

Airspace change masterplan – assessment framework

CAP 2156b

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Purpose of this document

1. The purpose of this document is to set out the assessment framework used by the CAA in determining whether to accept the airspace change masterplan into the Airspace Modernisation Strategy (AMS).
2. This document is supplementary to [CAP 2156a](#) *Airspace change masterplan – CAA acceptance criteria*. Both documents are published pursuant to Direction 4 of the Civil Aviation Authority (Air Navigation) Directions.
3. This document covers:
 - The airspace change masterplan and CAA acceptance (Chapter 1)
 - Iterative process for developing and assessing the masterplan (Chapter 2)
 - Legal and policy framework (Chapter 3)
 - Engagement principles (Chapter 4).

Chapter 1

The airspace change masterplan and CAA acceptance

Roles of the Department for Transport and CAA as co-sponsors

- 1.1 The Department for Transport and CAA are co-sponsors of airspace modernisation and are working together to deliver our shared strategic vision and objectives for the modernisation of UK airspace.¹
- 1.2 There are two distinct roles within this co-sponsor arrangement:
 - the **Department for Transport** will develop and own national policy, including the strategic case for airspace modernisation and the objectives it must deliver; the Secretary of State also sets the CAA's role in the Civil Aviation Authority (Air Navigation) Directions
 - the **CAA**, as independent regulator as well as technical adviser to the Government, will develop and maintain an AMS and oversee and report annually to the Secretary of State on its delivery, consistent with our duties under section 70 of the Transport Act 2000 and the policy framework set by the Government, including the UK's international obligations. The CAA's focus is on the technical policy framework required to enable the changes and to identify and propose new rulemaking activities. The CAA also ensures adherence to the CAP 1616 airspace change process.
- 1.3 The co-sponsors commission specific projects necessary for airspace modernisation, agreeing what must be delivered and the outcomes. We also set parameters for delivery groups tasked with planning and delivering modernisation projects.
- 1.4 The co-sponsors commissioned NATS (En Route) plc (NERL) to create a single coordinated implementation plan for airspace changes in the UK to cover the period to 2040, known as the airspace change masterplan (or '[masterplan](#)'). Given the large number of parties involved in the development of the masterplan, including many airports and NERL itself, the co-sponsors required NERL to set up a separate and impartial body, the Airspace Change Organising Group (ACOG), to coordinate the airspace changes necessary to deliver airspace modernisation and develop the masterplan. The CAA has specified these requirements in the form of a condition on NERL's air traffic services licence.²

¹ See CAP 1711 *Airspace Modernisation Strategy* www.caa.co.uk/CAP1711.

² NERL licence condition 10a www.caa.co.uk/CAP2111. See also Chapter 3 about the legal and policy framework.

Airspace Change Organising Group (ACOG)

- 1.5 [ACOG](#) is a unit within NERL, separate and impartial from NERL's other functional units. It is made up of airspace change programme and communications specialists. It is subject to oversight from a Steering Committee to assist with its impartiality and engagement of relevant stakeholders. The Steering Committee must include at least one representative from NERL, airlines, airports, the General Aviation community and independent members with appropriate experience. NERL remains accountable for the activities of ACOG.

Airspace Modernisation Strategy (AMS)

- 1.6 One of the CAA's functions is to have a strategy and plan for airspace. In 2017 the Government published its strategic case for airspace modernisation.³ The Secretary of State subsequently directed the CAA to "prepare and maintain a coordinated strategy and plan for the use of UK airspace up to 2040, including modernisation".⁴ As a result, in 2018, the CAA published an Airspace Modernisation Strategy, which replaced the earlier 2011 Future Airspace Strategy.
- 1.7 The CAA has since refreshed the strategy and published an updated version in January 2023⁵, which is described in [Chapter 2](#).

The airspace change masterplan

- 1.8 The purpose of the masterplan is to set out a single coordinated implementation plan for airspace changes⁶ in the UK up to 2040 to upgrade the UK's airspace and deliver the objectives of airspace modernisation at a system level.
- 1.9 In doing so, the masterplan will, in particular:
- identify where and when airspace design changes need to be developed in coordination to support delivery of the objectives of the CAA's AMS

³ *Upgrading UK Airspace: Strategic Rationale*, Department for Transport, 2017.

<https://www.gov.uk/government/publications/upgrading-uk-airspace-strategic-rationale>

⁴ Civil Aviation Authority (Air Navigation) Directions <https://www.caa.co.uk/Commercial-industry/Airspace/Airspace-change/Legislative-framework-to-airspace-change/>.

⁵ CAP 1711 *Airspace Modernisation Strategy* www.caa.co.uk/CAP1711.

⁶ Airspace modernisation will be achieved, in part, through the coordination by ACOG of a series of individual airspace change proposals initiated by 'sponsors', in this case airports (for routes close to airports) and NERL (for upper airspace routes connecting airports). We refer to the airspace change proposals forming part of this modernisation programme as 'constituent airspace change proposals'.

