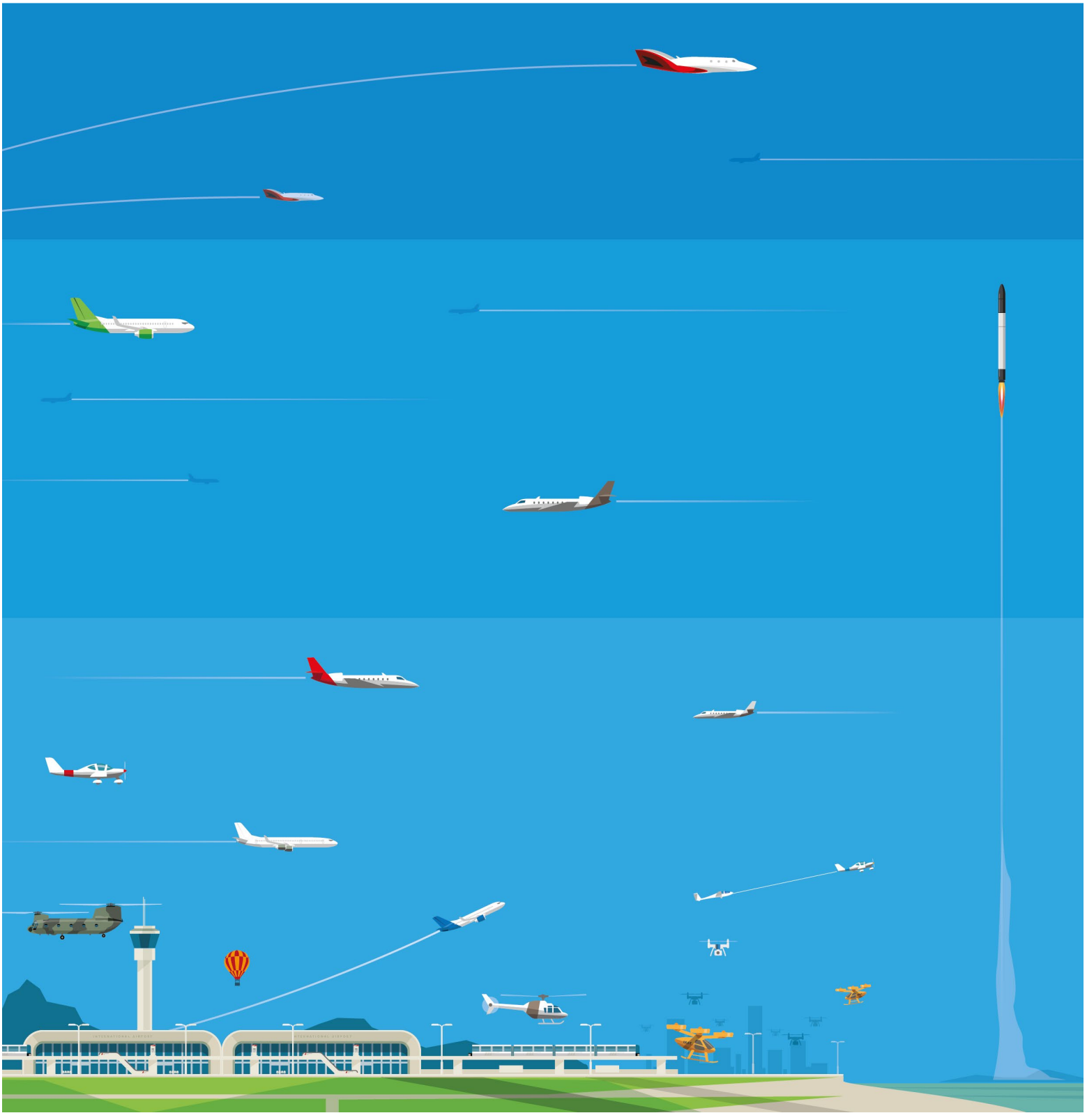
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UK Civil Aviation Authority

Airspace Modernisation – 2025 Progress Report

CAP 3215



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Executive Summary

This report provides the Secretary of State with the UK Civil Aviation Authority's (UK CAA) annual update on progress in delivering the Airspace Modernisation Strategy[1] during 2025.

The 2025 reporting period focused on aligning priorities and continuing implementation of the Strategy. Publication of the second edition of Airspace Modernisation Strategy Part 3 – Deployment Plan in Q3 2025 strengthened the link between the Strategy and delivery, re-baselining milestones for the UK CAA policy-led work and providing a more coherent plan.

Throughout the year, the UK CAA worked with the Department for Transport, NATS (En Route) plc, the Ministry of Defence, the Airspace Change Organising Group and wider industry. Efforts remained directed towards reforms of policies and processes, enabling major airspace change, integrating new airspace users, and maintaining the highest standards of safety and environmental performance.

Airspace Modernisation Strategy 2025 Progress

For the purposes of the Airspace Modernisation Strategy delivery plans that are set out in Parts 2 and 3 of the Strategy, we have grouped these into nine individual delivery elements under two headings: aircraft-based navigation and airspace management, with key areas of progress outlined below and additional detail provided in Chapter 1 of this report.

Aircraft-Based Navigation

Progress of the Terminal Airspace Redesign element remained constrained by funding, resources and complexity, with the programme retaining a red status. However, work has been done to address this for example, in June 2025, the government confirmed it would proceed with the creation of the UK Airspace Design Service provided by NATS (En Route) plc, which will focus initially on the complex airspace around London; and the associated Airspace Design Support Fund. Collaborative design work continued, with a consultation on Scottish Airspace Modernisation launched by airspace change sponsors in Q4 of 2025 - the first cluster to reach that stage in the process.

The UK CAA advanced work to update the legislative and procedural framework supporting airspace change. In Q3 2025, a consultation opened on proposed amendments to the CAP 1616 Airspace Change Process, focusing on clarity, proportionality and efficiency. Related reforms by the Department for Transport to the Air Navigation Directions and Air Navigation Guidance were also consulted on, alongside joint work by

[1] CAP1711: Airspace Modernisation Strategy 2023–2040 Part 1: Strategic objectives and enablers | UK Civil Aviation Authority

the UK CAA and the Department for Transport, to introduce a new UK Airspace Design Service and UK Airspace Coordination Service. These reforms, all published for consultation in Q4 2025, are intended to streamline and strengthen the governance and regulatory foundation that underpins modernisation.

Performance-Based Navigation progress made by UK CAA, centred on developing the legislative and policy framework for more efficient and sustainable airspace design. The consultation on amendments to the UK regulation closed in Q1 2025. Work also began to replace CAP 1385: Performance Based Navigation (PBN) and CAP 1378: Airspace Design Guidance: Noise Mitigation Considerations when Designing PBN Departure and Arrival Procedures. The proposed changes reflect updating design and route-spacing guidance to reflect modern navigation capabilities, supported by early research on vertical navigation and reduced departure divergence, laying the foundation for a refreshed regulatory framework.

In 2025, progress was made by UK CAA on defining ground infrastructure and data services policy, to support electronic position sharing. Updated concepts of operation and policy for Command-and-Control Link, Detect and Avoid, Unmanned Traffic Management, and Electronic Conspicuity were published.

The Department for Transport commissioned the UK CAA to assess the feasibility and safety case for a potential UK-wide Electronic Conspicuity mandate. Licensing of the 978-megahertz frequency for air-to-air data exchange for Unmanned Aircraft Systems established an important foundation for future operations. Alongside this, research on electric vertical take-off and landing aircraft identified areas for regulatory development, while authorisations for beyond visual line of sight flights demonstrated the UK’s growing capability in emerging aviation technologies.

Airspace Management

Progress was made across the wider enablers that strengthen resilience and digital capability. The navigation rationalisation programme was updated to preserve ground-based infrastructure resilience, and new operational procedures advanced Flexible Use of Airspace.

The System Wide Information Management framework development reached key milestones, including a decision on whether the UK Registry follows the EUROCONTROL approach, meeting the legislative obligation and an International Civil Aviation Organisation requirement. The System Wide Information Management Registry is a directory of information on services provided and required under the concept. Having this in place is a key enabler for System Wide Information Management implementation for both crewed and uncrewed aviation.

New digital datasets under Aeronautical Information Management marked further progress towards full digitisation of airspace data and services. The sustainment and replacement of the NATS (En Route) plc National Airspace System Flight Data Processor remains a critical requirement and dependency for Airspace Modernisation. Together, these activities

will enhance the operational and informational foundations of a safe and adaptable airspace system.

Airspace Modernisation Strategy Support Fund

The Fund continued to enable innovation and research across industry, supporting projects that deliver benefits in line with the objectives of the Strategy. Five projects were delivered and thirteen remained in progress at the end of the year. 6 new projects received funding through the two calls for proposals launched in 2025, leaving £2.3m available for investment in the future calls for proposals. Further detail regarding the funded projects is available under Chapter 1.

Airspace Modernisation Strategy Risks

While progress was maintained across most objectives, challenges persisted. Strategic and tactical risks centre on aligning technological enablers, reliant on NATS (En Route) plc requirement to upgrade their technical infrastructure. Managing technical complexities and delivery within strict deployment timelines and limitations remain a challenge. Funding constraints and national prioritisation of project delivery, along with the need to manage limited specialist resources across the UK CAA and the industry are also key risk factors to timely delivery. Interdependencies between major programmes continue to influence delivery timelines and capacity, particularly around achieving the Integration and System Wide Information Management objectives, critical in enabling and transitioning to a modernised landscape.

All these risks are being addressed through improved cross-programme planning and communication, clearer direction on priorities, and sustained collaboration. Further detail regarding risk and their mitigations are provided in Chapter 2.

UK CAA's 2025 Airspace Modernisation Commitments to the Prime Minister

In fulfilling the commitments made to the Prime Minister in early 2025, the UK CAA progressed three priority actions to accelerate modernisation:

- establishing the UK Airspace Design Service (UKADS) to strengthen national capability for managing complex airspace changes,
- enabling trials of beyond visual line of sight drone operations to demonstrate scalable and safe use of uncrewed aircraft, and
- consulting on reforms to improve the clarity and proportionality of the airspace change process.

These actions have delivered on the Government's request to drive growth, innovation and sustainability through the modernisation of the UK airspace system. Further detail on these commitments and outcomes is provided in Chapter 3.

