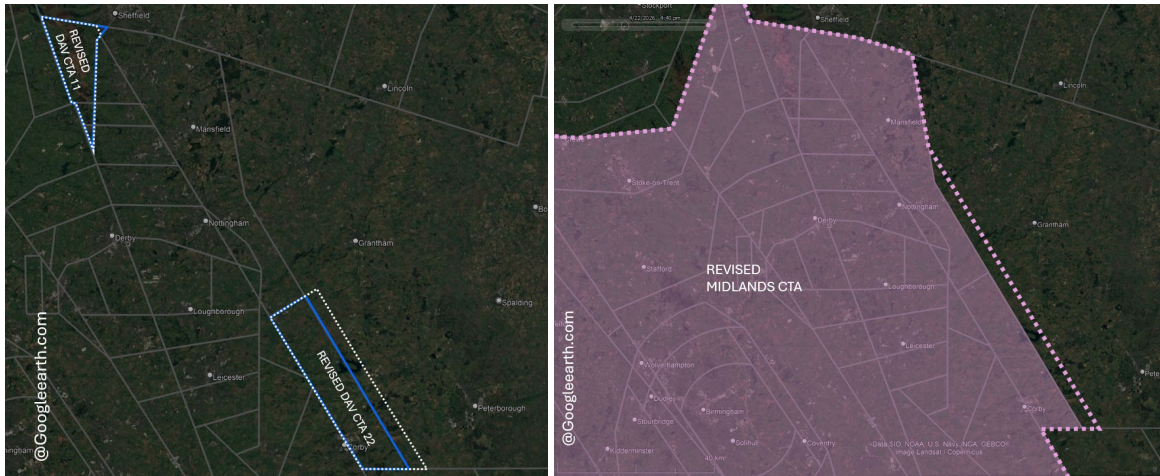


Figure 12: Illustration of the proposed lateral boundary revisions to 3 existing CTAs, shown by the dotted lines – Revised DAV CTA 11, Revised DAV CTA 22, and Revised Midlands CTA.

4.7 Proposed Changes – Military airspace

4.7.1

To support the new route network, revisions to 3 military airspace volumes are proposed, TRA003, EAMTA, and LINC AIAA which are summarised in Table 6 and illustrated in Figure 13 and Figure 14.

- **Revised TRA003:** revised lateral boundary (~224.6nm² reduction in area), no changes to levels or hours of operation. This change realigns the western boundary of TRA003 to accommodate the Revised Midlands CTA and provides 5nm separation from revised P72 (route 9).
- **Revised EAMTA:** revised lateral boundary (~218nm² increase in area), no changes to levels or hours of operation. This change provides the required 5nm separation from revised L613 (route 10). It also reduces the need for controllers to vector high-level traffic around the EAMTA (as today) by enabling an H24 FL305+ DCT, providing environmental benefit and mitigating unintended penetrations of the EAMTA.
- **Revised AIAA LINC:** revised vertical boundary lowering the ceiling to FL120 (currently FL130), no changes to the lateral boundaries or hours of operation. This change simplifies the airspace, with AIAA users operating up to FL120 and the NEW DAV CTA 27 (FL125 to FL195) operating above. This ensures reduced complexity/workload for controllers operating the new CAS, with only a small portion of the southeastern corner of NEW DAV CTA 28 remaining within the AIAA from FL105-FL120.

4.7.2

The boundaries for these 3 military airspace volumes have been redefined, following engagement and discussion with the military, and seek to mitigate disruption to military operations on the east side of the proposed Midlands Airspace, through increasing the airspace available for the EAMTA on the northern boundary.

Table 6: Summary of proposed revisions to military airspace – Revised TRA003, Revised EAMTA and Revised LINC S AIAA

Military Airspace	Lateral boundary change	Approx. area change	Vertical boundary change
Revised TRA003	~5nm reduction along a segment of the western boundary	-224.6nm ² (reduction)	none
Revised EAMTA	Boundary reduction at the southwest corner. Boundary increase at the northwest corner. ~4nm increase along the northern boundary.	+218nm ² (increase)	none
Revised AIAA LINC S	No change	No change	Ceiling lowered from FL130 to FL120

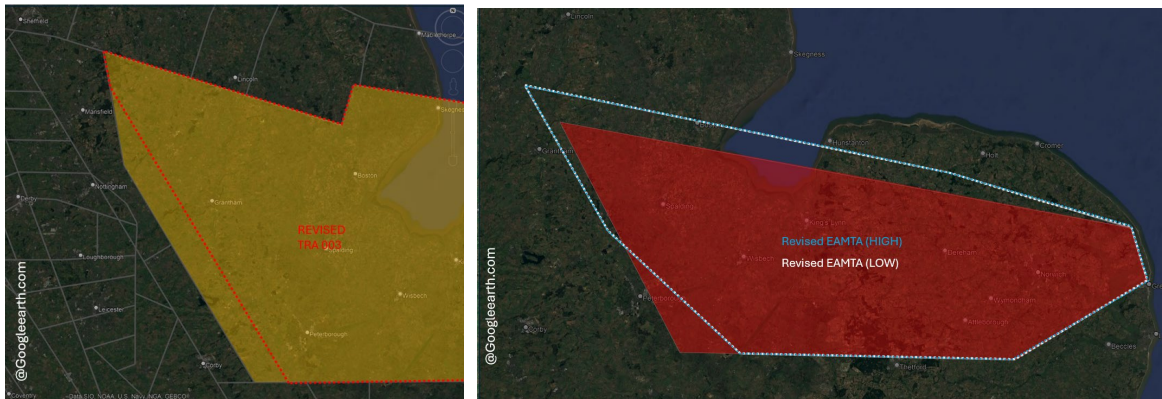


Figure 13: Illustration of the proposed lateral boundary revisions to military airspace, shown by the dotted lines – (left) Revised TRA003, (right) Revised EAMTA. No vertical boundary changes.

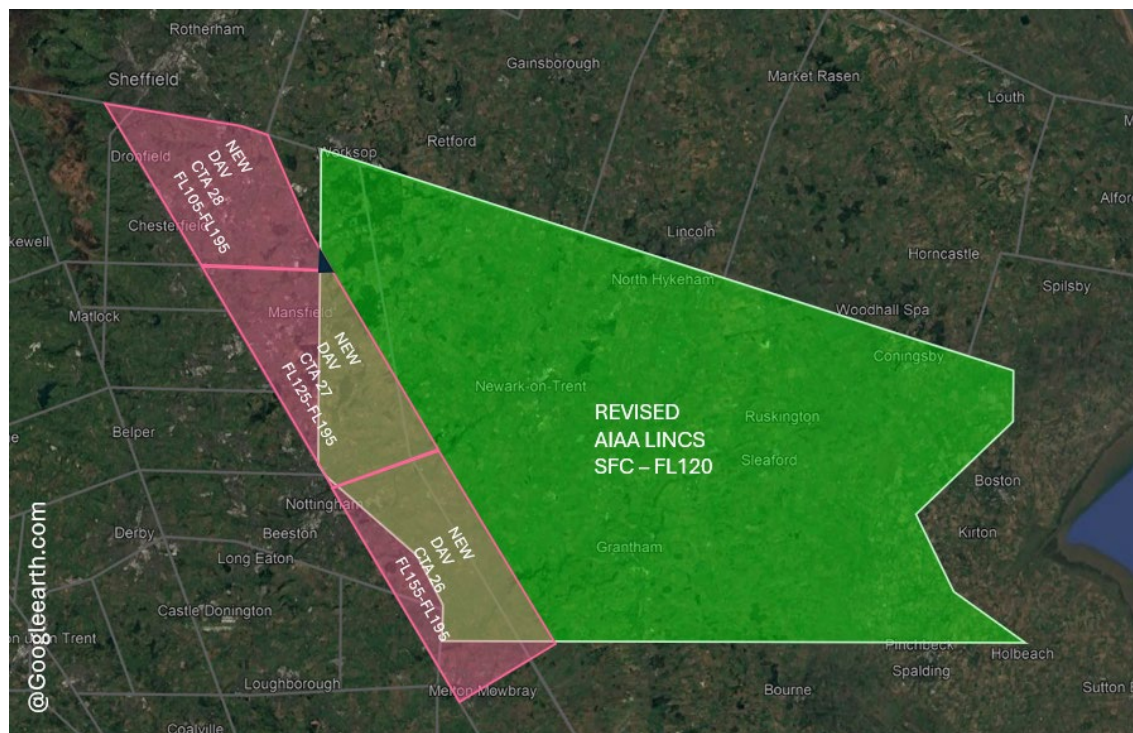


Figure 14: Illustration of the proposed vertical boundary revisions to military airspace – Revised AIAA LINC S, ceiling lowered from FL130 to FL120. The NEW DAV CTAs are predominantly situated above the AIAA and only a small volume (shown as a black triangle) lies within Revised AIAA LINC S from FL105-FL120. No lateral boundary changes.