- describe how individual airspace changes relate to each other (i.e. interdependencies) and where there are potential conflicts in their proposed designs
 - explain how trade-off decisions to resolve those conflicts have been made
 - set out the proposed timelines for implementation of the individual airspace changes
 - demonstrate the anticipated cumulative impact of the system as a whole.
- 1.10 Iteration 4 of the masterplan will describe, for each cluster or deployment, the proposed airspace structure and the final proposed trade-offs between interdependent ACPs, taking account of the outputs of the coordinated consultations. This will act as a framework for constituent airspace change proposals, which must be consistent with it.
- 1.11 With agreement from the co-sponsors, ACOG has adopted an iterative approach to the development of the masterplan, as described in [Chapter 2](#).

Acceptance into the Airspace Modernisation Strategy

- 1.12 The co-sponsors assess the masterplan to confirm it is consistent with government policy and the CAA's own statutory airspace functions. Based on that assessment, and before the masterplan can be implemented, the CAA must decide to formally accept the masterplan into the Airspace Modernisation Strategy (AMS), having consulted the Secretary of State.⁷
- 1.13 The co-sponsors will assess the masterplan, including iterations of it, against the requirements set out in [CAP 2156a Airspace change masterplan – CAA acceptance criteria](#). The criteria are derived from the requirements set out in the masterplan commissioning letters from the co-sponsors to NERL (see Appendix A of CAP 2156a).
- 1.14 The CAA will then, having consulted the Secretary of State, decide whether to accept the masterplan into the CAA's AMS. Where the CAA needs clarity on the policy framework (see Chapter 3) for accepting an iteration of the masterplan into the AMS, we will approach the Department for Transport for advice as part of the assessment process.
- 1.15 The CAA's acceptance of the masterplan into the AMS makes the masterplan, together with CAP 1616, the legal basis against which the CAA decides whether to approve any individual airspace change proposals.⁸ Therefore, the CAA's decisions on airspace change proposals will need to ensure that there is no misalignment with the masterplan.

⁷ The CAA has also consulted the Secretary of State on the criteria for accepting the masterplan set out in CAP 2156a *Airspace change masterplan – CAA acceptance criteria*.

⁸ [Direction 5 of the Civil Aviation Authority \(Air Navigation\) Directions](#).

- 1.16 The process for assessing and accepting the masterplan supplements – but does not alter or replace – the CAA’s CAP 1616 process for decisions on the constituent airspace change proposals sponsored by airports and/or air navigation service providers, including those making up the modernisation programme. While the airspace change process applies at the level of individual airspace change proposals, we must also consider how all these proposals interact and deliver policy at a programme level. Hence both the masterplan and CAP 1616 processes are needed for making airspace change decisions to achieve airspace modernisation and individual sponsors are required to follow the process in CAP 2156a *Airspace change masterplan – CAA acceptance criteria*, as well as CAP 1616.
- 1.17 Additionally, the masterplan may be used to show how critical an airspace change is to achieve airspace modernisation. It would therefore inform any CAA advice to the Secretary of State on whether to direct an organisation to prepare and/or submit an airspace change proposal where, in the view of the Secretary of State, it will assist in the delivery of the AMS and the masterplan.⁹

Maintaining objective decision-making

- 1.18 At each iteration of the masterplan, the CAA will make a decision whether to accept it into the AMS. The CAA will also be monitoring ACOG’s progress with developing the airspace change masterplan iterations to confirm that these are delivering what the co-sponsors commissioned and to address risks, issues causing delay etc.
- 1.19 The CAA’s decision whether to accept the masterplan has implications for maintaining the independence and objectivity of the decision-maker on an individual airspace change proposal, which may be the CAA or, where the proposal has been called-in, the Secretary of State.¹⁰
- 1.20 The governance structure for the AMS has been designed to de-risk any potential conflicts of interest in functions. Where these functions fall to the CAA, the roles are separated and carried out by different teams (see Table 1).
- 1.21 Some related functions may fall to the Department for Transport. The team responsible for advising the Secretary of State on directing an airport to initiate an airspace change will be separate from that deciding on a specific airspace change proposal that has been called-in for decision by the Secretary of State.

⁹ Using powers in Part 1 of the Air Traffic Management and Unmanned Aircraft Act 2021. The procedures and related guidance referred to in Part 1 section 2(5) include the masterplan acceptance criteria set out in CAP 2156a and this document CAP 2156b.

¹⁰ Where an airspace change proposal meets certain criteria, the Secretary of State may decide to call-in the proposal and to make the related decision, instead of the CAA. ([CAA website](#).)