Introduction

Purpose of the document

In 2023, the Government updated the UK CAA's strategic role for Airspace Modernisation by issuing Air Navigation Directions[2]. Consistent with its role as the specialist aviation regulator and its statutory responsibilities, the UK CAA is required to maintain and keep under review the Airspace Modernisation Strategy and consult the Secretary of State in relation to the Strategy, including any current or future implementation plans associated with it. The 2023 Air Navigation Directions also require the UK CAA to report to the Secretary of State for Transport annually on the delivery of the Strategy and this document fulfils that obligation.

The update provided within this report's chapters comprises of detail on the progress made by the industry, as well as on the policy development work conducted by the UK CAA, covering the period between 1 January and 31 December 2025. This report is also used as a vehicle to inform the Secretary of State for Transport about strategic risks and mitigating actions undertaken or required, to ensure delivery of the Airspace Modernisation objectives in the expected timescales.

Finally, in line with the UK Reg (EC) No. 2150/2005 the UK CAA is required to report annually to the Secretary of State for Transport on the application of the Flexible Use of Airspace (FUA) Concept. This report analyses the Flexible Use of Airspace performance and describes the concept developments under Element 5.

Structure Overview

Chapter 1 provides an assessment of delivery progress for each element and reports on projects supported by the Airspace Modernisation Strategy Support Fund. Progress is assessed and given a red, amber or green (RAG) status and is compared against the progress status reported in 2024.

Chapter 2 sets out the Airspace Modernisation Strategy's strategic risks and mitigations and provides a summary of key tactical risks experienced in 2025 for each delivery element.

Chapter 3 outlines how the UK CAA achieved progress on meeting the UK CAA's 2025 Airspace Modernisation commitments to the Prime Minister.

[2] The Civil Aviation Authority (Air Navigation) Directions 2023

Chapter 1

2025 Progress

Overview

1.1 This chapter presents an update on progress in 2025 with the delivery elements of the Airspace Modernisation Strategy.

1.2 Progress for each element is assessed using the standardised red, amber, green (RAG) methodology, combining assessment of confidence in timeliness and outcomes, to provide an overall delivery status, while enhancing visibility of emerging risks, interdependencies, and challenges.

1.3 Timeliness is assessed by reference to the baselines for each delivery organisation, as set out below:

- The UK CAA is assessed against the milestones, policy deliverables and implementation commitments defined in the second edition of the Airspace Modernisation Strategy Part 3 – Deployment Plan, reflecting the policy development elements and regulatory reform.
- NATS (En Route) plc's progress is measured against the Airspace Modernisation Strategy projects as reported under the NATS (En Route) plc's Service and Investment Plan, established at the start of the current regulatory period (NR23).
- The Airspace Change Organising Group's progress is assessed against the latest iteration of the Masterplan accepted by the UK CAA into the Airspace Modernisation Strategy.

1.4 This consistent framework across all Airspace Modernisation delivery entities provides a clear, transparent, and comparable measure of progress and supports coherent tracking of implementation of the strategic objectives.

Aircraft-Based Navigation (UK-ABN/1 to UK-ABN/4)

UK-ABN/1. Trajectory-based operations



Scope

1.5 This programme focuses on allowing airspace users to plan their activities based on specific needs. This is made possible by: organised Performance-based Navigation routes at lower altitudes, adaptable airspace designs that facilitate low-level integration of all users, removal of high-level route structures, air traffic management tools and flexible airspace management methods, that separate operations when needed. Examples could include military activities, training and space launches.

Free Route Airspace (FRA) led by NATS (En Route) plc

Background

1.6 The initial aim of Free Route Airspace Deployments is to remove Upper Air Traffic Service Routes above 25,000 feet, allowing airspace users the freedom to flight plan the trajectory they want to, between a defined entry and exit point, considering factors such as airspace availability, weather and wind speed. To date, this has been achieved over most of the Scottish upper airspace and over Wales and the Southwest in the London Flight Information Region. The long-term aim is to deploy Free Route Airspace operations across the whole of London and Scottish upper airspace and eventually below 25,000 feet, where possible. Historically, the UK Air Traffic Service route network has offered a constrained flight planning environment which is not always optimised for fuel efficiency.

Progress

1.7 Simulations completed by NATS (En Route) plc in May 2025 enabled development of an implementation plan to extend coverage of Free Route Airspace, using the current system, over the Southeast portion of Prestwick Upper Airspace as part of Deployment 3.

1.8 The deployment of cross-border Free Route Airspace and upper airspace operations relies on iTEC Version 2, the new flight data processing system, enabling Trajectory-based Operations in UK airspace. While the current system supports domestic operations, it cannot accommodate cross-border free route arrangements. Full benefits will only be achieved with the implementation of iTEC Version 3, also referred to as iTEC SkyNex. Until then, Route Availability Document restrictions will continue to apply in these regions.

1.9 The UK CAA continues to monitor and manage risk through regular oversight of NATS (En Route) plc's programme delivery.

RAG Status

1.10 The timeliness and outcome status remain red, unchanged from 2024, reflecting continued uncertainty surrounding NATS (En Route) plc's Free Route Airspace deployment schedule. Delays to the enabling Flight Data Processing system (iTEC Version 2) and the absence of confirmed delivery dates for future Free Route Airspace deployments continue to influence this assessment.

1.11 While the long-term benefits and functional design for Trajectory-based Operations are well defined, delivery confidence remains moderate due to dependencies with enabling technology upgrades, cross-border coordination, and potential sequencing constraints between national priorities and airspace deployments.

UK-ABN/2. Terminal airspace redesign



Scope

1.12 This programme focuses on managing arrival and departure operations at individual airports, providing predictable and repeatable routes that connect airports to the Free Route Airspace environment. Modern aircraft can achieve sustainable emissions reductions, through optimised climb and descent performance. This is achieved through use of structured Performance-based Navigation routes at lower levels and flexible access airspace structures for low-level integration. The aims are underpinned by Electronic Conspicuity for accurate navigation data sharing and airport management of runway sequencing, linking airport operations with the wider network through the Airport Operations Plan.

Performance-based Navigation led by UK CAA

Background

1.13 Performance-based Navigation enables more precise and efficient airspace design by utilising aircraft navigation capabilities to improve route spacing, capacity, and environmental performance. It provides the foundation for optimised arrival and departure procedures and is central to achieving a modernised, flexible, and sustainable UK airspace system. The UK CAA's Performance-based Navigation work programme includes regulatory development, updated design guidance, and the introduction of new operational concepts that support both crewed and emerging aviation activities.

Progress

1.14 The consultation on the proposed amendments to the UK Performance-based Navigation regulation closed in Q1 2025, having been initially delayed because of restrictions relating to the pre-general election period in summer 2024. The consultation response document was published by the UK CAA in Q4 2025, enabling next step collaborative work with the Department for Transport on the legislative package, in time to meet the revised baseline for the publication of the amended regulation in Q2 2026.

1.15 Progress has been made on the replacement of CAP 1385 – Performance-based Navigation: Enhanced Route Spacing Requirements and CAP 1378 – Performance-based Navigation: Airspace Design Guidance. Both documents are being fully revised to reflect advances in navigation technology, route-spacing methodologies, and environmental best practice. Publication was deferred to Q4 2026 to align with prioritised legislative updates and to ensure consistency across the new regulatory framework.

1.16 Development of the updated UK Performance-based Navigation Implementation Plan was deferred to Q4 2026, following consideration of whether a new national plan remains necessary, given the UK's withdrawal from the European Union. This will be confirmed once the revised regulation is finalised, and industry deployment plans are agreed.

1.17 Industry research and development activity on the UK concept for Future Use of Vertical Navigation Utilising a Satellite-Based Navigation System is in the early stages of delivery. Industry standards to support this concept will need to become available, before any UK policy or guidance material can be drafted.

1.18 The Reduced Departure Divergence project progressed through the Airspace Modernisation Strategy Support Fund, examined how optimised separation between departure routes could improve efficiency and provide noise-respite opportunities. Once industry findings are complete, the UK CAA will review the outcomes and determine the need for additional policy or guidance material.

1.19 Policy development for Point-in-Space Approaches at Vertiports was initially delayed from Q1 2025 to 2030, however due to UK CAA's re-planning and prioritisation activity, its delivery was sped up targeting completion by mid-2026. A UK CAA internal working group was stood up in September, comprising regulators from Airspace, Air Traffic Management and Aerodromes, Flight Operations and Airworthiness departments, to ensure this work package is progressed to the revised timelines.

1.20 The Consideration and Guidance for Vertical Interactions initiative achieved a key milestone in Q1 2025, completing a safety analysis and associated safety exercises. A joint working group between the UK CAA, NATS (En Route) plc and the Airspace

Change Organising Group developed the associated safety guidance material, which was completed in Q4 2025.

RAG Status

1.21 The timeliness status for this element has improved to green, up from amber in 2024. Progress is now aligned to the revised baseline following recovery from earlier consultation delays, and delivery remains on schedule for publication of the amended regulation in 2026. This improvement reflects effective schedule management and the successful absorption of previous slippage.

1.22 The outcome status remains amber, consistent with 2024. While the regulatory and guidance frameworks continue to mature, dependencies on legislative approval and resource availability still limit full delivery confidence. Further assurance will depend on completion of rulemaking activities and final alignment with industry deployment plans.

1.23 The overall progress status remains green, indicating steady advancement across rulemaking, design guidance and supporting initiatives. The programme continues to underpin a modern, performance-based approach to UK airspace design and supports wider national objectives for efficiency and sustainability.

1.24 To improve the outcome, the focus should remain on securing final legislative approval, ensuring stable resourcing, and strengthening dependency mapping across related programmes. Continued coordination between policy, regulation and industry deployment will enhance confidence in delivery through 2026.

Masterplan led by the Airspace Change Organising Group

Background

1.25 The Masterplan provides a coordinated delivery framework through which interdependent airspace changes are designed, consulted upon and implemented across the UK. Its delivery is led by the Airspace Change Organising Group. The Masterplan ensures that individual airspace change proposals collectively deliver the outcomes of the Airspace Modernisation Strategy, supporting capacity, environmental performance and operational efficiency. The baseline for 2025 is defined by the latest accepted iteration of the Masterplan: Iteration 2.

Progress

1.26 In the North of England cluster, collaborative design work between Manchester, East Midlands and Liverpool airports progressed through a series of joint workshops, leading to the integration of instrument flight procedure designs and preparatory work for full options appraisal by early 2026. However, delays persisted due to Leeds Bradford’s withdrawal from its planned Stage 2 gateway submission and continuing uncertainty regarding the potential reopening of Doncaster Sheffield Airport. These developments required the Airspace Change Organising Group to re-sequence

milestones and maintain close coordination with cluster sponsors to sustain alignment with national delivery timelines.