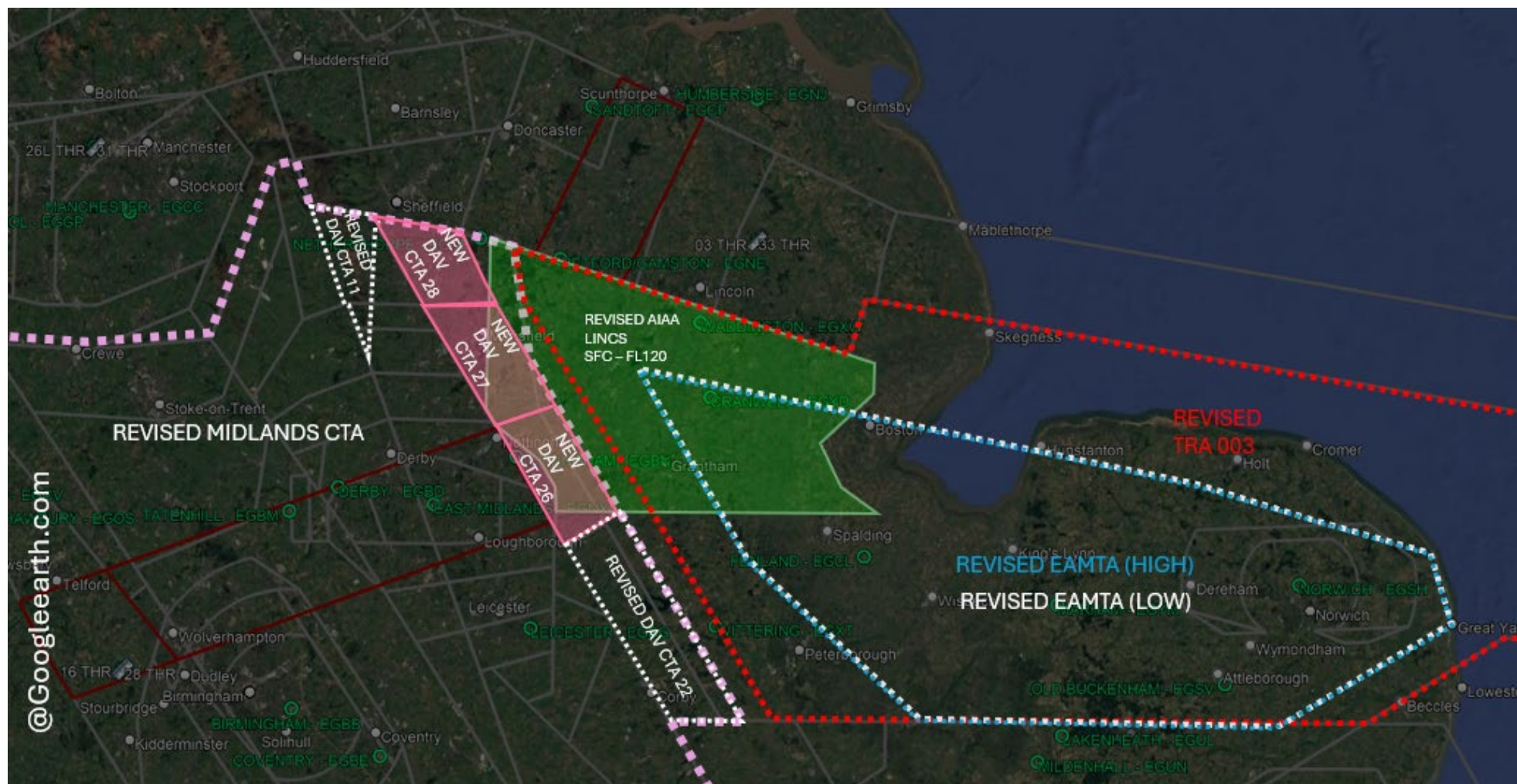


Figure 15: Illustration of all proposed changes to airspace volumes – 3 new CTAs (New DAV 26, New DAV 27, New DAV 28), 3 revised CTAs (Revised DAV CTA 11 – lateral change, Revised DAV CTA 22 – lateral change, Revised Midlands CTA – lateral change), and 3 revised military airspace volumes (Revised TRA003 – lateral change, Revised EAMTA – lateral change, Revised AIAA Lincs SFC – vertical change).

4.8 Regulations, Policies and Harmonisation

4.8.1 A number of CAA airspace regulations/policies provide key considerations for this airspace change proposal. The relevant aspects of these are summarised in Table 7 below.

Table 7: Relevant CAA airspace regulations and policies.

Publication	Overview
CAP 785B Implementation and Safeguarding of Instrument Flight Procedures (IFPs) in the UK	The proposed design changes to current STARs, and the introduction of a new STAR, provides compliance with the requirements and guidelines for changes to IFPs.
CAP1385 PBN: Enhanced Route Spacing Guidance	Defines the required route spacing between proximate routes. The proposed design complies with this policy, ensuring that the changes to ATS routes and STARs provide the required lateral and vertical distances to provide safe separation and optimise the use of airspace.
SARG Policy 127 Policy for the classification of UK Airspace	Provides requirements for the classification and designation of UK airspace. The proposed design complies with this policy, ensuring that the amount of controlled airspace is the minimum required to maintain a high standard of air safety. In addition, the classification of each new airspace volume, has been selected to permit safe access to as many types of airspace user as practicable.
SARG Policy 126 Policy for the design of Controlled Airspace Structures	Provides design criteria for controlled airspace. The proposed design complies with this policy, ensuring that changes to ATS routes and STARs are contained within the required lateral and vertical distances of controlled airspace.
SARG Policy 133 Policy for the establishment and operation of Special Use Airspace	Provides guidance on the design and management of Special Use Areas (SUAs). The proposed design complies with this policy, ensuring compliance with the minimum distance that routes can be positioned in proximity to SUAs. In addition, the revision proposed to TRA 003 seeks to improve efficiency and flexibility, whilst maintaining safety.
CAP740 UK Airspace Management Policy	Provides guidance on the application of FUA principles. The proposed design seeks to minimise, and mitigate, any negative impacts on military tactical freedom/military training, whilst optimising network performance.
ANG2017 UK Air Navigation Guidance 2017	Provides guidance on how to balance environmental objectives, such as aircraft noise and emissions, with airspace efficiency and modernisation. The proposed design ensures that environmental impacts are taken into account and seeks to reduce CO ₂ emissions, where possible, in alignment with this policy.

4.9 AMS Alignment

4.9.1 Table 8 demonstrates how this ACP aligns with the strategic objectives of the CAA's Airspace Modernisation Strategy, CAP1711 [Ref 1].

Table 8: ACP alignment with the strategic objectives of the AMS.

AMS Strategic Objectives	Alignment
Maintaining and, where possible, improving the UK's high levels of aviation safety	NATS supports the prioritisation and continuous improvement of aviation safety, and this ACP seeks to develop an improved airspace design through systemisation, mitigating an area of high traffic complexity/density by reducing controller workload, which would, additionally, help manage residual operational risk.