Table 1: CAA team roles in relation to assessing and accepting the masterplan and airspace change

CAA team	Function
Airspace Modernisation team	<p>Commissioning a masterplan of airspace changes</p> <p>Tracking its delivery on behalf of the co-sponsors</p> <p>Deciding whether it should be accepted into the AMS</p> <p>Advising on whether powers to direct an airspace change to be developed should be triggered</p> <p><i>Note that this team does not participate in decisions on the individual airspace change proposals making up the masterplan</i></p>
Airspace Regulation team	<p>Advising the Airspace Modernisation team on whether the masterplan is technically robust</p> <p>Deciding whether the final proposal produced for any individual airspace change (including those making up the masterplan) should be approved (unless the airspace change proposal has been called-in by the Secretary of State)</p> <p>Deciding on changes to airspace classification proposed by the Airspace Classification Review team</p>
Airspace Classification Review team	<p>Reviewing airspace classifications and making a proposal to amend them where appropriate, or for the use of alternative air traffic management measures to better support access to shared airspace</p> <p>Where an airspace change is already in progress, passing intelligence on to the relevant sponsor and ACOG</p>

Chapter 2

Iterative process for developing and assessing the masterplan

Iterative approach

- 2.1 ACOG is developing the masterplan through a series of iterations which are assessed and accepted separately¹¹. This process was proposed by ACOG and agreed by the CAA and Department for Transport as co-sponsors. It recognises that different information and levels of detail will be available at different points as the constituent airspace changes which together make up the plan, and therefore the plan itself, progress. It also means that the masterplan can be kept flexible and agile to accommodate the evolving context for airspace modernisation, such as any changes or additions to co-sponsor commissions to produce elements of the masterplan, or unanticipated external events.
- 2.2 [CAP 2156a](#) *Airspace change masterplan – CAA acceptance criteria* explains the expected content of each masterplan iteration and the interaction with the CAP 1616 process.
- 2.3 The masterplan is being developed in parallel with sponsors developing options for each constituent airspace change proposal. The iterations broadly align with certain gateways of the CAP 1616 process that each of the constituent airspace change proposals will follow. This means that ACOG may have an insufficient level of detail to understand the impacts of different options fully, depending on the maturity of the airspace change proposal concerned. ACOG may therefore need to make assumptions which it refines in later iterations.
- 2.4 In deciding whether to accept the masterplan, the CAA will review all the information provided to demonstrate compliance with the criteria set out in CAP 2156a and any updates to it, relevant law and policy, and any other requirements published by the co-sponsors. We will achieve this through a process of regular assessment by the co-sponsors and key decision points where the CAA considers whether to formally accept each iteration of the masterplan into the AMS.

¹¹ Iteration 1 was a high-level plan and so was not accepted into the AMS in the same way as later iterations. See CAP 1884 *Airspace Masterplan Iteration One (Southern UK): co-sponsor assessment*. www.caa.co.uk/CAP1884

Information exchange

- 2.5 The co-sponsors will regularly assess ACOG's methodology in developing the masterplan based on information provided by ACOG. This may take the form of both formal and informal feedback on draft versions of each iteration and include the co-sponsors participating in meetings involving ACOG.
- 2.6 The co-sponsors will receive regular updates from ACOG and the CAA will regularly report on progress to the Department for Transport. ACOG will keep the co-sponsors informed on how it intends to present the required information. ACOG will also keep the co-sponsors informed on whether work with NERL and the airport airspace change sponsors on the development of the masterplan is progressing on schedule.
- 2.7 The purpose of this information exchange is to ensure that the programme is managed as efficiently and effectively as possible. Information exchange for these purposes during the development of the masterplan will not fetter the co-sponsors' ultimate decision-making role in respect of formally assessing and approving iterations of the masterplan. Any issues that cannot be resolved through discussion are escalated by the CAA to the co-sponsors' Airspace Modernisation Programme Board.

Technical aspects

- 2.8 The CAA may assess supporting technical work by ACOG in developing the masterplan, such as operational concepts or assumptions. These concepts are most likely to be related to procedures, such as aircraft climb and descent performance, turn capability, route spacing etc.
- 2.9 To the extent that the technical feasibility of these concepts needs to be approved by technical experts in the CAA's Airspace Regulation team, this would happen at the decision stage of the CAP 1616 process (Stage 5) for the airspace change proposal concerned. It does **not** form part of the masterplan acceptance process. However, in order for us to accept the masterplan, it may be necessary for the CAA's Airspace Regulation team to consider such technical or operational concepts earlier, and to offer technical feedback.

Outcome-based assessment

- 2.10 The co-sponsors are primarily concerned with outcomes, specifically:
- a masterplan which fulfils the criteria in CAP 2156a *Airspace change masterplan – CAA acceptance criteria*
 - a masterplan which complies with NERL licence condition 10a
 - whether the masterplan aligns with the CAA's AMS
 - whether the Government's policy objectives are being delivered

- whether acceptance of the iteration concerned is consistent with the CAA's statutory responsibilities.

2.11 While the co-sponsors will oversee the masterplan development process, we will not dictate the process or prescribe how ACOG facilitates agreement between airspace change sponsors.