1.27 Within the Southeast cluster, sponsors are preparing for onboarding of their airspace change proposals to the UK Airspace Design Service, whose planned establishment was confirmed by Government in Q1 2025. Major airports including Gatwick, Heathrow, and Luton advanced their full options appraisal and noise-modelling work. Smaller airport sponsors such as Biggin Hill, London City, Farnborough and Southampton refined deconfliction and their design activities. Bournemouth continued to address gateway requirements following its earlier deferral, and Manston formally exited the cluster in Q2 2025 with the Co-sponsors' agreement.

1.28 The Scottish cluster made progress following delays early in the year. Edinburgh deferred its Stage 3 gateway from Q1 2025 to Q3 2025, to allow additional re-work of its design submission, progressing through the gateway in Q3 2025. Glasgow and NATS (En Route) plc undertook cluster-wide validation simulations, which were completed successfully. All three sponsors launched a public consultation on their airspace change proposals in Q4 2025.

1.29 In the West of England cluster, Exeter's withdrawal in Q2 2025, with the Co-Sponsors' agreement, left Bristol and NATS (En Route) plc to progress design development. Cluster simulations and refinement continued throughout 2025 at Swanwick, though limited controller availability delayed the start of the full options appraisal, delaying the next gateway milestone into 2026.

UKACS Consultation led by UK CAA

1.30 In March 2025, the government decided to reform the UK's approach to modernising the design of UK airspace by introducing a UK Airspace Design Service (UKADS), which will be provided by NATS (En Route) plc. The initial scope of the UKADS will be to modernise the complex airspace around London, by consolidating existing airspace change proposals within the London cluster of the airspace change masterplan into a single airspace change proposal.

1.31 NATS (En Route) plc would continue to provide a coordination service for those strategically important, interdependent airspace change proposals that are outside the scope of the UKADS (and which would continue to be sponsored by the airport or air navigation service provider concerned). This role is called the **UK Airspace Coordination Service (UKACS).**

1.32 In November, the UK CAA has launched a public consultation[3] , seeking views on this new coordination service (in place of the service currently provided by NATS (En Route) plc through the Airspace Change Organising Group (ACOG)).

[3] Airspace modernisation: Consultation on the requirements for a UK Airspace Coordination Service and associated guidance - Civil Aviation Authority - Citizen Space

RAG Status

1.33 The timeliness status remains red, unchanged from 2024, reflecting continued delays across several interdependent workstreams. Milestones under the Masterplan have slipped due to operational, resource, financial and sequencing challenges. The continued re-baselining of regional cluster timelines has extended delivery horizons beyond original forecasts.

1.34 The outcome status remains red, consistent with 2024. Delivery confidence across this element remains low due to funding issues, limited specialist resources, and the need to revise gateway submissions within clusters.

1.35 The overall progress status remains red, unchanged from 2024, due to schedule delays and low delivery confidence regarding the Masterplan.

1.36 The co-sponsors have taken action to drive an improvement in future status assessments. This will ultimately depend on re-planning activity, and progress in mobilisation, onboarding, and delivering design work by the UK Airspace Design Service. The improvement is also dependent on confirmed funding arrangements for complex airspace changes through the UK Airspace Design Service Support Fund and airport sponsors securing the necessary specialist resource. The safety guidance material from the Considerations and Guidance for Vertical Interactions work, completed in Q4 2025, will also support this.

UK-ABN/3. Network management



Scope

1.37 Delivery Element 3, Network Management, aims to balance the capacity of the operational network with the demand from users, through sharing of operational planning information. This is enabled through the Airport Operations Plans, informing the Network Operations Plan, managed through the Network Manager. The changes are enabled through queue management concepts – arrival and departure management techniques that can utilise the runway capacity efficiently, while reducing the need for the airborne holding of aircraft.

Queue and Capacity Management Led by NATS (En Route) plc

Background

1.38 Queue and Capacity Management is a NATS (En Route) plc programme primarily focused on redeploying the Arrival Manager Headbranch, replacing the existing hardware used by Terminal Control at Heathrow and Gatwick. This upgrade will enhance resilience and provide air traffic controllers with improved automated

support to sequence arriving aircraft, ensuring smoother, more efficient, and safer landings, thereby improving delay prediction and reducing the need for stack holding.

Progress

1.39 In March 2025, the Gatwick Time-Based Separation Advanced Mixed Mode system was successfully deployed using the existing version of the Arrival Manager Headbranch tool. This represented an important step in enhancing Gatwick's operational efficiency, while informing future upgrades to the underlying system architecture.

1.40 The redeployment of Arrival Manager Headbranch, which replaces legacy arrival management systems for Heathrow and Gatwick approach operations at Swanwick, during 2024 reversed to the previous system, to maintain operations. Lessons learned have informed a revised plan, with re-deployment now scheduled for Q1 2027.

1.41 The Gatwick Time-Based Separation Optimised Mixed Mode project has been delayed from Q4 2025 to Q4 2028, due to dependencies on both the Arrival Manager Headbranch and the Extended Computer Display System projects. The Interim Extended Arrivals Management Human-Machine Interface, originally planned for Q3 2026, will no longer be delivered. This decision reflects dependencies on the ongoing System Wide Information Management policy development, higher-than-anticipated implementation costs, and limited readiness among neighbouring air navigation service providers to consume shared data.

1.42 At Manchester Airport, planning activity commenced for the future implementation of Time-Based Separation procedures and training, with delivery expected in Q4 2028.

RAG Status

1.43 The timeliness status remains red, unchanged from 2024, primarily due to the revised deployment schedule for the Arrival Manager Headbranch. Delays in resolving technical integration challenges and system dependencies have extended the delivery timeline to Q1 2027, as reflected in NATS (En Route) plc's Service and Investment Plan. Additional schedule impacts arise from interdependencies with the Extended Computer Display System and System Wide Information Management policy development.

1.44 The outcome status remains green, consistent with 2024, reflecting continued operational performance improvements achieved through the deployment of the Gatwick Time-Based Separation Advanced Mixed Mode system in Q1 2025. Despite ongoing schedule pressures, NATS (En Route) plc report that the system has demonstrated measurable efficiency and resilience gains, indicating that intended operational outcomes remain achievable within the extended timeline.

1.45 The overall progress status remains amber, unchanged from 2024, acknowledging steady advancement towards enhanced arrival management capability, while

recognising the continuing delivery risks posed by resource constraints and system dependencies.

1.46 Progress towards an improved status will require stabilising the revised deployment schedule for Arrival Manager Headbranch, confirming dependencies with the Extended Computer Display System and System Wide Information Management initiatives.

UK-ABN/4. Integration



Scope

1.47 This programme focuses on the growing demand for UK airspace from both existing and new aviation operations – not only in terms of volume, but also in the complexity of interactions between users with varied performance capabilities. To ensure safe integration, a more innovative and flexible approach to airspace structures and procedures is required. This is enabled through flexible-access airspace structures, the use of Electronic Conspicuity for accurate position data sharing, the digitisation of airspace availability and operational information broadcasting, and the implementation of a new, aligned Lower Airspace Service, to support a diverse range of users. Additionally, the development of procedures and processes for high-altitude airspace management will facilitate the integration of high-altitude platform systems and supersonic/hypersonic operations.

1.48 The Integrating Lower Airspace programme delivers on the objectives of this programme, along with aspects of Element UK-AM/6 Data Services, Element UK-AM/7 Future Surveillance and Spectrum and the Future of Flight Programme.

1.49 The Future Air Traffic Management and Air Navigation Services sub-programme sits within the Integrating Lower Airspace programme. It brings together workstreams on Electronic Conspicuity, Detect and Avoid, Unmanned Aircraft System Traffic Management, Ground Infrastructure and Command & Control Link.

Electronic Conspicuity Led by the UK CAA

Background

1.50 Electronic Conspicuity is an umbrella term for the technology that can help pilots, unmanned aircraft users and air traffic services be more aware of what is operating in the surrounding airspace. Identifying an aircraft involves the use of electronic devices.

1.51 Electronic Conspicuity enhances the visibility of airspace users through electronic means, facilitating the integration of new entrants and unmanned aircraft within UK

airspace. It supports the creation of a safe and efficient environment for both manned and unmanned operations within UK airspace. Beyond these advantages, an Electronic Conspicuity policy will serve as a key enabler in achieving the Airspace Modernisation strategic objective of safely integrating diverse users, including Beyond Visual Line of Sight Unmanned Aircraft Systems.

Progress

1.52 An initial technical concept of operations on the carriage, use and performance requirements for Electronic Conspicuity in the UK has been produced and published for consultation in July 2025[4]. The Department for Transport has also commissioned the UK CAA to assess the feasibility and safety case for a potential UK-wide Electronic Conspicuity mandate. Licensing of the 978-megahertz frequency for air-to-air data exchange for Unmanned Aircraft Systems established an important foundation for future operations. Alongside this, research on electric vertical take-off and landing aircraft identified areas for regulatory development, while authorisations for beyond visual line of sight flights demonstrated the UK's growing capability in emerging aviation technologies.

RAG Status

1.53 The timeliness status is now green, improved from amber in 2024, due to key milestones progressing on schedule.

1.54 The outcome status remains amber, consistent with 2024, recognising continued development of the technical and regulatory framework and noting ongoing risk and dependencies in areas such as equipment certification, operational acceptance, funding, resources and industry readiness.

1.55 The overall progress status therefore remains amber, as the programme continues to make steady progress but is still reliant on testing outcomes and integration with adjacent policy development areas such as the System Wide Information Management, Detect and Avoid and Unmanned Traffic Management.

1.56 To improve the overall rating, sustained control of cross-programme dependencies must take place, along with the regulatory rulemaking no longer posing risks to delivery targets and outcomes. An established and validated critical path, underpinned by secured funding across the full project lifecycle, would improve confidence.

[4] CAP3140 Electronic Conspicuity – Initial Technical Concept of Operations (EC ConOps) 2025

Detect and Avoid Led by the UK CAA

Background

1.57 The scope of the Detect and Avoid project is to define a UK framework to allow integration of crewed and uncrewed air systems in the UK airspace. For unmanned aircraft system operations that are Beyond Visual Line of Sight of the remote pilot and outside of segregated airspace, a Detect and Avoid capability is required to replace the pilot 'see and avoid' responsibilities. Detect and avoid can be defined as providing the capability to see, sense or detect conflicting traffic or other hazards and take the appropriate action. It is therefore a critical enabler for Beyond Visual Line of Sight operations.