Integration of diverse users – including needs of defence and security	This ACP seeks to minimise the impact on diverse airspace users by ensuring the airspace design maintains close alignment with existing arrangements: the volume of additional controlled airspace proposed is the minimum required to maintain a high standard of air safety; the classification of new airspace volumes ensures safe access to as many types of airspace user as practicable and; any negative impacts on military tactical freedom/military training, have been minimised and mitigated.
Simplification – reducing complexity and improving efficiency	This ACP seeks to secure the most efficient use of airspace, and the expeditious flow of traffic, through a reduction in controller workload, thereby accommodating increasing traffic demand, improving airspace network resilience and reducing delays for airspace users.
Environmental sustainability – an overarching principle applied through all modernisation activities, in accordance with the Government's environmental objectives	This ACP seeks to provide environmental benefits by enabling more efficient flight profiles; an improved airspace design could support a reduction in tactical deviations from aircraft planned flight paths, in addition to more continuous climb and descent profiles, which would enable a reduction in fuel burn and CO ₂ emissions.

5. Impact of this Proposal

5.1 Understanding the assessment results

- 5.1.1 The impacts presented in this document are based on forecasting, modelling and simulation undertaken using the best available information at the time of assessment.
- 5.1.2 The analysis compares the proposed change with the baseline ('do nothing') scenario over a 10-year¹² appraisal period.
- 5.1.3 Forecasts of future traffic demand, operational performance, delay, fuel burn and CO₂e emissions are inherently uncertain, and actual outcomes may differ from those presented.
- 5.1.4 The assessment is intended to provide a reasonable indication of the likely effects of the proposal rather than a prediction of future operations.
- 5.1.5 For monetised values, a discount rate of 3.5% per annum, applied from 2029 in accordance with HM Treasury Green Book guidance (Annex A6), has been used.
- 5.1.6 Full details of the assessment methodology, assumptions, sensitivities and limitations are provided within the Full Options Appraisal on the [airspace change portal](#) page.

5.2 Noise, local air quality, tranquillity, biodiversity, local communities

- 5.2.1 The Air Navigation Guidance 2017 (ANG 2017) [Ref 5] sets out altitude-based priorities for airspace changes in the UK, focusing on balancing noise pollution with CO₂ emissions.
- 5.2.2 Noise impacts are prioritised in airspace change decisions up to 7,000ft; for airspace at or above 7,000ft, the priority shifts from local noise reduction to efficiency, specifically reducing CO₂ emissions.
- 5.2.3 The changes within this proposal ensure that the profile of flights below 7,000ft remains consistent with current operations. As such, we assess that there would be no significant change to noise, local air quality, tranquillity or biodiversity and no change in impact to stakeholders on the ground due to the proposed airspace change.

5.3 Fuel burn and CO₂e

- 5.3.1 Fuel burn and CO₂e emissions analysis has been performed using computer simulations which modelled the operation of the proposed change with the forecast traffic growth over a 10-year period.
- 5.3.2 The modelling forecasts a small increase in average fuel burn per flight compared to the baseline ('do nothing') scenario.
- 5.3.3 While many routes benefit from reduced track mileage and improved operational efficiency, these benefits are outweighed overall by disbenefits on a small number of high-traffic departure flows using the systemised route structure, resulting in a net increase in fuel burn and CO₂e emissions.
- 5.3.4 The overall fuel burn and CO₂e disbenefit is primarily driven by a limited number of long-haul departure routes requiring additional track miles during the climb phase of flight. However, impacts vary across the network, with some routes benefiting from shorter track mileage and improved efficiency. As a result, the aggregated assessment masks a more complex distribution of route-specific benefits and disbenefits.
- 5.3.5 Despite the overall increase in fuel burn, the impact at an individual flight level remains small, equating to an average increase of **1.1 kg** of fuel and **3.4 kg** CO₂e per flight across approximately 500,000 annual movements. Relative to the average fuel burn and CO₂e emissions of approximately 2,470 kg and 7,850 kg per flight, respectively, for the assessed

¹² The proposed Midlands Airspace change is currently anticipated to be implemented no earlier than November 2028, providing deconfliction with other operational deployments scheduled for 2028. Consequently, 2029 was adopted as the first year of implementation, in preference to modelling a partial implementation year covering only the final two months of 2028. The assessment therefore covers Year 1 (2029) and the subsequent 10-year appraisal period through to 2038 for both the baseline and proposed change scenarios.

traffic sample, this represents an increase of around 0.04% and is therefore considered a **low-impact** effect.

- 5.3.6 The assessment estimates a 10-year present value fuel cost impact of approximately **-£2.27 million** and an environmental impact of approximately **-£4.78 million**.

Table 9: Average fuel burn and CO₂e emissions per flight for the proposed change compared with the baseline ('do nothing') option

Average per flight	2029 (Year 1)		2038 (Year 10)	
	Without change	With change	Without change	With change
Fuel Burn (kg)	2,426.3	2,427.4 (+1.1)	2,471.1	2,472.2 (+1.1)
CO ₂ e (kg)	7,711.7	7,715.1 (+3.4)	7,854.2	7,857.6 (+3.4)

5.4 Capacity/resilience

- 5.4.1 This proposal provides ATS routes separated by design, leading to enhanced predictability and increased capacity. As traffic levels increase, this capacity improvement would reduce delay¹³ compared with the baseline ('do nothing') scenario, resulting in operational efficiency benefits for airspace users and a corresponding reduction in delay-related costs.
- 5.4.2 With the proposed change, total delay is estimated at 151,716 minutes in 2029, increasing to 266,436 minutes by 2038 in line with forecast traffic growth over the appraisal period.
- 5.4.3 While this proposal alleviates part of the capacity bottleneck within certain Midlands sectors, delays in adjacent regions increase in 2029. Consequently, the net delay benefit in the first year of implementation is limited to around 4,000 minutes, resulting in a delay cost impact of approximately **-£113,929** in present value terms.
- 5.4.4 This occurs because, in the baseline scenario, delays within certain Midlands sectors help regulate demand in neighbouring airspace. As these regulations are reduced or removed, traffic demand is redistributed, requiring additional delay in adjacent sectors to ensure their capacity limits are not exceeded.
- 5.4.5 By 2038, changes in traffic growth and peak demand patterns reduce this secondary effect, leading to lower delays in neighbouring regions.
- 5.4.6 Although delay costs increase slightly in 2029, as lower-cost delays in Midlands Airspace are replaced by more costly delays in adjacent sectors, this effect is temporary. Over the 10-year assessment period, higher-cost delays become more prevalent as traffic grows, and the change scenario increasingly reduces these delays, generating annual savings of approximately **£926,115** in present value terms by 2038.
- 5.4.7 Overall, the assessment indicates that the proposed airspace change would reduce delay costs relative to the baseline ('do nothing') scenario. The 10-year present value of delay costs is estimated at £70.4 million, representing a benefit of **approximately -£4.57 million** compared with the baseline.

¹³ NATS-attributable Air Traffic Flow Management (ATFM) delay, including delays caused by demand exceeding available sector capacity, or by route and airspace design constraints that reduce network throughput and operational efficiency.

Table 10: Estimated delay and delay cost benefits for the proposed change compared with the baseline ('do nothing') option

Year	Delay (minutes)		Delay cost benefit (Present Value, £)	
	Total Annual Delay	Difference to baseline	Total Annual cost	Difference to baseline
2029 (Year 1)	151,716	-3,805	5,330,293	-113,929
2038 (Year 10)	266,436	-22,577	8,371,802	+926,115

5.5 Military

- 5.5.1 NATS has engaged at all stages with the MoD and the proposed change is not expected to have an unacceptable impact on MoD operations.
- 5.5.2 The lateral boundaries for TRA003 and the EAMTA have been adjusted to support the new route network, and a revised vertical boundary for AIAA LINCIS is proposed to reduce the complexity/workload for controllers operating the new CAS. Following discussions with the military, increased airspace is proposed for the EAMTA on the northern boundary, to mitigate disruption to military operations on the east side of the proposed Midlands Airspace.