Chapter 3

Legal and policy framework

Overview

- 3.1 The CAA works closely with government to provide clarity around our respective policy and decision roles in the airspace change process. The criteria for making a decision to accept the masterplan must align with the legal and policy framework set by government as summarised in this section.
- 3.2 More up to date information can be found on the CAA's website.¹²

Transport Act 2000

- 3.3 The CAA's statutory duties in respect of air navigation are contained in Chapter III of Part 1 of the Transport Act 2000 and the Air Navigation Directions.
- 3.4 [Section 70](#) of the Transport Act places the CAA under a general duty in relation to its air navigation functions to exercise those functions so as to maintain a high standard of safety in the provision of air traffic services. That duty is to have priority over the CAA's other duties in this area of work. Noting that priority, the CAA's duties in relation to air navigation is to exercise its functions in the manner it thinks best so that:
- it secures the most efficient use of airspace consistent with the safe operation of aircraft and the expeditious flow of air traffic
 - it satisfies the requirements of operators and owners of all classes of aircraft
 - it takes account of the interests of any person (other than an operator or owner) in relation to the use of any particular airspace or airspace generally
 - it takes account of any guidance relating to spaceflight activities given to the CAA by the Secretary of State
 - it takes account of any guidance on environmental objectives given to the CAA by the Secretary of State
 - it facilitates the integrated operation of air traffic services provided by or on behalf of the armed forces and other air traffic services
 - it takes account of the interests of national security
 - it takes account of any international obligations of the UK notified to the CAA by the Secretary of State.

¹² [Legislative framework to airspace change | Civil Aviation Authority \(caa.co.uk\)](#)

- 3.5 The CAA's air navigation functions are the functions which we are required to perform under the Air Navigation Directions. This includes assessing and deciding whether to accept an iteration of the masterplan into our AMS.
- 3.6 If, in a particular case, there is a conflict in the application of the material factors in section 70, the CAA must apply them in the manner it thinks is reasonable having regard to them as a whole. The CAA must also exercise its air navigation functions so as to impose on providers of air traffic services the minimum restrictions which are consistent with the exercise of those functions.
- 3.7 For more information on how the CAA interprets its statutory duty under section 70, see CAP1616f.¹³

Air Navigation Guidance 2017

- 3.8 Section 70(2)(d) of the Transport Act 2000 requires the CAA to take account of any guidance on environmental objectives given to it by the Secretary of State when carrying out the air navigation functions set out in the Air Navigation Directions. This is subject to the CAA's primary duty of maintaining a high level of safety.
- 3.9 The Air Navigation Guidance was last issued in October 2017¹⁴ following a consultation by the Department for Transport about airspace and noise policy.¹⁵ Additional guidance in relation to spaceflight activities was published in September 2021.¹⁶ The Air Navigation Guidance is not just addressed to the CAA. The Government also expects that it will be taken into consideration by the aviation industry. The Air Navigation Guidance also acknowledges the important role which local communities have in the airspace change process.
- 3.10 Underpinning the Air Navigation Guidance are a number of key overall objectives set by the Government. These include:
- to provide guidance to the CAA under section 70(2) of the Transport Act 2000 and which the aviation industry should take account of

¹³ CAP 1616: *Airspace change: Guidance on the regulatory process for changing the notified airspace design and planned and permanent redistribution of air traffic, and on providing airspace information.* www.caa.co.uk/CAP1616

¹⁴ *Air Navigation Guidance 2017: Guidance to the CAA on its environmental objectives when carrying out its air navigation functions, and to the CAA and wider industry on airspace and noise management*, Department for Transport October 2017. <https://www.gov.uk/government/publications/uk-air-navigation-guidance-2017>

¹⁵ *Consultation Response on UK Airspace Policy: A framework for balanced decisions on the design and use of airspace*, Department for Transport October 2017. <https://www.gov.uk/government/publications/uk-airspace-policy-a-framework-for-the-design-and-use-of-airspace>

¹⁶ <https://www.caa.co.uk/media/p2kc0rum/additional-air-navigation-guidance-spaceflight.pdf>

- to ensure that aviation can continue to make its important contribution to the UK economy and at the same time seek to improve the sustainable development and efficiency of our airspace network
- to strengthen the UK's airspace change process and its transparency, particularly with respect to how local communities are involved within it, and
- to emphasise that the environmental impact of aviation must be mitigated as much as is practicable and realistic to do so.

3.11 The Air Navigation Guidance contains the Government's environmental objectives with respect to air navigation. These environmental objectives are designed to minimise the environmental impact of aviation within the context of supporting a strong and sustainable aviation sector. They are, in support of sustainable development:

- to limit and, where possible, reduce the number of people in the UK significantly affected by adverse impacts from aircraft noise
- to ensure that the aviation sector makes a significant and cost-effective contribution towards reducing global emissions, and
- to minimise local air quality emissions and in particular ensure that the UK complies with its international obligations on air quality.

3.12 To assist the CAA and sponsors, the government laid out the altitude-based priorities which should be taken into account when considering the potential environmental impact of airspace changes:

- in the airspace from the ground to below 4,000 feet the government's environmental priority is to limit and, where possible, reduce the total adverse effects on people;
- where options for route design from the ground to below 4,000 feet are similar in terms of the number of people affected by total adverse noise effects, preference should be given to that option which is most consistent with existing published airspace arrangements;
- in the airspace at or above 4,000 feet to below 7,000 feet, the environmental priority should continue to be minimising the impact of aviation noise in a manner consistent with the government's overall policy on aviation noise, unless the CAA is satisfied that the evidence presented by the sponsor demonstrates this would disproportionately increase CO2 emissions;
- in the airspace at or above 7,000 feet, the CAA should prioritise the reduction of aircraft CO2 emissions and the minimising of noise is no longer the priority;
- where practicable, it is desirable that airspace routes below 7,000 feet should seek to avoid flying over Areas of Outstanding Natural Beauty (AONB) and National Parks; and

- all changes below 7,000 feet should take into account local circumstances in the development of the airspace design, including the actual height of the ground level being overflown, and should not be agreed to by the CAA before appropriate community engagement has been conducted by the sponsor.