Progress

1.58 The UK Specific Operations Risk Assessment method replaced the Operating Safety Case, as the way of applying for operational authorisation in the 'specific' category from Q2 2025. This Specific Operations Risk Assessment methodology includes assessments of air risk that consider the airspace in which flights take place and requires the identification and use of available safety mitigations. The Detect and Avoid policy and its evolution will support the Specific Operations Risk Assessment approach to air risk considerations.

1.59 Following publication of the Detect and Avoid policy concept in 2024, testing and feedback phase of the project commenced in 2025, within the UK sandbox environment. The Detect and Avoid policy concept consultation response was published in Q2 2025, with the initial policy being under revision, to include considerations for other non-crewed hazards.

RAG Status

1.60 The timeliness status is now green, improved from amber in 2024, reflecting progress in line with the schedule. The Q4 2025 update to include non-crewed hazards and planned 2026 consultation remain on track, with no material delays identified against the current baseline.

1.61 The outcome status remains amber, consistent with 2024, acknowledging that while testing and stakeholder engagement are progressing, dependencies on policy alignment with the Unmanned Traffic Management, Electronic Conspicuity, and the wider lower airspace integration still present moderate tactical risk.

1.62 The overall progress status remains amber, as the programme continues to mature through successful testing and feedback. However, it remains contingent on the final policy validation.

1.63 To improve the overall status rating, a clear critical path needs to be established and validated among the interdependent policy development activities, together with funding secured for the full lifecycle of the projects.

Unmanned Aircraft System Traffic Management Led by the UK CAA

Background

1.64 Unmanned Traffic Management and the needs of other vehicles such as Electric Vertical Take-Off and Landing are considered part of the overall air traffic management service provision. Unmanned Traffic Management is accepted as supporting the real-time or near-real-time organisation, coordination and management of unmanned aircraft system operations, including the potential for multiple Beyond Visual Line of Sight operations. To facilitate the safe and efficient integration of unmanned aircraft systems, there will be a requirement for specific services to be provided, such as flight authorisation, geo-consciousness and conflict management services. The UK CAA, with input from stakeholders, is setting out a regulatory and service provision framework for this concept.

Progress

1.65 The initial Unmanned Traffic Management Concept of Operations was defined in Q3 2025, with the preparation for testing and trials taking place in Q4 2025. The necessity and scope of rulemaking continue to be explored through industry engagement and at Law Commission review[5].

RAG Status

1.66 The timeliness and outcome status remains amber, consistent with 2024, reflecting progress in defining operational frameworks. However, it recognises the need for replanning of the milestones and continued dependencies on the legislative reform, regulatory approval, and dependencies with the Electronic Conspicuity and Detect and Avoid projects.

1.67 The overall progress status remains amber, with development activity on track but reliant on confirmation of the rulemaking scope and successful validation of early testing outcomes.

1.68 To improve the overall status rating, a clear critical path needs to be established and validated among the interdependent rulemaking and policy development activities, together with funding secured for the full lifecycle of the projects.

Ground Infrastructure Led by the UK CAA

Background

1.69 Ground Infrastructure focuses on the development of technical ground-based systems and related requirements that enhance Electronic Conspicuity. This supports the delivery of assured position information, enabling the safe and integrated operation of both crewed and uncrewed systems in UK airspace.

[5] Aviation autonomy: consultation, summary and overview – Law Commission

1.70 The full scope of the ground infrastructure for the Lower Airspace Concept project is greater than originally anticipated. The initial focus was around enabling Flight Information Service-Broadcast and Traffic Information Service-Broadcast. Technical requirements are now being drafted to determine the level of performance required, in support of the novel and dependent policy development concepts, described earlier under this element. These requirements will be used to develop an initial concept of operations for ground infrastructure, which will be tested through ongoing trials and sandbox activity.

Progress

1.71 The scope of the Ground Infrastructure project was defined in Q2 2025, and the project plan was formulated and baselined. The initial concept of operations and safety case has been produced, reviewed and signed off in Q4 2025.

RAG Status

1.72 The timeliness status is amber, due to the duration extension to the concept of operations review period.

1.73 The outcome status remains amber, consistent with 2024, reflecting good progress in scoping and planning but continued dependencies on Electronic Conspicuity and Unmanned Traffic Management projects.

1.74 The overall progress status remains amber, indicating steady advancement and improved definition of requirements.

1.75 To achieve a green rating, a clear critical path needs to be established and validated among the interdependent policy development activities, together with funding secured for the full lifecycle of the projects.

Lower Airspace Concept Led by the UK CAA

Background

1.76 The Lower Airspace Concept[6] is an overarching descriptor for several projects delivering: alignment of Flight Information Service arrangements, aerodrome airspace structures (controlled vs uncontrolled), Transponder mandatory zones (TMZ), the Lower Airspace Service and Unmanned Aerial Systems Traffic Management.

1.77 The Lower Airspace Concept work is intrinsically linked to other modernisation activities such as Electronic Conspicuity, Ground Infrastructure, System Wide Information Management, Traffic Information Service-Broadcast and Flight Information Service-Broadcast.

[6] Lower Airspace Concept UK CAA.pdf

1.78 The demand for Air Traffic Management in UK lower airspace (outside of controlled airspace) is expected to increase. A simplified provision of Air Traffic Service in lower airspace will benefit all airspace users and help to fulfil the ambition of full integration. Leveraging technology enhancements in the provision of Air Traffic Management in lower airspace will support the safe and efficient conduct of flight and improve access to volumes of airspace.

Progress

1.79 Progress under this workstream in 2025 was limited, due to resource reprioritisation and inter-programme dependencies.

1.80 Within the ICAO Flight Information Service-Broadcast Infrastructure project, the UK CAA held an internal safety and hazard identification workshop in Q3 2025 and developed a technical alignment paper to inform external consultation.

1.81 Under the International Civil Aviation Organization Flight Information Services alignment initiative, the UK CAA advanced preparatory work for future consultation, following the 2024 publication of CAP 3007. Safety assurance and technical development activities continued through 2025 alongside industry stakeholders. Implementation and post-implementation review plans remain at the scoping stage.

1.82 Work on Airspace Structures to Support Aerodromes Operating in Uncontrolled Airspace progressed in 2025, with the Aviation Legislation and Policy Sponsorship mandate formally accepted by the UK CAA and the Department for Transport in Q2 2025. Draft airspace guidance material continued development through internal peer review and is on track to enter consultation by Q2 2026.

RAG Status

1.83 The timeliness status is red, reflecting limited progress in 2025 due to funding, resource, and inter-programme dependencies.

1.84 The outcome status is amber, indicating moderate confidence. While the technical foundations are being laid, dependencies on other lower airspace initiatives continue to restrict outcome certainty.

1.85 The overall progress status is red, consistent with the challenges to programme mobilisation, resource and funding. Incremental progress across supporting initiatives demonstrates potential for recovery once resource and funding issues are resolved.

1.86 To achieve a green rating, a clear critical path needs to be established and validated among the interdependent development activities, together with funding secured for the full lifecycle of the projects.

Airspace Management (UK-AM/5 to UK-AM/9)

UK-AM/5. Airspace management



Scope

1.87 The programme's focus is to enable efficient use of UK airspace across both high-altitude and low-level operations. This is achieved through flexible access airspace structures, supporting low-level user integration, alongside procedures for managing high-altitude operations and flexible use of airspace management techniques for safe segregation when necessary.

Flexible Use of Airspace Led by the UK CAA

Background

1.88 The Flexible Use of Airspace concept underpins the safe and efficient sharing of airspace between civil and military users. It is structured around three levels of Airspace Management:

- Level 1 – Strategic: Managed by the UK CAA's Safety and Airspace Regulation Group, which develops national policy and strategic plans.
- Level 2 – Pre-Tactical: The temporary allocation of restricted or reserved airspace.
- Level 3 – Tactical: The real-time management and coordination of airspace operations.

1.89 The Advanced Flexible Use of Airspace programme aims to evolve this concept through increased automation, data integration and dynamic management capabilities. It will support the transition to a trajectory-based operational environment and improve coordination between civil and military users through digital connectivity. The long-term target for full implementation is Q4 2038, in alignment with enabling systems such as System Wide Information Management, Trajectory-Based Operations, and Dynamic Mobile Areas 1 and 2.

Progress

1.90 During 2025, work on the Advanced Flexible Use of Airspace concept continued to progress through strategic planning and inter-agency coordination. The UK CAA, in collaboration with the Ministry of Defence and NATS (En Route) plc, refined the overall programme scope and governance model.

1.91 The establishment of the Airspace Development Coordination Group in Q3 2025 was a key milestone, improving civil–military coordination and supporting early alignment with future digital airspace systems. The group's achievements include Dynamic Mobile Areas operational concept development, programme dependencies mapping, engagement with international partners and the military, and research into real-time data exchange mechanisms and safety frameworks for dynamic airspace allocation.

1.92 Implementation of Variable Profile Areas was completed on schedule in Q4 2025, following design validation and safety assurance activities earlier in the year. Variable Profile Areas introduce modular, pre-defined airspace blocks that can be dynamically activated to optimise airspace use. Their completion represents a significant step towards a more flexible and trajectory-based airspace management model.

RAG Status

1.93 The timeliness status improved to green from red in 2024, due to key milestones being achieved in line with the schedule.

1.94 The outcome status is assessed as amber, due to dependencies with the enabling systems such as System Wide Information Management and Trajectory-Based Operations affecting on-time schedule delivery confidence.

1.95 The overall progress status remains amber, acknowledging progress with consideration given to the long-term dependency risks and the extended implementation horizon until 2038.

1.96 To achieve a green rating, the critical path must be validated, along with cross-programme alignment and a long-term resource secured across all involved delivery entities.

UK-AM/6. Data services



Scope

1.97 The programme is a key enabler of the Airspace Modernisation Strategy, focusing on establishing the digital foundations and data infrastructure. It aims to ensure that the exchange, accessibility and quality of aeronautical data across all modernisation activities are accurate, timely, standardised and interoperable.

1.98 The International Civil Aviation Organization has recognised that feedback from industry and users will be key to the successful delivery of the Aeronautical Meteorology threads. Similarly, successful delivery of this element will be dependent on UK operational stakeholders highlighting specific requirements, where necessary.

1.99 Contributions to the relevant International Civil Aviation Organization panel, leading the development of technical proposals for this element, are being made by the UK CAA.

