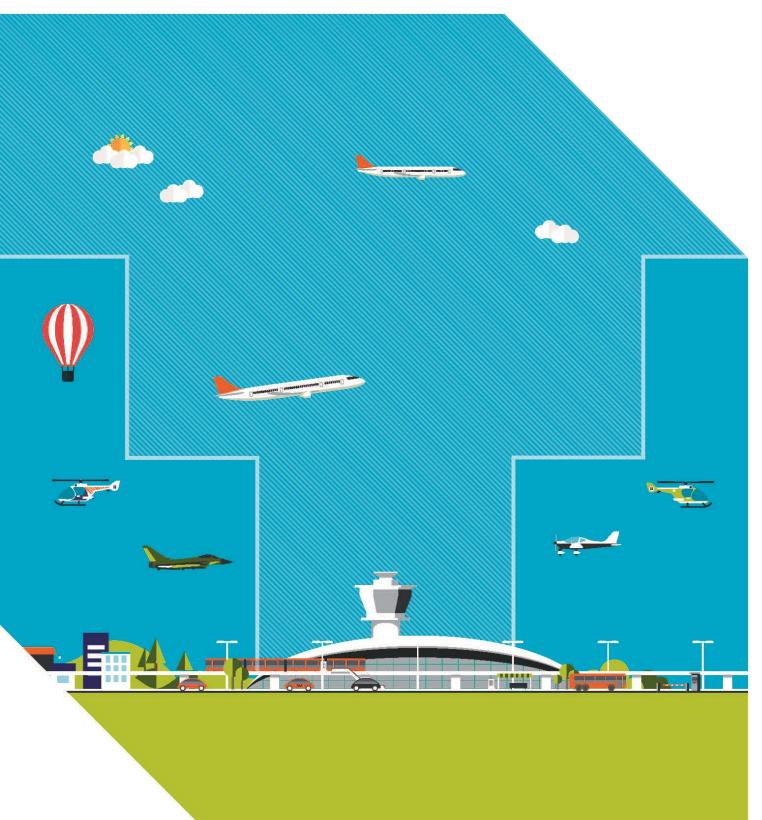


# Procedure for the CAA to review the classification of airspace

CAP 1991



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#### This procedure takes effect from 1 December 2020.

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The latest version of this document is available in electronic format at: www.caa.co.uk/cap1991.

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## Purpose of this document

#### CAA procedure for reviewing the classification of airspace

- 1. This document is about the CAA procedure for reviewing the classification of airspace. The classification of airspace determines the flight rules which apply how and where aircraft can fly, the equipment that must be carried and procedures that must be followed.
- 2. The Secretary of State has given the CAA, as the UK's independent aviation regulator, the function to review airspace classifications and to amend them where appropriate.<sup>1</sup> This requires a regulatory procedure. This document explains that procedure.
- 3. The procedure is effective from 1 December 2020.

## How does this procedure relate to the CAP 1616 process for proposed changes in airspace design?

- 4. The CAA has responsibility for deciding whether to approve any changes proposed to the design of airspace over the UK the airspace structure and instrument flight procedures within it that are used by aircraft. The airspace classification forms part of the overall airspace design, so a change in airspace classification could form part of a proposal to change airspace design. Also, a proposed change in airspace classification could of itself have sufficient operational or environmental impacts that it is not suitable for the procedure described in this document. In both cases such proposals follow the process described in our publication CAP 1616.<sup>2</sup>
- 5. The CAA's function to review airspace classifications, which is effective 1 December 2020, is legally and functionally separate from our approval of changes in airspace design through the CAP 1616 process. The two processes share some common elements and also have many differences. One fundamental difference is that for the procedure set out in this document the Secretary of State requires **the CAA** to propose a classification change, whereas CAP 1616 airspace change proposals are, with a few exceptions, generally

<sup>&</sup>lt;sup>1</sup> The CAA has published the Secretary of State's <u>letter</u> of 30 October 2019. The function to regularly consider whether airspace classification should be reviewed, and to amend it as the CAA considers appropriate in accordance with a procedure, did not previously exist.

<sup>&</sup>lt;sup>2</sup> 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. <u>www.caa.co.uk/cap1616</u>

'sponsored' by an **airport or air navigation service provider**, with the CAA acting only as regulator.