- 3.13 The Air Navigation Guidance recognises the degree of challenge which can exist in satisfying the expectations of local communities, those impacted by aviation, and the aviation industry's aspiration to further develop the efficiency of the UK airspace network. For example, a key policy issue is how to retain the benefits of aviation while addressing its environmental impacts, and how the CAA should integrate those considerations when making regulatory decisions on the necessary trade-offs between differing airspace objectives, such as increasing airspace capacity, reducing emissions and managing noise.
- 3.14 Through the Air Navigation Guidance, the Government acknowledges that there are other legitimate operational objectives, such as the overriding need to maintain a high standard of safety, the desire for sustainable development, and the need to enhance the overall efficiency of the UK airspace network, which the CAA and others are required to take into account and consider alongside the environmental objectives of the Air Navigation Guidance.

NERL air traffic services licence

- 3.15 The CAA has required NERL through a condition in its air traffic services licence¹⁷ to maintain an Airspace Change Organising Group (ACOG), as described in Chapter 1. The licence condition requires NERL, through ACOG, to create and maintain the masterplan – a single coordinated implementation plan for airspace changes in the UK to cover the period to 2040 – which must:
- be consistent with the delivery of airspace modernisation as described in the AMS
 - meet the criteria set out in CAP 2156a *Airspace change masterplan – CAA acceptance criteria*
 - comply with any requirements or guidance associated with the above, as provided by the co-sponsors, including on the content or the methods by which the masterplan is to be produced
 - take into consideration information provided by and expertise of the airport operators and other air navigation service providers in the relevant part of the managed area; and

¹⁷ NERL licence condition 10a. www.caa.co.uk/CAP2111

- take into consideration the views of the entities listed as representatives of a stakeholder group, or as a conduit to them, in the governance annex to the AMS.

3.16 When accepting the masterplan and assessing progress towards each iteration, the CAA will confirm that it is consistent with these obligations, and also with relevant policy, in particular the objectives set out in the AMS, which are derived from our statutory duties in section 70 of the Transport Act 2000.

Airspace Modernisation Strategy (AMS)

3.17 The Department for Transport and CAA are co-sponsors of airspace modernisation and are working together to deliver our shared strategic vision and objectives for the modernisation of UK airspace. As explained in Chapter 1, the CAA has been directed by the Secretary of State to “prepare and maintain a coordinated strategy and plan for the use of UK airspace up to 2040, including modernisation”, which we have refreshed and published as [CAP 1711](#).

3.18 The refreshed AMS kept its vision to “deliver quicker, quieter, and cleaner journeys and more capacity the benefit of those who use and are affected by UK airspace”. It sets out the **ends** (strategic objectives), **ways** (delivery elements) and **means** (delivery plans) of modernising airspace.

3.19 The AMS vision is underpinned by four strategic objectives (or **ends**) to be achieved from airspace modernisation:

1. Maintain and enhance high aviation safety standards.
2. Integration of diverse users and meet defence/security needs.
3. Simplification – reduce complexity and improve efficiency.
4. Sustainability – delivering the Government’s key environmental objectives with respect to air navigation.



Safety



Integration



Simplification



Environment

Government aviation policy

- 3.20 In December 2018, the Government published Aviation 2050, a Green Paper consulting on how it saw sustainable growth being delivered.¹⁸ In light of the unprecedented impacts that the Covid-19 pandemic had on the aviation sector, in May 2022 the Department for Transport published Flightpath to the Future, a medium-term strategic framework for the sector in support of its vision for a modern, innovative and efficient sector over the following 10 years.¹⁹
- 3.21 Building on the responses received to the Aviation 2050 consultation, this 10-point plan focuses on how government and industry can work together to deliver a successful aviation sector of the future. It focuses on four key themes: enhancing global impact for a sustainable recovery; embracing innovation for a sustainable future; realising benefits for the UK; and delivering for users. In view of the impacts of the pandemic, and having responded to one specific aspect²⁰, the Government decided not to publish a further formal response to the remaining parts of Aviation 2050.
- 3.22 In respect of airport capacity, Flightpath for the Future reiterates the Government's position that *"Airport expansion has a key role to play in realising benefits for the UK through boosting our global connectivity and levelling up. We continue to be supportive of airport growth where it is justified, and our existing policy frameworks for airport planning provide a robust and balanced framework for airports to grow sustainably within our strict environmental criteria. They continue to have full effect, as a material consideration in decision-taking on applications for planning permission. The Government is clear that the expansion of any airport must meet its climate change obligations to be able to proceed."* It also notes that airspace modernisation *"has an important role to play in ensuring the UK can meet its decarbonisation ambitions, and embrace opportunities presented by new and novel aircraft. The Government is committed to ensuring UK airspace can support the sustainable growth of the aviation sector."*
- 3.23 Following the designation of the Airports National Policy Statement (ANPS)²¹ in June 2018, it has been subject to legal challenge, which was ultimately