System Wide Information Management Led by the UK CAA

Background

1.100 System Wide Information Management refers to the set of standards, infrastructure and governance that supports the management of air traffic management related information. It enables the discoverability, accessibility and interoperability of accurate and timely data across the entire aviation system. As the aviation industry continues to grow, driven by increasing demand, the emergence of unmanned and autonomous aircraft, economic expansion, access to reliable, real-time information has become increasingly vital.

Progress

1.101 The System Wide Information Management concept definition was agreed by the UK CAA in Q2 2025. The draft version of the concept of operations is a key input to the System Wide Information Management framework. The draft concept of operations was delivered in Q4 2025, with a target date for publication in Q2 2026.

1.102 At the end of 2025, the UK CAA agreed to use the EUROCONTROL registry to perform this function.

RAG Status

1.103 The timeliness status improved from red in 2024 to green, reflecting progress against the baseline.

1.104 The outcome status remains amber, acknowledging progress against planned milestones, but recognising that detailed dependencies have yet to be understood.

1.105 The overall progress status improves from red to amber, supported by clear milestones and strengthened policy alignment. However, further work is required to establish end-to-end data assurance, stakeholder readiness, and technical integration pathways.

1.106 To improve the overall status, a full dependency model needs to be validated, resource secured long-term, and industry readiness confirmed, to deliver compliant services by 2027. A clearly mapped critical path linking dependencies will be essential to support decision making.

The Future of Aeronautical Information Management (AIM) Led by the UK CAA

Background

1.107 Aeronautical Information Management means the dynamic, integrated management of aeronautical information through the provision and exchange of quality-assured

digital aeronautical data, in collaboration with all parties. It is the State's responsibility to ensure the flow of aeronautical data and aeronautical information, necessary for air traffic management system safety, regularity, economy and efficiency, in an environmentally sustainable manner.

1.108 There are three types of aeronautical data: routine, essential, and critical, and this classification is based upon the potential risk, resulting from the use of corrupted data. All data types are provided by multiple parties and submitted to the Aeronautical Information Service, which NATS (En Route) plc is licensed and certified to provide in the UK.

1.109 The Future of Aeronautical Information Management work covers the transition from Aeronautical Information Service products and services to a System Wide Information Management environment.

Progress

1.110 During 2025, Instrument Flight Procedure datasets commenced evaluation and work to implement digital notification and dataset services. This work progressed in line with expected schedule.

1.111 Operational dataset trials were completed and released for Aeronautical Information Products through the UK Internet Briefing System in Q4 2025.

1.112 Preparatory work continued the Airport Mapping Database, following the review of CAP 1732[7] in 2025. The scope of data required to support future operations has been identified, and the target delivery date of the second quarter of 2027 remains unchanged.

1.113 Work on digital charts and System Wide Information Management services has been limited, due to dependencies on international guidance, national rulemaking activity, and interdependencies with other programmes such as Unmanned Aircraft System Traffic Management and the UK Pilot Common Project Rulemaking Mandate.

1.114 Development of the Digital Operational Reporting Information System is awaiting the publication of International Civil Aviation Organization standards and recommended practices.

RAG Status

1.115 The timeliness status is green, reflecting progress with dataset trials completed in 2025 and key milestones for digital notification and dataset services remaining on track for delivery by 2027. Transition to the European Aeronautical Database and the Airport Mapping Database programme continues delivery in line with the expected timelines.

[7] CAP1732: Aerodrome Survey Guidance | UK Civil Aviation Authority

1.116 The outcome status is amber, recognising progress and noting dependencies on international standards, regulatory developments, and the need for alignment with other enabling programmes such as System Wide Information Management and the Pilot Common Project.

1.117 The overall progress status is green, supported by the successful completion of trials and confirmed delivery confidence against baseline milestones.

Regulation of Data Products and Services Led by the UK CAA

Background

1.118 This project aims to deliver a certification and oversight process for data service providers.

Progress

1.119 During 2025, the regulatory approach for data service providers certified by other regulatory bodies was agreed. The UK will recognise existing certifications from the European Union Aviation Safety Agency and the Federal Aviation Administration, while encouraging voluntary UK certification. Associated workstreams will be updated to reflect this approach, with completion expected in 2028.

1.120 Work continued to define policies for the certification and oversight of UK-based data service providers not certified by another regulatory body. The necessary tasks have been identified, including the potential creation of a rulemaking task to amend provisions under UK (EU) 2017/373 Annex VII and UK (EU) 965/2012. The target completion date for this activity remains 2028.

1.121 The development of aviation safety agreements and working arrangements between the UK CAA and other regulatory bodies, including the European Union Aviation Safety Agency and the Federal Aviation Administration, is planned to enable mutual recognition of data service provider certification. The work remains at the planning stage, with a delivery date of 2028.

1.122 Preparatory work also continued to define a regulatory approach for organisations that provide data products outside the scope of existing regulation. The necessary tasks have been identified, but implementation has not yet begun. This work remains scheduled for completion in 2028.

RAG Status

1.123 The timeliness status is green, reflecting progress in 2025.

1.124 The outcome status is green, due to all necessary tasks now defined and agreed.

1.125 The overall progress status is green, supported by progress towards a defined certification model and cross-border recognition agreements.

Deployment Point En Route Led by NATS (En Route) plc

Background

1.126 This programme's focus is on modernising and replacing the National Airspace System Flight Data Processing system, a key enabler for the Airspace Modernisation Strategy and efficiencies across NATS (En Route) plc's operation. For example, it will enable the expansion of Free Route Airspace, including its cross-border utilisation. The programme was simplified in early 2022, to deliver outcomes through four project streams, running concurrently.

Progress

1.127 Stream 1 Prestwick Centre Upper Airspace Full Operational Service project did not pass formal validation in 2024, impacting delivery now planned for Q2 2029, with recovery approach implemented by NATS (En Route) plc. An interim step was introduced, which deploys the iTEC Version 2 Flight Data Processor platform with the existing Medium Term Conflict Detection toolset, to reduce project training, transition time and the risk to service disruption.

1.128 Deployment of Stream 2 Integrated DSESAR Services project, enabling the Main Voice System (MVS) and En Route capability at Swanwick, has been delayed from Q4 2024 to Q1 2027 due to missed milestones and delivery challenges. A revised commercial agreement and a joint delivery plan with the suppliers for the remaining work packages was developed by NATS (En Route) plc and agreed in Q3 2025, including dependencies management with the Stream 4 delivery of the Deployment of Main Voice System at Swanwick Area Control Temporary Ops Room Service.

1.129 The Co-sponsors discussed the NATS (En Route) plc Deployment Point En Route during director level meetings to address delivery risks and delays. As a result, The Co-Sponsors have advised NATS (En Route) plc to prioritise the following technology deployments:

- iTEC Version 2 in Scottish Upper Airspace by 2029,
- National Airspace System sustainment with an En Route Automation Modernisation module replacing the core of the system by 2030/31,
- iTEC Version 3 (SkyNex) by 2035.

RAG Status

1.130 The timeliness status remains red, unchanged from 2024, due to continued slippages across programme workstreams, causing a delay of more than four years.

1.131 The outcome status remains amber, reflecting progress in risk recovery planning but acknowledging that the extended timelines continue to constrain delivery confidence.

1.132 The overall progress status remains red, with delivery confidence reduced by cumulative delays, complex interdependencies and resource challenges. Although

recovery actions are underway, the impact on related programmes such as Free Route Airspace and iTEC integration continues to limit assurance of timely realisation of benefits.

1.133 To improve this status, a delivery plan, with cross-programme dependencies, and a validated, resource-loaded critical path is required.

UK-AM/7. Future surveillance and spectrum



Scope

1.134 The Future Surveillance and Spectrum programme focuses on transitioning from traditional, non-cooperative surveillance to more cost-effective and secure solutions, reducing reliance on extensive ground-based infrastructure. Emphasis will be placed on increased use of data link services, spectrum management and Global Navigation Satellite Service security to prevent interference.

Surveillance Infrastructure Development Led by the UK CAA

Background

1.135 The Communication, Navigation and Surveillance Infrastructure project aims to ensure the UK maintains a resilient navigation capability, that meets the operational needs of the aviation sector. It supports the wider Airspace Modernisation Strategy through the delivery of a Global Navigation Satellite System for aviation purposes, the development of performance-based surveillance and communications frameworks, and the identification of infrastructure requirements, to support emerging airspace users and service models.

Progress

1.136 Progress on the communication and surveillance developments are pending the publication of International Civil Aviation Organization standards and recommended practices.

1.137 Progress was made in developing a performance-based surveillance framework for the UK. In 2025, work began on a procedure for managing 24-bit aircraft addresses and on updating associated publications, to define their use for unmanned aircraft equipped with Automatic Dependent Surveillance – Broadcast systems.

1.138 Common infrastructure requirements for the provision of the Lower Airspace Service are being developed, with updates to CAP 670 and policy on the use of Automatic Dependent Surveillance – Broadcast in multiliterate ground surveillance systems.

1.139 Stakeholder consensus was also reached on establishing a policy and process to determine when and how unmanned aircraft transition from geometric to barometric altitude takes place.

1.140 Surveillance requirements for high-altitude platform systems and advanced air mobility operators were gathered in 2025. In Q3 2025, a meeting was held with industry representatives to consider concepts for satellite-based communication, navigation and surveillance, which are in early development.

RAG Status

1.141 The timeliness status for this element is green, reflecting delivery plan definition in the second edition of the CAP 1711b Airspace Modernisation Strategy Part 3 - Deployment Plan.

1.142 The outcome and the overall progress status remain amber, indicating moderate delivery confidence. While policy and technical frameworks continue to be developed, dependencies on international standard-setting, national rulemaking and interoperability with data-service enablers constrain the full assurance of long-term outcomes' achievement.

1.143 To achieve an improved status, stable deployment plans with mapped dependencies and a clearly defined critical path across surveillance, spectrum and data-service enablers are required.

UK-AM/8. Integration of communications, navigation, surveillance & spectrum



Scope

1.144 This programme delivers on projects from across the communications, navigation, surveillance and radio spectrum elements. In the short term, the updated optimisation programme for existing ground infrastructure will enhance Global Navigation Satellite Systems resilience for suitably equipped aircraft.

Future Navigation Infrastructure Led by the UK CAA

Background

1.145 This programme aims to ensure that the UK maintains a resilient and reliable navigation capability aligned with the Performance-based Navigation mandate. A complementary Positioning, Navigation and Timing Minimum Operational Network is being developed, to provide resilience in the event of failure or degradation of satellite-based navigation systems. The only current alternative for crewed aviation is

the continued use of terrestrial navigation aids, such as Distance Measuring Equipment and Very High Frequency Omnidirectional Range systems.