5.6 General Aviation

- 5.6.1 This proposal requires approximately **315.8nm²** of additional CAS to support the new route network. The proposed additional CAS is above FL100 and in airspace which is not regularly used by VFR aircraft or gliders. The new airspace is designated as Class C; this classification permits access to GA traffic, and is the lowest level of airspace classification considered safe due to the volume and complexity of traffic. As such, it is considered that access for GA will not be significantly changed from the baseline ('do nothing') scenario.

5.7 Commercial Airlines

- 5.7.1 Overall, the proposed change is expected to yield a positive impact on the operations of commercial airlines.
- 5.7.2 The proposed change should lead to increased route adherence which should enhance predictability and flight planning.
- 5.7.3 The introduction of a systemised design should reduce the requirement for controller tactical intervention, resulting in the trajectories being flown correlating more closely to the flight planned route, with fewer delays.
- 5.7.4 The proposed change should enable airlines to achieve a more continuous climb and improved descent profiles when departing/ arriving at the London and Manchester TMAs leading to reduced operating costs.

5.8 Airport/Air Navigation Service Providers (ANSPs)

- 5.8.1 Minor airport infrastructure costs are anticipated for this option.
- 5.8.2 Airport-related impacts are limited to updates to aeronautical charts, flight planning information, and associated systems to reflect revised STAR designations for Birmingham, East Midlands, Liverpool John Lennon, London City, London Gatwick, London Heathrow, London Luton, London Stansted, Manchester and Southend Airports, together with the introduction of a new STAR for London City Airport.
- 5.8.3 In addition, changes to adjoining controlled airspace may require updates to radar displays and operational documentation for Birmingham and East Midlands approach units.

- 5.8.4 These impacts have not been quantified, as costs incurred by external organisations cannot be reliably estimated. However, they are expected to be minor and are unlikely to be significant.

5.9 Impact on aviation safety

- 5.9.1 This change is being assured in accordance with the NATS Safety Management System. An Assurance Plan has been developed, supported by development simulations and Preliminary Hazard Identification and Risk Assessment workshops. Early safety assessments identified no significant safety concerns, and development simulations involving operational controllers found the revised airspace design to be safe, usable and operationally beneficial, with reduced workload and improved predictability. While risk assessment activities are ongoing, no issues have been identified to date that are expected to result in unacceptable risk. The remaining hazard identification and risk assessment work will be completed during the pre- and post-validation stages.

5.10 Impact summary

- 5.10.1 A summary of the impacts of this proposal is provided as follows:

Assessment Area	Potential Disbenefits
Safety	No significant safety concerns identified
Capacity	Increased capacity and predictability
Delay	Long-term delay cost benefit
Fuel Burn	Small increase
CO ₂ e	Small increase
CAS	Additional Class C airspace required
Military	Airspace boundary amendments required

- 5.10.2 Overall, the proposal delivers a strengthening business case over time, driven by reducing costs relative to the baseline scenario, with net quantified benefits increasing throughout the appraisal period and the annual net quantified impact in present value terms improving to approximately **£225,454** in 2038.

5.11 Reversion statement

- 5.11.1 In the unlikely event the proposal requires reversal (once approved and implemented), permanent reversion to the pre-implementation state would be complex due to significant changes to the airspace structure and the scale of change.
- 5.11.2 Should there be unexpected issues caused by this proposal, short notice changes could be implemented via NOTAM or Route Availability Document (RAD) restrictions.
- 5.11.3 For a permanent reversion, the changes would have to be reversed by incorporating this into an appropriate future AIRAC (Aeronautical Information Regulation and Control) date. Large scale airspace changes are implemented a maximum of four times a year due to the lengthy lead times to allow for testing and preparation activities. The feasibility and scheduling for a reversion is additionally determined by the time needed to update multiple safety critical systems, and train controllers.

6. Consultation Participation

6.1 How to respond to this consultation

- 6.1.1 The consultation begins at 00:01hrs Monday 26th October 2026, and ends at 23:59hrs Sunday 20th December 2026, a period of 8 weeks.
- 6.1.2 Consultation material is available on the CAA's [Citizen Space consultation website](#).
- 6.1.3 The list of stakeholders targeted for this consultation is detailed in the Consultation Strategy and additionally listed in Appendix A List of Stakeholders. These stakeholders have been directly informed of this consultation.
- 6.1.4 The consultation is not limited to these stakeholders and anyone may respond.
- 6.1.5 A feedback questionnaire is provided on the consultation website.
- 6.1.6 It is recommended (and preferred by the CAA) that responses are made via the consultation website.
- 6.1.7 A link to the consultation is also provided from the NATS public website (www.NATS.aero) and the [NATS Customer Affairs](#) website.
- 6.1.8 Please note that when submitting feedback, you will be asked to provide the following information:
- Your name, and your role if you are responding on behalf of an organisation.
 - Your contact details (email)
 - Your response to specific aspects of the change proposal i.e. Support, Ambivalent, Object, Don't Know.
 - Any comments you have on the change proposal.
- 6.1.9 Please give your reasons for supporting or objecting to the proposal. (For example: the impacts on you or your organisation, and how often you would be affected).
- 6.1.10 If this proposal does not affect your operation, please respond, as that fact itself is useful data.
- 6.1.11 A copy of the consultation questions is provided in Appendix D Consultation Questions

6.2 What happens with the responses, and what happens next

- 6.2.1 Responses will be publicly visible, following moderation, by being published on the CAA's Citizen Space consultation website, which is in line with CAP1616 requirements. Should any responses contain commercially sensitive data, then this will be redacted as part of our moderating process.
- 6.2.2 NATS will actively monitor the consultation website and will formally respond back to any queries, alongside including any generic queries under a FAQ section.
- 6.2.3 On completion of the consultation, we will analyse all consultation feedback and produce a feedback report, summarising common themes arising from the feedback, alongside NATS' response to any issues raised. The feedback report will be available for download via the CAA's [airspace change portal](#).
- 6.2.4 Any new requirements identified will be considered in the ongoing design process, and support the production of Stage 4 - Update and Submit ACP. At Stage 4, the ACP will detail the final design being submitted and make reference to any changes that have been made as a result of consultation feedback.
- 6.2.5 Subject to achieving approval, we plan to implement the final version of this proposal no earlier than Q4 2028.

7. Appendix A List of Stakeholders

7.1.1 Throughout the CAP1616 process, work has progressed to map potential impacts against affected stakeholders. The following table lists the targeted stakeholders for this consultation alongside the stage of the CAP1616 process in which these stakeholders have been identified.

Aircraft Operators	
Aer Lingus	Stage 3
Air France	Stage 3
American Airlines	Stage 3
British Airways	Stage 1
easyJet	Stage 1
Jet2.com	Stage 1
Loganair	Stage 3
Ryanair	Stage 1
TUI Airways	Stage 1
United Airlines	Stage 3
Airports	
Birmingham	Stage 2
Doncaster Sheffield	Stage 3
East Midlands, Manchester and Stansted (Manchester Airport Group - MAG)	Stage 2
Gatwick	Stage 2
Heathrow	Stage 2
Humberside	Stage 3
Leeds	Stage 3
Liverpool	Stage 2
London City	Stage 2
Luton	Stage 2
Southend	Stage 2
Computerised Flight Plan Service Providers	
Air Support	Stage 1
Aviation Cloud	Stage 1
Flight Keys	Stage 1
Jeppesen	Stage 1
Lido	Stage 1
Lufthansa Systems	Stage 1
NavBlue	Stage 1
General Aviation (GA)	
Skydive Langar	Stage 1
Skydive Tilstock	Stage 1
National Air traffic Management Advisory Committee (NATMAC)	
Bae Systems (Warton)	Stage 1
British Gliding Association (BGA)	Stage 1
British Skydiving	Stage 1
General Aviation Alliance (GAA)	Stage 1
Ministry of Defence (MoD) via Defence Airspace and Air Traffic Management (DAATM)	Stage 1
Military	
Air Mobility Force	Stage 2
RAF Brize Norton	Stage 3
Swanwick 78 Squadron	Stage 3

8. Appendix B Design History

Gathering information

- 8.1.1 Before NATS could create design options (conceptual or detailed), information was required to understand the existing airspace environment (known as the 'current-day scenario') and the high-level criteria that the proposed design should meet.
- 8.1.2 NATS operational and airspace SMEs prepared a description of the current-day scenario and used it to assess which stakeholders were most likely to be impacted by the proposed change to determine a targeted stakeholder list. SMEs also determined a set of draft Design Principles (DPs) and, along with the current-day scenario, these were sent to targeted stakeholders. The stakeholder feedback received was subsequently used to update the current-day scenario and to inform the final DPs.