¹⁸ *Aviation 2050: The future of UK Aviation: a consultation*, HMG, December 2018
https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/769695/aviation-2050-web.pdf

¹⁹ *Flightpath to the Future: a strategic framework for the aviation sector*, Department for Transport, May 2022 <https://www.gov.uk/government/publications/flightpath-to-the-future-a-strategic-framework-for-the-aviation-sector>

²⁰ In 2019 the Government responded in respect of introducing legislation for enforcing the development of airspace change proposals (which became The Air Traffic Management and Unmanned Aircraft Act 2021).

²¹ *Airports National Policy Statement: new runway capacity and infrastructure at airports in the South East of England*, DfT June 2018. <https://www.gov.uk/government/publications/airports-national-policy-statement>

unsuccessful before the Supreme Court in December 2020. The ANPS sets out that there is a need to increase airport capacity in south-east England by 2030 and that the Government's preferred scheme is a new northwest runway at Heathrow. Following a number of requests to review the ANPS, the Secretary of State confirmed his decision in his open letter of 6 September 2021 stating that it was not appropriate to review the ANPS at that time. The Secretary of State set out that the question of whether or not to review the ANPS should be considered again after the Government's Jet Zero Strategy had been finalised, and that the timing of any re-consideration would need to have regard to the availability of long-term aviation demand forecasts.²²

- 3.24 In December 2018, the Government published Aviation 2050, a Green Paper consulting on how it saw sustainable growth being delivered.²³ In May 2022, in the context of the unprecedented impacts that the Covid-19 pandemic had on the aviation sector, the Department for Transport published Flightpath to the Future, a medium-term strategic framework for the sector in support of its vision for a modern, innovative and efficient sector over the following 10 years.²⁴
- 3.25 In July 2022 the Government published its Jet Zero Strategy²⁵ which outlined the framework and plan for the aviation sector to achieve net zero greenhouse-gas emissions by 2050, and a target for UK domestic aviation to reach net zero by 2040 and for all airport operations in England to be zero emission by the same year.
- 3.26 The strategy framework is based on three guiding principles (international leadership, delivering in partnerships and maximising opportunities) and six core policy measures (system efficiencies, sustainable aviation fuels, zero-emission flight, markets and removals, influencing consumers and addressing non-CO₂ impacts). The strategy sets an in-sector CO₂ emissions reduction trajectory for aviation to 2050 against which the Government will regularly review progress, with a review of the strategy every five years.

²² *Decision on requests to review the Airports National Policy Statement under the Planning Act 2008*, Department for Transport, September 2021.
https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/101520/7/decision-on-requests-to-review-the-anps.pdf

²³ *Aviation 2050: The future of UK Aviation: a consultation*, HMG, December 2018
https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/769695/aviation-2050-web.pdf

²⁴ *Beyond the horizon: the future of UK aviation, making best use of existing runways*, DfT June 2018.
<https://www.gov.uk/government/publications/aviation-strategy-making-best-use-of-existing-runways>

²⁵ *Jet Zero strategy: delivering net zero aviation by 2050*, Department for Transport July 2022.
<https://www.gov.uk/government/publications/jet-zero-strategy-delivering-net-zero-aviation-by-2050>

- 3.27 The Jet Zero Strategy considers improvements in system efficiencies, which includes airspace modernisation, as one of its key foundations, providing important short- to medium-term savings in emissions before 2050.
- 3.28 In October 2021, alongside its Net Zero Strategy²⁶ (setting out its plan to tackle climate change across all sectors of the economy), the Government published its response to the report by the Climate Change Committee *Progress in Reducing Emissions*.²⁷ The Committee had recommended that the Government assess its airport capacity strategy in the context of Net Zero and any lasting impacts on demand from Covid-19, as part of the aviation strategy. The Committee had also recommended that there should be no net expansion of UK airport capacity unless the sector was on track to sufficiently outperform its net emissions trajectory and could accommodate the additional demand.
- 3.29 The Government's response stated that flying is a social and economic good, and one that it wholeheartedly supported as a key part of building a global Britain. The Government went on to say that it currently believed that the aviation sector, even if returning to a pre-Covid-19 demand trajectory, could achieve Jet Zero without the Government needing to intervene directly to limit aviation growth. Department for Transport analysis showed that there are scenarios where net zero targets can be achieved by focusing on new fuels and technology, rather than capping demand, with knock-on economic and social benefits. The Government also reaffirmed its commitments to increase system efficiencies including the airspace modernisation programme. As noted above, this position was confirmed in the Jet Zero Strategy (see above).²⁸

Strategic environmental assessment and Habitats Regulations assessment

Application to the masterplan

- 3.30 The masterplan is required to be subject to a **strategic environmental assessment** and a **Habitats Regulations assessment**. These assessments are a legal requirement.²⁹

²⁶ *Net Zero Strategy: Build Back Greener*, HMG, October 2021.