1.146 The programme also includes work to develop a UK framework for Dual-Frequency Multi-Constellation Satellite-Based Augmentation and to define Minimum Operational Network requirements, supporting both normal and contingency operations. These activities are coordinated by the UK CAA through the Communications, Navigation and Surveillance Infrastructure group of projects under the UK CAA Air Navigation Control Board.

Progress

1.147 Collaboration between the UK CAA and NATS (En Route) plc continued throughout 2025 to assess the resilience of existing and proposed terrestrial navigation infrastructure.

1.148 The Navigation-Monitoring Operational Network working group met in Q3 2025 to review the current and proposed coverage of Very High Frequency Omnidirectional Range and Distance Measuring Equipment systems, including those under the ongoing Rationalisation Programme. A draft infrastructure proposal was developed by UK CAA, outlining Phase 1 coverage for en-route operations and airports, identified as potential Minimum Operational Network enabled locations. However, this activity was not completed as planned by Q4 2025, due to a need for further validation of technical and operational requirements, expected to take three months.

1.149 In 2025 the UK CAA engaged with the International Civil Aviation Organization Navigation Systems Panel on the development of international standards for Dual-Frequency Multi-Constellation Satellite-Based Augmentation. The UK CAA's contribution under the Aviation System Block Upgrade NAVS-B2/2 work programme is ongoing, with planned completion of the programme in Q4 2029.

1.150 The Navigation Minimum Operational Network working group continued to lead the development of the UK strategy for resilient Positioning, Navigation and Timing infrastructure. The group coordinated with internal and external stakeholders, including the Ministry of Defence and air navigation service providers, to ensure that the Strategy aligns with emerging European and international initiatives on navigation aid resilience, through production of detailed delivery and stakeholder engagement plans.

RAG Status

1.151 The timeliness status remains green, unchanged from 2024, reflecting that programme activities continue in line with the plan. The delay of the rationalisation programme for ground infrastructure to provide Global Navigation Satellite System failure resilience to Q1 2026 is within tolerance and does not materially affect the overall schedule.

1.152 The outcome status remains amber, recognising progress in developing resilient navigation infrastructure and international engagement on dual-frequency satellite augmentation, but noting dependency on International Civil Aviation Organization standard setting and validation of operational requirements.

1.153 The overall progress status remains amber, with a moderate delivery confidence, reflecting continued coordination between the UK CAA, NATS (En Route) plc and the defence stakeholders.

1.154 To improve the overall rating, validation of the Minimum Operational Network proposal must be completed, and international alignment on satellite-based augmentation standards needs to be secured. A verified end-to-end resilience framework across navigation and communication systems will also need to be demonstrated.

UK-AM/9. Aircraft capabilities



Scope

1.155 This programme focusses on identifying and implementing aircraft capabilities required for UK modernised airspace that are not addressed through other Airspace Modernisation Strategy elements. It also supports the integration of new types of aircraft and operations within UK airspace.

High-Altitude Operations Led by the UK CAA

Background

1.156 The High-Altitude Operations project focuses on developing the policy, requirements, and regulatory framework needed to enable operations above the traditional controlled airspace volumes. It considers a future mix of activities, including crewed, uncrewed, and space-transit operations, and supports the long-term objectives of the Airspace Modernisation Strategy. The programme will align with the Aviation System Block Upgrade Block 3, due to commence in Q1 2031.

1.157 The Higher Airspace Operations Delivery Group coordinates this activity and consists of representation from the UK CAA, Ministry of Defence, NATS (En Route) plc and the Department for Transport. It is responsible for developing technical and operational requirements, ensuring coordination across government, industry and international partners.

Progress

1.158 In 2025, the UK CAA started preparation for the anticipated integration of Higher Airspace Operations (HAO) into ICAO's Global Air Navigation Plan (GANP) by planning the AMS evolution steps accordingly. Increased project activity is expected from Q1 2026.

RAG Status

1.159 The timeliness status remains green, consistent with 2024, reflecting the revised delivery timescales and mobilisation triggers. Progress is paced appropriately to strategic priorities, with no deviation from planned sequencing ahead of the Aviation System Block Upgrade Block 3 in 2031.

1.160 The outcome status remains amber, acknowledging incremental progress in defining technical and regulatory requirements and strengthened international engagement. However, delivery confidence remains moderate due to the early stage of this work.

1.161 The overall progress status remains amber, reflecting steady strategic progress within current priorities but limited tangible outputs due to the programme's preparatory phase. Coordination across the UK CAA, Ministry of Defence and international partners continues to provide a foundation for future mobilisation.

1.162 The status is expected to improve as the area of work matures.

Faster-Than-Sound Flight Led by the UK CAA

Background

1.163 The Faster-Than-Sound Flight project addresses the re-emergence of interest in commercial supersonic and hypersonic aircraft operations. The current Rules of the Air Regulations (UK Reg (EU) No 923/2012) permit instrument flight rules operations at supersonic and hypersonic speeds over land. With several manufacturers pursuing new commercial aircraft types capable of such speeds, the UK CAA is reviewing the associated regulatory and environmental frameworks, which may require development.

Progress

1.164 The UK CAA's consultation response on the Prohibition of Supersonic, Transonic and Hypersonic Flight Over Land was published in Q2 2025. Work is ongoing to develop provisions and an approval process to manage supersonic and transonic flights over land, considering environmental and operational aspects.

1.165 The UK CAA's work on Faster-Than-Sound Flight is closely linked with Higher Airspace Operations policy and features within the European Concept for Higher Airspace Operations framework. Coordination between these workstreams ensures alignment across international research and regulatory developments.

RAG Status

1.166 The timeliness status remains green, indicating that activities continue in line with planned sequencing, following the publication of the consultation response in Q2 2025. Work on policy development and approval processes for supersonic, transonic and hypersonic operations is progressing in line with expected timelines.

1.167 The outcome status remains amber, reflecting progress in policy definition and alignment with international frameworks. It reflects however a moderate delivery confidence, due to the uncertainty around future aircraft certification standards and environmental impact assessment limitations.

1.168 The overall progress status remains amber, consistent with 2024, acknowledging ongoing coordination and international engagement but limited tangible outputs at this stage of the programme maturity.

1.169 The status is expected to improve as the area of work matures.

Remotely Piloted Aircraft Systems Command and Control Link Led by the UK CAA

Background

1.170 The Command-and-Control link refers to the data connection between a remotely piloted aircraft and a remote pilot station, enabling the management and control of the flight. Its design, security and operational management involve a range of options, influenced by the operating environment, any functions supported by the link, and its potential loss or failure.

Progress

1.171 Publication of the first version of the policy concept (covering Specific Assurance Integrity Level 1-3 operations) was published in Q3 2025. Consultation responses are now being reviewed and developed for the next version, to cover operations up to Specific Assurance Integrity Level 5.

RAG Status

1.172 The timeliness status remains amber, unchanged from 2024, reflecting the replanning required following delays to this workstream.

1.173 The outcome status remains amber, consistent with 2024, as completion of the first policy milestone demonstrates progress, but confidence in achieving later deliverables remains moderate, given ongoing resource constraints and system integration dependencies.

1.174 The overall progress status remains amber, recognising that while foundational policy work has advanced, further assurance is required to confirm delivery sequencing and interdependencies across Electronic Conspicuity, Detect and Avoid, and Unmanned Traffic Management.

1.175 To improve the rating, a resource-loaded critical path and secured funding across the full project lifecycle along with cross-programme dependencies is required.

Airspace Modernisation Strategy Support Fund

1.176 At the end of 2025 a total of £6.5m was awarded across thirty-one projects under the Airspace Modernisation Strategy Support Fund, since 2021.

1.177 As of December 2025, thirteen projects are ongoing and there is £2.3m available for an investment under the fund, in future calls for proposals.

2025 Awarded Projects

1.178 Two calls for proposals opened in 2025, with the UK CAA receiving ten applications in February and sixteen applications in September.

1.179 A total of six projects (three under each round), were awarded funding in 2025:

Demonstrating Integration of Crewed and Fully Integrated Beyond Visual Line Of Sight Operators Pathway in the North Sea led by Flylogix Holdings

1.180 This project aims to demonstrate how uncrewed Beyond Visual Line Of Sight operators can safely operate alongside existing crewed aviation, across a large area of unsegregated airspace (around 93,000 km²) in the Central and Northern North Sea, generating evidence and operational learning that supports the UK CAA's "Fully Integrated BVLOS Operators" pathway and wider Airspace Modernisation Strategy objectives. It builds on Flylogix's ongoing North Sea Beyond Visual Line Of Sight work with partners such as NATS (En Route) plc and offshore operators, to mature the safety case and approval services needed for routine Beyond Visual Line Of Sight operations, beyond segregated airspace.

Managing Shared Airspace: Unmanned Aircraft System Traffic Management Interoperability for Beyond Visual Line Of Sight Operations – ANRA Technologies

1.181 This project sets out to stand up and test interoperable Unmanned Aircraft System Traffic Management services, so multiple Beyond Visual Line Of Sight drone operations can run safely at the same time in shared airspace. It develops a UK concept of operations, practical governance, and coordination approaches, drawing on experience from the United States implementation and operational evaluation. The project uses live trials (including real-world operations in Lancashire), to validate interoperability, cooperative operating principles, and oversight arrangements for both commercial and emergency-service Beyond Visual Line Of Sight activity.

Airspace Optimisation Tool led by Hawkrose

1.182 This project involves a system called the Hawkrose Airspace Optimisation Tool which has been developed, evaluated, and configured in collaboration with Heathrow

Airport Ltd. The Hawkrose Airspace Optimisation Tool is an evaluation and optimisation system used to help design and compare airspace change options. It takes proposed airspace geometry and local flight demand and uses machine-learning “emulation” models to rapidly predict key environmental outcomes, especially noise and local air quality impacts, so options can be assessed quickly and consistently. It can then use optimisation techniques, including reinforcement learning, to search for “high performing” airspace designs against a chosen objective (for example, reducing impacts while meeting operational needs).