Producing design assumptions and design constraints

- 8.1.3 Based on the information gathered, NATS SMEs determined key assumptions and constraints for the new airspace design including: the traffic flows into/out of the proposed change area; the requirement to limit the impact on adjacent airspace sectors; ensuring no changes to flight paths below 7,000ft (and subsequently no change to airport SIDs); the complexity and density of future traffic growth; airspace access and use by other airspace users such as the Ministry of Defence (MoD), gliding sites and parachute sites, and; compatibility with the work completed to date on the MTMA and LTMA airspace modernisation projects.

Developing the design options

- 8.1.4 Once the design constraints and considerations were understood, NATS SMEs qualitatively assessed three high-level concepts to identify suitability for this airspace change:
- 1) Free Route Airspace (FRA). Implementation of this option is restricted by Air Traffic Management (ATM) system limitations, and the increase in airspace complexity would limit capacity.
 - 2) Full systemisation. The complexity and volume of traffic in Midlands Airspace would limit the design of efficient routings, significantly impacting environmental efficiency.
 - 3) Hybrid-systemisation. Provides the balance of structured airspace to manage the complexity of climbing/ descending traffic between the TMAs, and allows flexible flight planning for overflights.
- 8.1.5 Following selection of the hybrid-systemisation high-level concept, NATS SMEs developed it into two more detailed design options. Both design options prioritised the need to limit the impact on other airspace users, specifically reducing the need to take additional CAS and/or amend SUAs. Both options presented 5 southbound routes, as this was considered to be the best use of the airspace and provide the greatest operational benefit. For Option 1, 10 parallel routes were designed (5 southbound/ 5 northbound) and for Option 2, 9 parallel routes were designed (5 southbound/ 4 northbound). For both options, due to the airspace constraints, the first route (route 1) was anchored on the western extremity of the airspace. No other routing options were proposed as fewer than 9 routes would have resulted in under-utilised airspace, and more than 10 routes would not fit in the airspace with the required separation between the routes.

Appraisal of design options

- 8.1.6 Option 1 - 10 Parallel Routes (5 southbound routes/ 5 northbound routes) was assessed as providing the greatest systemisation with 4 of the northbound routes supporting departing traffic from the LTMA and Farnborough, Solent group and Wessex group airfields. It also complemented the design work being undertaken in the MTMA modernisation project in which arrival traffic to airfields northeast are designed to be further east than today. In addition, a 10-route design was determined to deliver more capacity benefits through a

greater reduction in controller intervention in busier traffic scenarios, when compared with the 9-route design option.

- 8.1.7 Option 2 - 9 Parallel Routes (5 southbound routes/ 4 northbound routes) would provide some systemisation, however, in this option, one northbound route would support MTMA traffic, one northbound route would support London FIR overflights, and this left only 2 northbound routes available for departing traffic from the LTMA and Farnborough, Solent group and Wessex group airfields. It was therefore considered likely that, during periods of medium/high traffic levels, a significant level of controller intervention would still be required to keep aircraft safely separated.
- 8.1.8 Within the Stage 2 Optional Appraisal, the 10-route option scored 'MET' for 5 of the 9 design principles and 'PARTIAL' for the other 4, and was subsequently progressed to Stage 3; the 9-route option scored 'MET' for 3 of the 9 design principles, 'PARTIAL' for 5 and 'NOT MET' for 1, and was subsequently rejected.

Development of proposed option

- 8.1.9 During Stage 3, there has been extensive modelling, testing, and analysis activities with controllers to further refine Option 1 - 10 Parallel Routes, specifically: operational acceptance of the proposed route spacings; optimisation of the traffic allocation to each ATS route according to their departure/destination and/or UK entry/exit fixes and; preliminary Human Factors and Safety assessments. Close engagement has also taken place with the military to minimise the requirements for additional CAS and to mitigate any potential negative impacts on military activities.

9. Appendix C Technical Details

9.1 SID connectivity

- 9.1.1 To determine if flight paths below 7,000ft are likely to be impacted from changes to departure/network connectivity, we have analysed flight paths from the impacted SIDs, listed in Table 11, and compared current lateral profiles from the SID endpoints with the proposed route changes.
- 9.1.2 This analysis uses actual radar data from summer 2025 (EURONCONTROL CFMU traffic data, 1st June 2025 – 31st August 2025); the current lateral flight path (grey trajectories) of aircraft for each impacted SID is shown, along with an illustration of where most aircraft currently achieve 7,000ft (yellow dotted line), and an overlay of the proposed new flight plannable DCTs (blue arrows), see Figure 16.
- 9.1.3 It can be seen that the proposed new flight plannable DCTs predominantly lie within the 'swathes' of lateral dispersion associated with departure tracks today. Specifically, for all impacted SIDs, the lateral profile of flights below 7,000ft remains consistent with current operations.
- 9.1.4 As such, we have determined that the proposed changes to departure/network connectivity will not impact flight paths below 7,000ft.

Table 11: Impacted SIDs for this airspace change proposal.

Departure Airport	Impacted SIDs	Total no. of flights analysed [June-Aug 2025]
EGBB	ADMEX 1M	3,039
EGGP	NANTI 2T NANTI 2V	1,618
EGLC	BPK 1A BPK 1H	989
EGLL	ULTIB 1J ULTIB 1K	1,772
	UMLAT 1F UMLAT 1G	7,826
EGGW	OLNEY 2B OLNEY 2C	1,727
EGCC	SANBA 1R SANBA 1Y	8,466
	LISTO 2S LISTO 2Z LISTO 2R LISTO 2Y	1,397