<https://www.gov.uk/government/publications/net-zero-strategy>

²⁷ Climate Change Committee's 2021 progress report: Government response, HMG, October 2021

<https://www.gov.uk/government/publications/committee-on-climate-changes-2021-progress-report-government-response>

²⁸ *Jet Zero consultation: summary of responses and government response*, Department for Transport July 2022. <https://www.gov.uk/government/publications/jet-zero-strategy-delivering-net-zero-aviation-by-2050>

²⁹ Given that the geographical coverage of the masterplan is UK-wide, the relevant regulations are the [Environmental Assessment of Plans and Programmes Regulations 2004](#) and the [Conservation of Habitats and Species Regulations 2017](#).

- 3.31 The strategic environmental assessment is a systematic decision-support process, aiming to ensure that environmental and sustainability impacts are integrated into high-level government policy, planning and programme making. The strategic environmental assessment for the masterplan would be an 'upstream' assessment which complements the more specific 'downstream' assessment of environmental impacts carried out for each individual airspace change proposal under the CAP 1616 process. The aim is to influence strategic decisions taken early on, to take account of alternatives and assess the cumulative effects of multiple proposals.
- 3.32 The Habitats Regulations assessment refers to the several distinct stages of assessment which must be undertaken in accordance with law on conservation of habitats and species. The Habitats Regulations assessment for the masterplan would determine the potential effects of the masterplan on protected sites, known as Natura 2000 sites, in view of the site's conservation objectives. The CAA, as the competent authority, could only agree to the masterplan after having ascertained that it will not adversely affect the integrity of a protected site, unless there are no alternative solutions and there are imperative reasons of overriding public interest.
- 3.33 These assessments can be wide-ranging in terms of the scope of environmental impact and are not just confined to noise or emissions.³⁰ They apply to all types of airspace. When deciding on the scope and level of detail of information that must be included in the strategic environmental assessment, the law requires that certain 'consultation bodies' must be consulted. Once completed, the public, including impacted or interested stakeholders, must be consulted on the strategic environmental assessment. The Habitats Regulations assessment is also subject to certain consultation requirements.
- 3.34 The assessments must be kept up to date through monitoring as the programme is developed and implemented. The final airspace designs and therefore specific environmental impacts at the level of each individual airspace change proposal will be considered by the CAA in its environmental assessment at Stage 5 of the CAP 1616 process.
- 3.35 More information on the expected content for these assessments and statutory consultees is published by the relevant government departments.³¹

³⁰ In scope are issues such as biodiversity, population, human health, fauna, flora, soil, water, air, climatic factors, material assets, cultural heritage including architectural and archaeological heritage, landscapes and the interrelationship between the above factors. Effects include secondary, cumulative, synergistic, short, medium and long-term permanent and temporary, positive and negative effects.

³¹ <https://www.gov.uk/guidance/strategic-environmental-assessment-and-sustainability-appraisal#strategic-environmental-assessment-requirements-for-neighbourhood-plans> dated 6 March 2014; https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/580073

Roles

- 3.36 The CAA is the ‘responsible authority’ for the strategic environmental assessment of the masterplan, which means we must ensure that it is carried out at an appropriate stage based on current knowledge and the level of detail available. The CAA is also the ‘competent authority’ for the purposes of the Habitats Regulations assessment. Again, we must consider the assessment and be satisfied that our statutory obligations have been properly discharged.
- 3.37 The CAA is responsible for preparation of the necessary reports for strategic environmental assessment and Habitats Regulations assessment, including how these assessments should be scoped proportionately so as to best inform the masterplan.
- 3.38 The CAA will also be responsible for consultation on the detailed strategic environmental assessment and Habitats Regulations assessment reports with the Statutory Nature Conservation Bodies, statutory consultees and the public, which will take place in stages as ACOG develops Iteration 3 and later iterations. ACOG will need to show how the strategic environmental assessment and Habitats Regulations assessment have been taken into account in the masterplan as Iteration 3 matures and later iterations are developed.

Secretary of State letter to CAA regarding ACOG strategic aims

- 3.39 In a [letter to the Chair of the CAA](#) dated 4 November 2019, the Secretary of State stated that ACOG should have the following strategic aims, to be reflected in the Terms of Reference of ACOG and its Steering Committee:
- create airspace capacity to support the growth of aviation
 - reduce controlled airspace
 - release lower airspace
 - reduce delay for passengers to ensure that they get to their destination on time
 - reduce noise and CO2 emissions.

ACOG must also have appropriate representation from all users of airspace and engage fully with all stakeholders, including airports, airlines, General Aviation, environmental and local communities, as it progresses its work.