Research into autonomous Detect and Avoid algorithms through part live/ part simulation demonstrations and procedure development led by AIC, SkyDrones & TRAX

1.183 This project aims to develop and validate advanced Detect and Avoid capabilities for autonomous Unmanned Aerial Systems, by combining controlled real-world conflict-avoidance testing against a finite set of unmanned aircraft with real-world conflict avoidance against a representative “busy day” sample of simulated conflicting traffic. By using both live and simulated targets, it refines Detect and Avoid algorithm performance and develops robust procedures to support safe operations in integrated, low-altitude airspace.

Leveraging Extended Projected Profile Data to Improve Fuel & Emissions Efficiency During the Descent Phase of Trajectory Based Operations in UK Airspace led by easyJet

1.184 This project aims to evaluate the fuel and emissions benefits of Enhanced Predictive Profile (EPP) descents by combining simulations with anonymised real-flight trajectory data from easyJet’s FANS-C-equipped aircraft. It analyses key performance metrics such as descent rates and routing efficiency, and models scenarios such as selecting specific latitude and longitude descent points. The project also strengthens the evidence base for future ATN-B2 implementation in UK airspace by leveraging high-quality aircraft trajectory data to improve the accuracy of the simulation results.

Airspace Characterisation for Uncrewed Detect and Avoid Operations (Project ACUDO) led by Volant & Draken

1.185 The objective of this project is to provide feedback for informing, evidencing, and supporting a rigorous and efficient process to characterise UK airspace regions for the purposes of high integrity Detect and Avoid verification.

2025 Completed Projects

1.186 Five projects have delivered their outputs by December 2025 and are now complete:

Fuel-efficient Delay Absorption led by GE Aerospace

1.187 This project focused on enhancing extended arrival management techniques to achieve two sets of benefits targeted in the Airspace Modernisation Strategy:

- To further reduce the level of stack holding at the main UK capacity-constrained airports
- To stream arriving aircraft prior to the top of descent

1.188 Stansted Airport was used as the test case for this project.

Advanced Drone Airspace Management led by envAero

1.189 This project developed the Concept of Operations and requirement set for an Artificial Intelligence enabled tool capable of identifying, classifying and managing suitable volumes of airspace to accommodate Beyond Visual Line of Sight drone operations.

Reduced Departure Divergence – Validation of Industry Research for Updated Minimum Standards led by Gatwick Airport

1.190 The first Reduced Departure Divergence project was conducted in 2023 to produce a UK Minimum Standard for the angle of divergence required between Performance-based Navigation departure routes to achieve a given interval (or split time) between successive aircraft taking off from the same runway end. This project used a third-party organisation to validate the research. To view the final report, please click here.

Flight Path Design Visual Repository led by Tetra Tech and Trax

1.191 This project developed and implemented a web-based Flight Path Design Visual Repository that is intended to enhance the development, engagement, and consultation aspects of all airspace change proposals required to deliver Airspace Modernisation in the UK. It aimed to deliver a step change in the UK's approach to options development, community outreach and airspace integration, especially for larger, more complex airspace change proposals like those included in the four regional clusters of the Masterplan.

Next Generation Airspace Operations and Surveillance led by Livelink Aerospace

1.192 This project developed, deployed and tested a new airspace technology, 'Passive Detection and Radar', which offers benefits such as reduced carbon emissions, improved traffic routing and increased airport capacity.

1.193 Final reports can be requested by email on: airspace.modernisation@caa.co.uk.

Chapter 2

Airspace Modernisation Strategy Risks & Mitigations

Overview

2.1 This chapter reports on the background and actions that were required to mitigate Airspace Modernisation strategic risks identified in 2025.

2.2 A summary of the tactical (delivery) risks is also included, covering specifics of projects, workstreams, or technical tasks under each element, alongside any mitigating actions undertaken, as reported by the delivery entities.

2.3 In 2025, the Airspace Modernisation Oversight team continued to mature a common approach to risk identification, ownership and reporting across the Airspace Modernisation Strategy portfolio.

2.4 Enhanced alignment between delivery entities and Airspace Modernisation Oversight on risk identification and reporting ensured that risk narratives presented through the Airspace Modernisation Strategy governance structure remained consistent from the working group level through to the Co-sponsors and the Secretary of State for Transport.

2.5 The Airspace Modernisation Strategy risk framework now formally distinguishes between strategic, operational and tactical risk types, ensuring proportional ownership, clearer escalation, and improved traceability of mitigation actions through the Airspace Modernisation Strategy governance tiers.

2.6 Strategic risks are those that could impact the overall deliverability, scope or objectives of the Airspace Modernisation Strategy. Four strategic risks were actively monitored during the reporting period, reflecting challenges associated with airspace change and technological enablers, resource and funding, international coordination and legislative readiness.

2.7 Operational risks affect the medium-term delivery of programme objectives and coordination across organisations. With delivery now progressing across multiple organisations, greater focus was also placed on risk interdependencies, sequencing, and governance escalation.

2.8 Tactical risks arise from the execution of specific projects, workstreams, or technical tasks.

2.9 Progress for each element continues to be assessed using the standardised red, amber, green methodology introduced in 2024.

2.10 The overall RAG rating combines assessments of timeliness and outcomes.

- GREEN from a timeliness perspective indicates a 0–1-month delay from baseline; from an outcome perspective it indicates that there is strong certainty about outcomes. Assumptions are well-validated, risks are minimal or well-mitigated, and data or experience strongly support the plan. Most unknowns are accounted for.
- AMBER from a timeliness perspective indicates a 2–3-month delay from baseline; from an outcome perspective it indicates there is moderate certainty about outcomes. Some assumptions may still need validation, and risks are present but manageable. The element relies on a balance of knowns and unknowns, requiring monitoring and potential adjustments.
- RED from a timeliness perspective indicates a 4+ month delay from baseline; from an outcome perspective it indicates there is low certainty about outcomes. Assumptions are largely untested, and there are significant risks or unknowns that could impact the element. The plans may need considerable adaptation as the project progresses.

2.11 The outcome assessment for each element is informed by several key factors, including quality, cost, dependencies, planning, resources, risk and stakeholder commitment. While the assessment is based on the analysis of these data points, it is also influenced by the UK CAA Airspace Modernisation Oversight team's confidence in the likelihood of project strategic outcomes being delivered within the expected timeframes, based on the available data.

Strategic Risks & Mitigations

Overview

2.12 Strategic risks are those that could impact the overall deliverability, scope or objectives of the Airspace Modernisation Strategy.

2.13 This section summarises the key strategic risks and mitigations in 2025.

Strategic risk 1: Misalignment of Technological Enablers, Airspace Deployments and National Priorities

Background

2.14 NATS (En Route) plc has a requirement to upgrade their technical infrastructure, to both enable and transition to a modernised landscape. Due to the complexity of major airspace change and technological transformation, both the NATS (En Route) plc Deployment Point En Route Programme and the Airspace Change Organising Group-led delivery of the Masterplan have experienced delays.

2.15 For industry to implement the major airspace change proposals under the Airspace Change Masterplan and the required NATS (En Route) plc technical infrastructure upgrades, a window of 12 months in between deployments is required, to facilitate

controller training and to minimise risk of disruption during transition into live operations.

Risk

2.16 Unless deployments are synchronised and coordinated effectively, the delivery of airspace change, and therefore the subsequent intended benefits, may be impacted or delayed.

Mitigations

2.17 The Co-sponsors have worked closely with NATS (En Route) plc to understand the deployment constraints and have provided strategic direction on priorities, such as The National Airspace System (NAS) Flight Data Processor (FDP) sustainment and replacement, Heathrow's Third Runway and London Terminal Manoeuvring Area airspace change deployments delivered by 2035.

2.18 The Co-sponsors have remained closely engaged with NATS (En Route) plc and the Airspace Change Organising Group to better understand the nature of the challenges and where necessary, to provide support and guidance to assist coherence across the Airspace Modernisation Strategy.

Required Decision or Direction

2.19 Current mitigation satisfactory; no additional action required.

Strategic risk 2: Resource and Funding Challenges

Background

2.20 In the current delivery model, sponsors of airspace change in the Masterplan programme fund their airspace change proposals. However, each sponsor of the airspace change within that cluster may not have the available funding or resource to progress in expected timescales.

2.21 Several of the policy areas of modernisation, that relate directly to the integration of new users into the ATM system, are being led by the UK CAA under the Integration element's Future of Flight programme and are supported by government funding, which needs to be renewed each year. The resource required to develop and deliver these projects is dependent on continuity of that funding.

2.22 Limited availability and capacity of suitably qualified expert resource poses additional challenges to the timely delivery of activities across both the industry and the UK CAA.

Risk

2.23 There is insufficient resource or funding to modernise at the required pace, and to the required standards, to meet the expected Government and stakeholder timelines.

Mitigations

2.24 Following consultation, the Department for Transport and UK CAA have announced a revised delivery model for airspace change, establishing the UK Airspace Design Service, to be provided by NATS (En Route) plc as the single guiding entity for future airspace design. The UK Airspace Design Service will initially focus on modernising the complex airspace in the London region, with the potential to expand the scope nationally, subject to resource capacity and capability.

2.25 In Q4 2025, the Department for Transport and UK CAA consulted on modifications to the terms and conditions of NATS (En Route) plc's air traffic services licence to establish the UK Airspace Design Service and an Airspace Design Charge. As well as funding the activities of the UK Airspace Design Service, the Charge would provide funding mechanisms for a new UK Airspace Design Support Fund to assist eligible airport sponsors in the UK, outside the scope of the UK Airspace Design Service, with progressing eligible airspace change proposals.

2.26 Internally, the UK CAA has established a joint planning function between the Future of Flight and the Air Navigation programmes, to align workload with the available resource and prioritise activities accordingly.

2.27 The UK CAA has also received continued government commitment to fund the Future of Flight programme, which would not be able to be progressed otherwise.

Required Decision or Direction

2.28 Current mitigation satisfactory; no additional action required.

Strategic risk 3: International Alignment and Coordination

Background

2.29 Although the Airspace Modernisation Strategy is UK-focused by design, successful modernisation depends on close cooperation at both global and European levels, to ensure that systems, concepts and procedures remain standardised and interoperable. The key driver for the Strategy is alignment with the International Civil Aviation Organisation Global Air Navigation Plan; therefore, it is taking globally agreed concepts for the modernisation of air traffic management and translating them into a UK context.

2.30 Because of complex geographical boundaries, and multiple flight information regions, air navigation service providers and air traffic management systems, interoperability is particularly critical at European level, to ensure the safety and efficiency of the network.

Risk

2.31 UK modernisation efforts become incoherent, desynchronised or unable to leverage enabling capabilities with supporting international elements; thereby making the Airspace Modernisation Strategy less effective, less efficient and less deliverable.