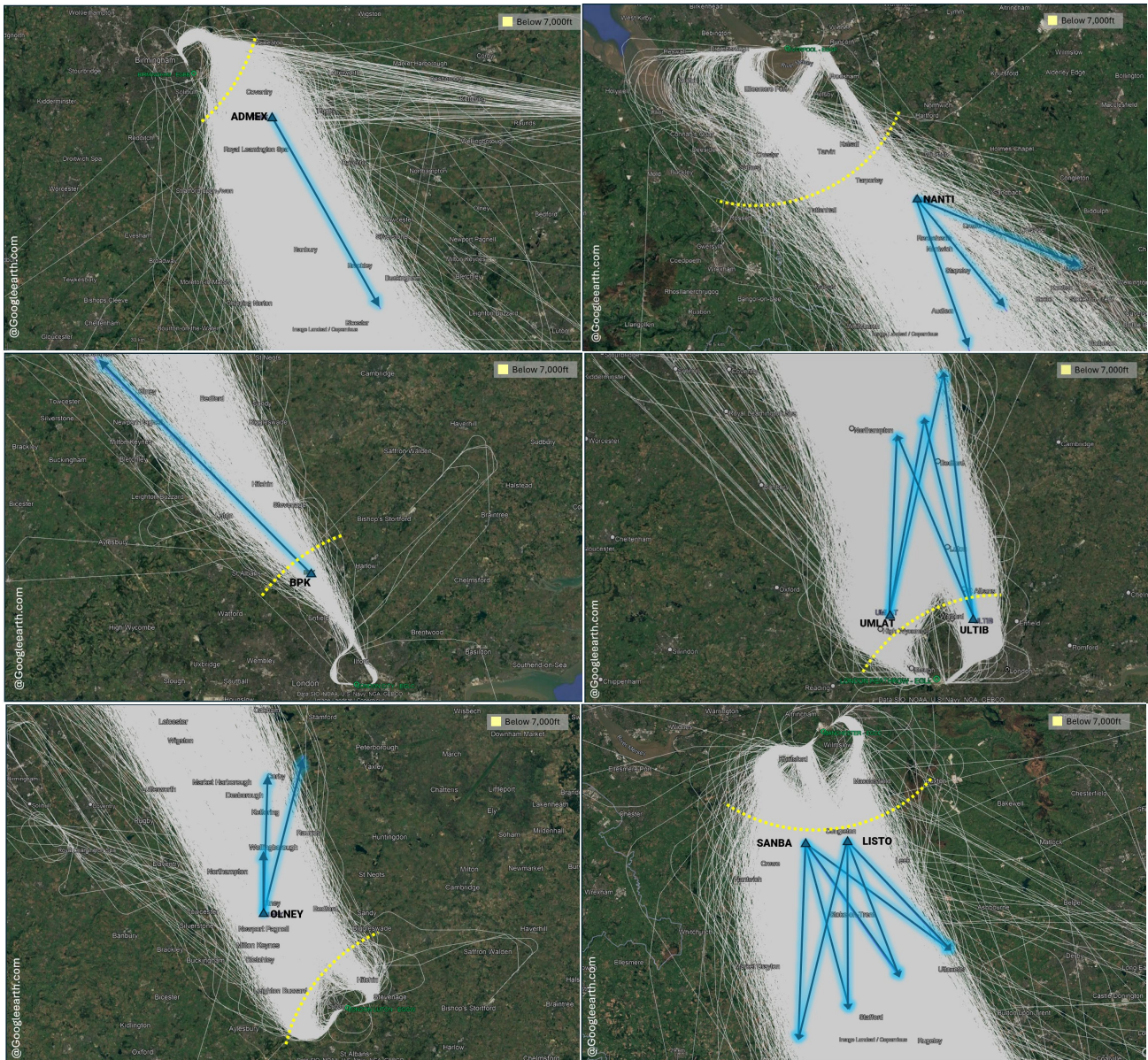


Figure 16: Analysis of departure/network connectivity for impacted SIDs. The current lateral flight paths (grey trajectories) are shown, along with an illustration of where most aircraft currently achieve 7,000ft (yellow dotted line), and proposed new flight planable DCTs (blue arrows). (Top) Birmingham and Liverpool John Lennon airports. (Middle) London City and London Heathrow airports. (Bottom) London Luton and Manchester airports.

9.2 PBN Equipage

- 9.2.1 Table 12 shows the PBN equipage for arrivals to the impacted airports. This analysis uses flight plan data from summer 2025 (FPRSA (Flight Plan Reception Suite Automated) traffic data, 1st June 2025 – 31st August 2025). It should be noted that as this data is taken from filed flight plan data, aircraft only need to confirm their equipage meets the requirements for their planned route and not their actual equipage. Therefore, the RNAV 1 equipage rate may be higher than that shown here.
- 9.2.2 The data demonstrates there is a very high proportion of flights with declared RNAV 1 (or better) equipage rates, and the expectation is that this will increase in the future as older airframes retire.

Table 12: PBN equipage for arrivals to the impacted airports.

Arrival Airport	Navigation Specification		Total No. Flights
	RNAV 1/RNP 1	RNAV 5	
EGBB	99.89%	0.11%	14,889
EGCC	99.99%	0.01%	29,402
EGGP	99.73%	0.27%	6,369
EGGW	99.98%	0.02%	18,997
EGKB	99.70%	0.30%	3,612
EGKK	100.00%	0.00%	38,563
EGLC	99.91%	0.09%	6,527
EGLD	98.26%	1.74%	115
EGLL	99.89%	0.11%	118,441
EGMC	99.61%	0.39%	1,273
EGNR	99.30%	0.70%	284
EGNX	99.96%	0.04%	8,279
EGSC	98.98%	1.02%	294
EGSS	99.96%	0.04%	28,495
EGWU	100.00%	0.00%	1,094

10. Appendix D Consultation Questions

About you

- 1) What is your name? (Required)
- 2) What is your email address? (Required)
- 3) Please enter your postcode (most relevant to your response home/ work/ organisation etc). UK only - if responding from outside the UK please leave blank and complete the next question instead.
- 4) If responding from outside the UK, please supply an address or location description.
- 5) Who are you representing? (Required)
 - a. I am responding as an individual
 - b. I am responding on behalf of an organisation.
- 6) All responses are published. However, you may choose whether or not to have your name published. Are you happy for your name to be included in the response publication? (We will not publish email addresses or any other personal information). (Required)
 - a. Yes - I want my response to be published with my name.
 - b. No - I want my response to be published anonymously.

Organisation details

Only answer this section if you are responding on behalf of an organisation

- 7) What is your organisation name?
- 8) What is your position/title?

Your Feedback

- 9) Overall, to what extent do you support or object to the airspace changes described in this proposal? (Required)
 - a. Support - I support the changes
 - b. Ambivalent - I have mixed feelings
 - c. Object - I object to the proposed changes
 - d. Don't know - I neither support nor object

Please provide your rationale

- 10) To what extent do you support or object to the new systemised route structure (5 southbound routes/ 5 northbound routes) described in this proposal? (Required)

- a. Support - I support the changes
- b. Ambivalent - I have mixed feelings
- c. Object - I object to the proposed changes
- d. Don't know - I neither support nor object

Please provide your rationale

- 11) To what extent do you support or object to the additional ATS route amendments (route alignment/ truncation/ extension/ waypoint changes) described in this proposal? (Required)

- a. Support - I support the changes
- b. Ambivalent - I have mixed feelings
- c. Object - I object to the proposed changes
- d. Don't know - I neither support nor object

Please provide your rationale

- 12) To what extent do you support or object to the Standard Arrival Route (STAR) changes described in this proposal? (Required)

- a. Support - I support the changes
- b. Ambivalent - I have mixed feelings
- c. Object - I object to the proposed changes
- d. Don't know - I neither support nor object

Please provide your rationale

- 13) To what extent do you support or object to changes to departure connectivity and speed restrictions as described in this proposal? (Required)

- a. Support - I support the changes
- b. Ambivalent - I have mixed feelings
- c. Object - I object to the proposed changes
- d. Don't know - I neither support nor object

Please provide your rationale

- 14) To what extent do you support or object to the controlled airspace (CAS) changes described in this proposal? (Required)

- a. Support - I support the changes
- b. Ambivalent - I have mixed feelings
- c. Object - I object to the proposed changes
- d. Don't know - I neither support nor object

Please provide your rationale

- 15) If you have any other comments on NATS proposal, please provide your feedback here.

MoD

- 16) Are you answering on behalf of the Ministry of Defence (MoD)?

- a. Yes
- b. No

MoD Questions

17) Does the MoD agree or disagree with the proposal to redefine the lateral dimensions of TRA003 as set out within the consultation document and thereby facilitate new routings for Midlands Airspace with associated capacity benefits as a result?

- a. Agree
- b. Disagree

Please provide your rationale

18) Does the MoD agree or disagree with the proposal to redefine the lateral dimensions of the EAMTA as set out within the consultation document and thereby facilitate new routings for Midlands Airspace with associated capacity benefits as a result?

- a. Agree
- b. Disagree

Please provide your rationale

19) Does the MoD agree or disagree with the proposal to redefine the vertical dimensions of the LINC5 AIAA as set out within the consultation document and thereby facilitate new routings for Midlands Airspace with associated capacity benefits as a result?

- a. Agree
- b. Disagree

Please provide your rationale

11. Appendix E Other Items

11.1 Stakeholder Feedback

11.1.1 A summary of how stakeholder feedback has influenced the development of the proposed design is provided below. More detailed information on the stakeholder feedback received and how it was considered during each stage of the CAP1616 process is presented in Sections 11.1.2, 11.1.3, and 11.1.4.