[/Strategic Environmental Assessment Regulations requirements checklist.pdf](#) dated 9 February 2015;
<https://www.gov.uk/guidance/appropriate-assessment> dated 22 July 2019;
<https://www.gov.uk/guidance/habitats-regulations-assessments-protecting-a-european-site#who-to-consult-when-carrying-out-an-hra> dated 24 February 2021.

ICAO and Single European Sky

- 3.40 As an ICAO contracting state, the UK has obligations concerning airspace modernisation under the ICAO Global Air Navigation Plan. These were previously fulfilled through EU law and initiatives including SESAR (Single European Sky ATM Research), but the UK remains committed to its ICAO obligations, which include the widespread adoption of routes based on satellite navigation.

Applying the legal and policy framework to the CAA's acceptance of the masterplan

- 3.41 The CAA will always consider the impact of relevant laws and policy when making decisions on individual airspace change proposals through the CAP 1616 process. However, because the number of airspace change proposals required to modernise airspace at a systemised level requires a strategic coordinating mechanism in the form of the masterplan, we must also consider how all these proposals interact and deliver policy at a programme level. (An example is consideration of environmental impacts at a programme level, which is why strategic environmental assessment will be required to complement the more detailed environmental assessment of each airspace change proposal.)
- 3.42 A trade-off is the choice or decision to resolve a conflict. At the masterplan level, such conflicts may arise between:
- the objectives of different airspace change proposals, for example, where two airports want to make use of the same volume of airspace
 - the objectives of an airspace change proposal and its impact on an existing airspace design (or the potential opportunities for that design).
- 3.43 The masterplan will need to describe a system-wide view of the areas where airspace design trade-offs that affect two or more interdependent airspace change proposals are likely to arise. It will also summarise the nature of the specific design trade-offs and consider the potential solutions available to sponsors to resolve them. The co-sponsors will only approve the masterplan if the solution proposed to a trade-off is aligned with government policy.
- 3.44 Where trade-offs are unable to be resolved by sponsors in coordination with ACOG, the decision may be brought before the co-sponsors to propose a resolution. The co-sponsors will make a judgement based upon individual circumstances, recognising that each airspace change varies greatly in terms of size, scale of impact and complexity.
- 3.45 Should the CAA require government policy direction to aid our acceptance decisions in respect of the masterplan, we will approach the Department for Transport as part of the assessment process. The Department for Transport has

stated that each decision should fully take into account the individual circumstances and relevant policies at the time.³² The CAA will formally consult the Secretary of State before accepting any iteration of the masterplan.

³² <https://www.gov.uk/government/publications/update-on-airspace-modernisation/dft-and-cao-update-on-airspace-modernisation-march-2021> (Recommendation 9)

Chapter 4

Engagement principles

- 4.1 In developing the masterplan, ACOG must provide the co-sponsors with an engagement strategy. The strategy will be subject to ongoing assessment by the co-sponsors.
- 4.2 Engagement is a catch-all term for developing relationships with stakeholders – this may be in writing, through meetings, or other media. We expect ACOG's engagement strategy to follow best-practice principles. We summarise our expectations below. CAP 1616f, while not directly applicable to the masterplan, also contains some useful guidance.
- 4.3 Wherever there are potential impacts on relevant stakeholders, we expect ACOG:
- to clearly communicate its proposed approach in coordinating the system-wide masterplan
 - to give relevant stakeholders an opportunity to inform ACOG of the positive and negative impacts of that approach
 - to allow those stakeholders to see how their views have been captured and considered before moving forward.
- 4.4 The fundamental principles of effective engagement are targeting the relevant audience, communicating in a way that suits the audience, and giving the audience the tools to make informative, valuable contributions to the development of any proposal.
- 4.5 While for Iteration 2 it was only necessary to engage with a limited subset of stakeholders (those in the 2018 AMS governance structure), for Iteration 3, ACOG will need to do a public engagement exercise. We expect the format of this to be explained in ACOG's engagement strategy.
- 4.6 The engagement strategy must cater for all audiences, as different stakeholders may be affected in different ways, and to different extents. Where possible, ACOG should take into account different engagement preferences of these stakeholders. Airport operators may be better placed (in terms of experience and communication channels) to help identify relevant, and in particular local, stakeholders.
- 4.7 Information must be presented in an accessible way, so ACOG's engagement materials must provide sufficient information for stakeholders to understand clearly what it is they are being asked to do and why. Issues and opportunities should be clearly articulated to enable the stakeholder to respond from an

informed position, thereby enriching both the quality and relevance of the feedback received.

- 4.8 We are not prescribing the method ACOG should use to analyse responses, providing that the feedback is properly assessed and that ACOG demonstrates how it has been considered as a potential refinement of the masterplan. Therefore, where stakeholder feedback is submitted through conversations in discussions or events rather than in a formal written response, ACOG will need to make it visible through a published summary with a clear indication of how it has been considered. Where it is determined that a response does not impact the masterplan, the appropriate rationale must be given. Such responses may still contain valuable information, which should be captured in a summary of key themes, along with ACOG's response to them.
- 4.9 Throughout ACOG's engagement on the masterplan, it must demonstrate transparency so that it is clear to stakeholders how the feedback that they have provided has been considered.