Mitigation

2.32 The UK CAA continued to participate in International Civil Aviation Organization and EUROCONTROL working groups, to ensure representation in global air traffic management initiatives.

2.33 The publication of the second edition of the Airspace Modernisation Strategy Part 3 – Deployment Plan in Q3 2025, provided increased visibility of the UK's long-term modernisation roadmap and reinforces engagement with international and industry partners through to 2030.

Required Decision or Direction

2.34 Current mitigation satisfactory; no additional action required.

Strategic risk 4: Legislative Change in Support of Airspace Modernisation

Background

2.35 Delivery of Airspace Modernisation Strategy objectives relies on an updated UK legislative and regulatory framework, that supports the introduction of new technologies and operating concepts. Some existing provisions, such as those derived from the EU Pilot Common Project (Commission Implementing Regulation (EU) No 716/2014), are now outdated or incomplete, in relation to the UK's current modernisation priorities.

2.36 The previous definition of this risk "Non-Compliance with Assimilated Legislation Derived from the European Pilot Common Project (Commission Implementing Regulation (EU) No 716/2014)" has changed its status and the new definition is currently in development through the Tier 2 Airspace Modernisation Strategy Board and risk review workshops engagement, to confirm ownership, likelihood and impact ratings.

Tactical Risks & Mitigations

Overview

2.37 Tactical risks arise from the execution of specific projects, workstreams, or technical tasks.

2.38 This section summarises the key tactical risks and mitigations identified in 2025, by delivery element.

UK-ABN/1. Trajectory Based Operations

2.39 While progress has been made under this element, red status is driven by the level of risk to the delivery of Free Route Airspace and the dependency with the Deployment Point En Route Programme (iTEC SkyNex), to fully realise the benefits of cross border Free Route Airspace. Risks include the requirement to sustain and

modernise the National Airspace System Flight Data Processor and to manage capacity constraints given the national priorities.

2.40 Mitigating actions include senior-level conversations between the UK CAA, Department for Transport and NATS (En Route) plc, to determine deployment capacity and prioritisation for major airspace change and the supporting technological enablers.

UK-ABN/2. Terminal Airspace Re-design

2.41 The red status is driven by milestone delays against the 2022 version of the Masterplan accepted into the Airspace Modernisation Strategy by the co-sponsors and reflects the levels of delivery risks in this area. Those are unchanged from the previous years and include funding, programme compression and complexity and design quality issues.

2.42 For the Southeast Cluster, following consultation, the Department for Transport and UK CAA have agreed that a revised delivery and funding model is necessary to address these challenges, leading to the establishment of the UK Airspace Design Service.

2.43 For eligible airport sponsors outside the scope of the UK Airspace Design Service, in the interests of fairness and to promote the progress of airspace modernisation across the UK, an Airspace Design Support Fund is being established, against which airspace change sponsors which meet the eligibility criteria will be able to claim back certain costs associated with their airspace change.

2.44 NATS (En Route) plc submitted a paper on the Consideration and Guidance for Vertical Interactions (CAGVI) to the UK CAA, to support with mitigating the design complexity risks under the Masterplan. A working group consisting of representatives from UK CAA, NATS (En Route) plc and the Airspace Change Organising Group was established to progress the production of the UK CAA safety guidance material, which is due to be delivered in Q1 2026.

UK-ABN/3. Network Management

2.45 The improved amber status reflects delivery progress of the Gatwick Time Based Separation Advanced Mixed Mode in Q1 2025, with a successful mitigation of the associated resource risks. Arrival Manager Headbranch has been affected by the reprioritisation of resources by NATS (En Route) plc onto higher priority projects, causing some delay to the originally planned activities under this project. The main risks identified were the potential for further impacts to the timeline and loss of anticipated benefits, because of airspace design changes.

2.46 These risks were managed by NATS (En Route) plc through resource planning and monitoring, reported close engagement with its suppliers and communication of any

changes in expected benefits through the Service and Investment Plan (SIP) engagement process.

UK-ABN/4. Integration

2.47 The amber status reflects the level of risk associated with competing objectives, requiring prioritisation across other Airspace Modernisation Strategy related and unrelated workstreams, and 'business as usual' regulatory activities, managed and delivered by the UK CAA. The projects are also affected by a limited UK CAA specialist resource, available to progress work under these novel areas and is compounded by. the lack of long-term funding, which is being renewed with the Department for Transport annually. The Lower Airspace Programme projects such as Electronic Conspicuity, Detect and Avoid, Unmanned Traffic Management, Ground Infrastructure and the element's UK-AM/9 project Command and Control Link may become affected, should the funding become unavailable.

2.48 Mitigations included increased collaboration across the internal technical working groups, an improved approach to resource planning and prioritisation methodology, and continued funding discussions with the Department for Transport.

UK-AM/5. Airspace Management

2.49 The amber status reflects the ongoing level of complexity under the Flexible Use of Airspace concept delivery.

2.50 Mitigations included continued collaboration through the Higher Airspace Operations Delivery Group alignment of delivery plans across programmes, and joint work between the UK CAA, Department for Transport and Ministry of Defence to manage interdependencies and maintain progress across all military and civil stakeholders involved.

UK-AM/6. Data Services

2.51 A System Wide Information Management resource availability issue has been addressed by the UK CAA, with progress made in 2025 to mature the definition of the scope and work packages. However, this policy development area remains a key dependency for several other Airspace Modernisation workstreams, for example The National Airspace System and the Deployment Point En Route programmes led by NATS (En Route) plc. As a result, this element's status remains unchanged from last year's assessment and is reported as red.

2.52 Mitigations for the policy development areas included active participation of the UK CAA at international working groups, closer coordination across the internal delivery teams, and joint planning with government and industry partners to manage known dependencies, maintaining data quality, and ensuring readiness for digital information services across all stakeholders.

2.53 Mitigating actions for the NATS (En Route) plc technological change included senior-level discussions between the UK CAA, the Department for Transport and NATS (En Route) plc, to determine the appropriate deployment capacity and prioritisation for delivery of major airspace change and technological enablers.

UK-AM/7 Future Surveillance and Spectrum & UK-AM/8. Integration of Communications, Navigation, Surveillance

2.54 The amber status reflects the ongoing level of risk associated with technical dependencies, resource constraints and reliance on development of international standards for surveillance and navigation system.

2.55 Mitigations included continued coordination through specialist working groups, strengthened engagement with international standards bodies, and collaboration between the UK CAA, Ministry of Defence and the Office of Communications to manage dependencies, align timelines and ensure that a resilient surveillance framework meets future operational requirements.

UK-AM/9. Aircraft Capabilities

2.56 The amber status reflects the level of risk associated with the early stage of policy development, limited resources, and reliance on international research programmes to define common operational standards.

2.57 Mitigations include close coordination through the Higher Airspace Operations Delivery Group and participation in Higher Airspace Operations forums under relevant European programmes coordinated by the Single European Sky Air Traffic Management Research (SESAR) and EUROCONTROL. Proactive monitoring of technological and regulatory developments was also undertaken by UK CAA, to inform future UK policy and ensure readiness for next-generation high-altitude and faster-than-sound operations.

Chapter 3

UK CAA's 2025 Airspace Modernisation Commitments to the Prime Minister

Overview

3.1 In response to the Prime Minister's request for measures to support national economic growth and investment, the UK CAA reaffirmed its commitment to progressing the Airspace Modernisation Strategy through three key actions during 2025:

- Establishing the UK Airspace Design Service
- Enabling two trials using remotely piloted drones beyond visual line of sight
- Consulting on improvements to the effectiveness and proportionality of the airspace change process.

3.2 During 2025, the UK CAA made progress and has met these commitments, advancing policy, consultation and preparatory activities to strengthen the foundation for delivery from 2026 and beyond.

3.3 Together, these achievements have strengthened the governance, delivery and policy frameworks underpinning the Airspace Modernisation Strategy, providing a stable foundation for continued delivery in the years ahead.

3.4 This chapter provides an update on the progress against each of the commitments.

Establishment of the UK Airspace Design Service

3.5 During 2025, the Department for Transport and the UK CAA advanced work to establish the UK Airspace Design Service, to be provided by NATS (En Route) plc. Following the 2024 consultation, a move to a single, centralised design service was confirmed. Throughout the year, progress was made in defining the governance framework, funding model, and initial geographic scope, focused on the modernisation of the complex airspace in the London region. Supporting Statutory Instruments were laid, to enable the new funding arrangements, and consultations were launched on related regulatory changes. By the end of 2025, the required framework had been established to enable NATS (En Route) plc to begin work.

Beyond Visual Line of Sight Remotely Piloted Aircraft System Trials

3.6 In 2025 the UK CAA approved a series of trials designed to demonstrate the feasibility of scalable, safe operations in a complex airspace environment.

3.7 In September 2025, the UK CAA approved Windracers Ltd, in partnership with Luftfartstilsynet (Civil Aviation Authority Norway), to conduct the UK's first civil unmanned aircraft operation across international airspace. The Windracers ULTRA aircraft completed beyond visual line of sight flights between Tingwall Airport in the Shetlands and Haugesund Airport in Norway. The trial established the first authorised civil corridor between the UK and an adjoining state, demonstrating cross-border interoperability and the use of controlled temporary danger areas to manage operational risk.

3.8 The UK CAA also supported trials with the National Police Air Service, to assess how remotely piloted aircraft could enhance emergency response, by providing rapid, low-risk access to incident locations. Data from these activities will inform future policy and safety regulation for the integration of uncrewed aircraft into the UK airspace system.

3.9 Further trials were approved across multiple sectors. The Flylogix Ltd project with NATS (En Route) plc demonstrated the integration of uncrewed aircraft into controlled airspace, to support offshore energy operations. Dronecloud and Railscape's Uncrewed Aircraft Systems division were authorised to conduct infrastructure inspections across the rail network, while Sees.ai and National Grid undertook operations inspecting live power infrastructure across England and Wales, providing a safe and efficient alternative to traditional aerial surveys.

Consultation on Improvements to the Airspace Change Process (CAP 1616)

3.10 In Q3 2025, the UK CAA launched a public consultation on proposed amendments to CAP 1616: Airspace Change Process. The proposals focused on enhancing clarity, proportionality and efficiency within the UK's airspace change framework. The consultation reflected lessons learned from the previous change programmes and responded to industry feedback seeking simpler processes and clearer decision-making roles. The consultation closed in December 2025, and responses are being analysed to inform final updates planned for publication in 2026.