Stakeholder feedback	Design response
Military concerns regarding future airspace requirements	EAMTA and TRA003 boundaries redefined, in close collaboration with the military
Military operational requirements	
Manchester Airports Group (MAG) concerns regarding changes to tracks below 7,000ft	Current lateral profiles from SID endpoints assessed and compared with the proposed route changes for the impacted airports
MAG concerns regarding RNAV 5 equipage impacts	PBN equipage assessed for arrivals to the impacted airports
Aviation stakeholder feedback on design principles and current day scenario	Design Principles and current day scenario refined during Stage 1

11.1.2 Stakeholder feedback from Stage 1

The following table provides a summary of Stakeholder feedback from Stage 1 that is considered relevant to the design. For full details of all stakeholder feedback received in Stage 1, including NATS responses, see the Stage 1 Define document [Ref 3].

Table 13: Relevant stakeholder design feedback from Stage 1

Stakeholder	Feedback	NATS Response
British Skydiving / Skydive Langar / Skydive Tilstock	Concerns that there could be a negative impact on identified parachute sites: 1. Tilstock parachute site (SFC – FL150) 2. Langar parachute Site (SFC – FL150) 3. Weston-On-the-Green parachute site (SFC – FL120)	The proposed design will have no impact on the Tilstock, Langar or Weston-on-the-Green parachute sites.
RAF Brize Norton	Concerns that there could be a negative impact in the danger areas and RAF Brize Norton CTR.	The proposed design will have no impact on any danger areas, military corridors, or on the RAF Brize Norton CTR.

11.1.3 Stakeholder feedback from Stage 2

The following table provides a summary of Stakeholder feedback from Stage 2 that is considered relevant to the design. For full details of all stakeholder feedback received in Stage 2, including NATS responses, see the Stage 2 Develop and Assess document [Ref 4].

Table 14: Relevant stakeholder design feedback from Stage 2

Stakeholder	Feedback	NATS Response
MAG	Concern that there could be a change to tracks at/below 7,000ft.	To provide departure connectivity to the new route network, new flight plannable DCTs will be provided from the endpoints of several airport SIDs. An analysis of flight paths has been undertaken to determine that, below 7,000ft, the lateral path from the SID endpoint to the new ATS route will be consistent with the current operation; details of this analysis is provided in Appendix C Technical Details

Air Mobility Force	Concerns that there could be a negative impact on training at Brize Norton.	The proposed design will have no impact on the RAF Brize Norton CTR.
BGA	Concerns that there could be a negative impact on the Camphill Box Gliding Area should the base of CAS extend below FL100.	In the Camphill Box Gliding Area the base of new CAS is FL105 and therefore will not impact gliding operations (SFC – FL100) in this region. Additionally, a small amount of Class G airspace (1.1nm ²) has been released within the Camphill box due to the realignment of the lateral boundaries of DAV CTA 11 providing increased airspace access to GA.
British Parachute Schools Ltd / Skydive Langar	Preference for the base of CAS for routes 8,9,10 to be above FL160.	Additional CAS is proposed to support routes 8,9 and 10. However, in the vicinity of the Langar parachute site the base for new CAS is FL155 and therefore will not impact Langar parachute site operations (SFC-FL150).
MoD via DAATM	Concerns that there could be a negative impact on military operations due to the reshaping of the EAMTA and TRA003.	Realignment of the lateral boundaries for the EAMTA and TRA003 is proposed to support new ATS routes in this region of airspace. The boundaries for the EAMTA and TRA003 have been redefined, in close collaboration with the military, to ensure minimal disruption to military operations on the east side of the proposed Midlands Airspace, while increasing the amount of CAS for EAMTA on the northern boundary. This will provide an overall increase in the volume of airspace available for EAMTA activities.

11.1.4 Stakeholder feedback from Stage 3

The following table provides a summary of all Stakeholder feedback received during Stage 3 (in the work completed pre-consultation).

Table 15: All stakeholder feedback from Stage 3

Stakeholder	Feedback	NATS Response/ design impact
EGBB	Question whether route connectivity change at ADMEX will increase track miles for departures.	The lateral path below 7,000ft will be consistent with today. No design impact.
EGBB	Concern that in current operations, truncated SIDs cause issues as flight operators do not know which downstream waypoints to fly to e.g. after ADMEX from the easterly runway.	This is a current airspace issue (and not associated with this airspace change), however NATS is happy to work together with EGBB to work on a solution. No design impact.
EGBB	Comment that we may be impacted by 2026 changes to the ANG (Air Navigation Guidance) and AND (Air Navigation Directions).	Whilst we are aware of future changes, we will be completing this phase of the CAP1616 process under ANG 2017 and AND 2023. No design impact.
MAG	Question whether the changes to STAR navigation specifications to RNAV1 will lead to a restriction of aircraft types on these arrival routes.	RNAV 5 traffic will be accommodated through existing (unchanged) RNAV 5 STAR routings. However, most aircraft within the UK are RNAV 1 equipped (or better); the PBN equipage for arrivals to the impacted airports is provided in Appendix C Technical Details. No design impact.
EGBB	Question as to whether there is impact on the Cotswold and Fairford FUAs.	There are no changes to the Cotswold CTAs or the Fairford Danger Area. No design impact.
EGBB	Question as to whether there is future proofing relevant to EGBB to provide alignment with the CAA's masterplan.	NATS confirmed that the flight path changes associated with this change are at/above FL70, however the introduction of systemised routes should enable more continuous departure climbs/ arrival descents which should provide benefit. Modernisation of the lower airspace environment will be a focus of the new UK Airspace Design Service (UKADS). No design impact.

EGBB	Question as to whether the changes will impact the use of STAMs (Short Term ATFCM Measures).	It is anticipated that the proposed changes will have a positive impact on capacity through reduced controller workload, however the application of STAMs is determined through tools such as TLPD (Traffic Load Prediction Device) and as such is out of scope for this ACP. No design impact.
EGBB	Question as to whether there are any more simulations.	Confirmation that there will be simulations during Stage 4. NATS is happy to provide access for airport stakeholders to observe during the simulations. No design impact.
MoD via DAATM	Question whether the eastern end of the Lichfield corridor will penetrate new CAS.	Clarification provided that the Lichfield corridor will stay outside of proposed new CAS. No design impact.
MoD via DAATM	Concern that TRA003 and the EAMTA are quite heavily utilised in the region where there is a proposed reduction of airspace. Additionally, the airspace give-back for the EAMTA is not as useable as the portion of airspace that is being removed in the southwest corner; (e.g. for fast-moving jets) tight turns may not render the new airspace practical/useable.	As a result of this stakeholder feedback, NATS completed analysis of radar track data for TRA003 and EAMTA [evidence included in data pack provided directly to the CAA]. The data shows that for the southwestern part of the EAMTA, the majority of tracks are in transit to/from the EAMTA, rather than operating within it. Similarly, for the western part of TRA003, traffic is low within the area we are requesting. Revisions were made to the proposed Revised EAMTA, increasing the volume of airspace give-back on the northern boundary.
MoD via DAATM	Comment that it would be useful to see the proposed changes overlayed on a more detailed operational map showing waypoints, airfields, military corridors etc. (such as a radar overlay). There will be some moderate impact on military operations that needs to be considered, and without the detailed maps this is currently difficult to assess.	As a result of this stakeholder feedback, NATS provided more detailed operational maps for the proposed change [evidence included in data pack provided directly to the CAA]. No design impact.
MoD via DAATM	Comment that in current operations, Lichfield corridor traffic commonly turns north at the eastern end of the corridor. With the new CAS this would require coordination and additional workload which may be prohibitive and could require the military to find alternative routings.	As a result of this stakeholder feedback, NATS completed analysis of radar track data for the Lichfield corridor [evidence included in data pack provided directly to the CAA]. The traffic routing to the north is low (~ 1 aircraft per week) and a proposal has been made that these flights could potentially turn earlier to maintain 5nm spacing against traffic.
MoD via DAATM	Military comment that they are broadly onboard and supportive of the proposed change.	Thank you for your feedback. No design impact.
MoD via DAATM	Comment that the sectorisation changes are of interest to the military as this impacts their coordination procedures.	Clarification provided that minimal changes to sector boundaries are taking place with this proposal, except for the aforementioned proposed extensions to CAS to the east; no change to sector sequences are expected. No design impact.
MoD via DAATM	Comment that the Military Holbeach ACP (currently at Stage 2) is planning to extend to the northeast of the Wash, potentially SFC-23,000ft.	There is no anticipated impact to the Midlands ACP with this change. No design impact.
MoD via DAATM	Discussion that there is likely to be a future proposal to convert the EAMTA to a Danger Area. Comment that the military is also investigating making the TRAs bookable.	NATS confirmed that the Midlands design has been future proofed with routes 5nm+ away from the EAMTA to account for any future buffers that may be added. No design impact.
Skydive Langar	Comment that Langar does not see that there will be any impact of the additional CAS on Langar operations.	Thank you for your feedback. No design impact.

Skydive Langar	Comment that the LINC's AIAA (Area of Intense Aerial Activity) does not affect gliding operations.	Thank you for your feedback. No design impact.
Skydive Langar	Question whether Weston-on-the-green is impacted.	NATS confirmed that the realigned Heathrow STAR will continue to route via SOPIT as per today (clear of the site). Birmingham outbounds will continue to operate as today and be tactically vectored to avoid Weston-on-the-green when active.

11.2 CAA recommendations from Stage 2

The following table reports on the progress of CAA recommendations from Stage 2.

Item	Progress
The change sponsor must ensure that they effectively communicate the operational implications of CAP1385 design criteria to operators in stage 3 and consider compatibility with FASI ACPs.	A pre-consultation workshop with aircraft operators in Stage 3 has explained the proposed systemised route structure and the operational implications of the CAP1385 design criteria. The proposed Midlands design is fully compatible with the work completed to-date within the FASI MTMA modernisation project.
The change sponsor must include the following airlines (Air France, Aer Lingus, American Airlines, Loganair and United Airlines) on the stakeholder list and engage with them at stage 3.	The stakeholder list has been updated to include these additional airline operators.
The change sponsor must discuss and agree the methodology for the greenhouse gas emissions modelling with the CAA before commencing their Stage 3 full options appraisal. (CAP1616i para 6.2). Specifically, this must include whether the baseline and design option modelled scenarios will be based on planned or actual flight tracks.	The CAA has been informed in advance on the methodology for the greenhouse gas emissions modelling.
It is recommended that the change sponsor demonstrates that for the progressed option, the proposed ATS routes have been optimised as far as reasonably practicable to maximise environmental benefit i.e. reduce track mileage when compared to the existing design.	A full design history is provided in Appendix B Design History. The systemised airspace design is an enabler for the FASI MTMA modernisation project, and full benefits realization within UK airspace is subject to the FASI MTMA deployment.
The change sponsor should clearly outline why certain impact streams have not been quantified; this is particularly important at Stage 3 where assessments should be quantified if possible and justification should be provided if unable to do so.	Where impacts cannot be quantified, suitable justification or qualitative approaches as appropriate have been included within the assessments.

12. Appendix F Glossary

ACP	Airspace Change Proposal A formal application submitted to the CAA to change the design of UK airspace.
AIAA	Area of Intense Aerial Activity A designated airspace with a high volume of aircraft operations. These areas serve as warnings to pilots to remain highly vigilant for intensive manoeuvring, test flights, or training, and encourage them to obtain a Flight Information Service.
AIRAC	Aeronautical Information Regulation and Control The internationally agreed system used to manage and publish significant aeronautical information changes on fixed dates so that pilots, air traffic controllers, airlines, flight planning systems, and chart providers all update their information at the same time
AMS	Airspace Modernisation Strategy A UK-wide program led by the Department for Transport (DfT) and the Civil Aviation Authority (CAA) seeking to modernize UK airspace to improve safety, increase capacity, and reduce environmental impacts.
ATM	Air Traffic Management
ATC	Air Traffic Control/ Air Traffic Controller
ATS	Air Traffic Service
BGA	British Gliding Association
CAA	Civil Aviation Authority
CAP	Civil Aviation Publication
CAS	Controlled Airspace Controlled airspace is an airspace of defined dimensions within which air traffic control services are provided to Instrument Flight Rules (IFR) flights and to Visual Flight Rules (VFR) flights in accordance with the airspace classification
CFMU	Central Flow Management Unit EUROCONTROL air traffic management system that optimizes and regulates flights across Europe.
CFSP	Computerised Flight Plan Service Provider
CO ₂ e	Carbon Dioxide Equivalent Is a standard unit of measurement used to quantify the climate impact of all greenhouse gases (GHGs) by converting them into the equivalent amount of carbon dioxide (CO ₂) that would cause the same amount of warming.
CTA	Control Area A CTA is a volume of controlled airspace which begins at a specified altitude above the ground and extends to a defined upper limit.
DAATM	Defence Airspace and Air Traffic Management
DCT	(Direct) waypoint to waypoint routing, which does not use an airway. DCTs are published in the Rout Availability Document, Appendix 4.
DP	Design Principle These principles are established at the beginning of the airspace change process and ensure that all future design options are developed and evaluated fairly.
DPE	Design Principle Evaluation
EAMTA	East Anglian Military Training Area

IOA	Initial Options Appraisal
FAQ	Frequently Asked Question
FPRSA	Flight Plan Reception Suite Automated The automated sub-system managed by NATS to process, validate, and translate European-formatted flight plans into the exact digital format required by UK air traffic services.
GA	General Aviation Refers to all civil aviation operations other than scheduled commercial air transport or military flights (e.g. recreational flying, pilot training, business travel, search and rescue, medical transport).
GAA	General Aviation Alliance
GDPR	General Data Protection Regulation
LTMA	London Terminal Control Area Controlled airspace in the south of the UK, designed to manage the high volume of arriving and departing flights for London's major airports.
MoD	Ministry of Defence
MTMA	Manchester Terminal Control Area Controlled airspace in the center of the UK, designed to manage the high volume of arriving and departing flights for Manchester and the surrounding airports.
NATMAC	National Air Traffic Management Advisory Committee
PBN	Performance Based Navigation A PBN navigation specification defines the aircraft equipment, system accuracy, and aircrew training required to fly a specific route, procedure, or airspace. Instead of navigating using physical ground beacons, aircraft use navigation systems to meet the defined performance standards.
SID	Standard Instrument Departure A SID is a published, pre-defined flight path that pilots follow immediately after take-off under Instrument Flight Rules (IFR).
SME	Subject Matter Expert
SoN	Statement of Need The SoN defines the sponsor's requirements for changing the airspace design, clearly outlining the specific issues, opportunities, and primary objectives of the proposed change.
STAM	Short Term ATFCM (Air Traffic Flow and Capacity Management) Measures STAMs help smooth out traffic peaks and balance controller workload through the application of e.g. ground delays, flight level capping, and re-routing.
STAR	Standard Arrival Route A published flight path used by arrival aircraft flying under Instrument Flight Rules (IFR). It bridges the gap between the cruise phase of flight, and the final approach to the destination airport.
SUA	Special Use Airspace Is a defined volume of airspace designated for military operations, training, and exercises
TMA	Terminal Control Area
TLPD	Traffic Load Prediction Device A specialized software tool and complexity model developed by NATS which forecasts the traffic counts for airspace sectors and provides a measure of future sector complexity.
TRA	Temporary Reserved Area A volume of airspace temporarily segregated for the exclusive use of specific users (such as the military) during designated periods.

UKADS	UK Airspace Design Service
VFR	Visual Flight Rules Aviation regulations allowing pilots to operate aircraft in clear weather conditions –Visual Meteorological Conditions (VMC)– primarily by sight.