- 6. The CAA has therefore decided to keep these two processes separate.
- 7. However, at the point where the CAA decides that an amendment to airspace classification is needed, there clearly needs to be consistency with the CAA's decision-making on proposals to change the airspace design that are following the CAP 1616 process. The CAA Airspace Regulation team that decides on such proposals will, for safety and overall consistency reasons, need to take a holistic view of a change to airspace design or classification, irrespective of whether a change has come from the classification review process or the CAP 1616 process.
- 8. Appendix A to this document explains what information the CAA Airspace Classification team will collate and publish in the final amendment. It is the template that we use when presenting the amendment to the CAA Airspace Regulation team for a regulatory decision in the same way that Appendix F of CAP 1616 explains what information an airspace change sponsor must provide in its formal proposal. The CAA's decision criteria in either case will necessarily follow Appendix G of CAP 1616.

#### Who is this document for?

9. This document is intended to be read by anyone interested in the way airspace is used or accessed, or the impacts of flights using airspace. More information on stakeholder groups can be found on pages 21 to 22.

#### Structure of this document

- 10. We have structured the rest of this document as follows:
  - a brief overview of airspace classification
  - the legislative and policy basis for the procedure
  - an overview of the three stages of the procedure
  - the first stage, Consider
  - the second stage, Review
  - the third stage, Amend
  - Appendix A, information that will be presented to the CAA Airspace Regulation team for a regulatory decision
  - Appendix B, a glossary of terms used in this document or related documents.

## Overview of airspace classification

#### What is airspace?

- 11. States have complete and exclusive sovereignty over the airspace above their territory. States have chosen to commit, by international treaty, to provide air navigation services (which include air traffic control) in that airspace to an internationally recognised standard.
- 12. For the purposes of providing air traffic services, airspace can be divided into two main categories, controlled and uncontrolled. Aircraft in controlled airspace fly under the positive monitoring and direction of air traffic control to maintain safe distances between them.<sup>3</sup> Uncontrolled airspace typically incorporates areas where aircraft are not required to be identified and managed by air traffic services, although pilots may request a service from notified air traffic service providers to support their safe flying.

#### **Airspace classification**

- 13. The Air Navigation Directions have long required the CAA to publish a national policy for the **classification of airspace**. ICAO requires that States determine those portions of airspace where air traffic services will be provided and, where it is so determined, whether air traffic control service or flight information service are provided. In turn, the airspace is designated according to the type of air traffic service provided and in accordance with the ICAO airspace classification system. **Air traffic control** service is provided to all flights within airspace classes A to D and to those flights operating in accordance with the instrument flight rules (IFR) in class E airspace; these are known as 'controlled airspace' classifications. **Flight information service** may be provided to all flights in class E airspace.
- 14. The classification of the airspace determines the flight rules that apply and the procedures that must be followed. The classification depends upon the types of air traffic involved, the density and complexity of air traffic and the safety hazards posed to passenger-carrying commercial air transport operations. In summary, the ICAO airspace classifications notified within the UK are:

<sup>&</sup>lt;sup>3</sup> In Class E airspace, only flights under Instrument Flight Rules are controlled.

- class A: the most restrictive airspace classification, allowing IFR operations only
- class C and class D: airspace allowing for both IFR and VFR operations in a controlled environment
- class E: airspace allowing for both IFR and VFR operations wherein VFR operations are not controlled
- **class G**: the least restrictive airspace classification, applied to all other airspace.
- 15. More information on airspace classifications can be found in the CAA policy statement *The Application of ICAO Airspace Classifications in UK Flight Information Regions.*<sup>4</sup>
- 16. In class G (i.e. uncontrolled) airspace, there are currently no restrictions on which aircraft can enter it or the routes they take. The leisure flying and aerial sports sector within General Aviation tends to operate in class G, alongside a few commercial and business flights. The vast majority of commercial air transport flights operate solely in controlled airspace. The military has significant requirements to use both types of airspace and occasionally also operates within the confines of segregated training or danger areas.

#### Webpages with factual information

- 17. If you have questions about the procedure which this document does not answer, there is a dedicated webpage for airspace classification at <u>www.caa.co.uk/airspaceclassification</u>. There are also several pages of information on the CAA website at <u>www.caa.co.uk/airspacechange</u>, including:
  - what is airspace and what is an airspace change?
  - the <u>airspace change portal</u><sup>5</sup>
  - the <u>Airspace Modernisation Strategy</u>
  - the <u>legal and policy context</u> within which the CAA must work, including the Air Navigation Directions, the CAA's statutory objectives when carrying out its air navigation functions and environmental guidance and policy from government which the CAA must take account of.

<sup>&</sup>lt;sup>4</sup> <u>http://publicapps.caa.co.uk/docs/33/20141113PolicyStatementApplicationOfAirspaceClassificationInUKPolicyVersion5.pdf</u>

<sup>&</sup>lt;sup>5</sup> This includes the CAA's policy on moderating material uploaded to the portal and our obligations to disclose information. Information held by the CAA is subject to legislation that requires us to consider disclosing it on request – the Freedom of Information Act 2000 and Environmental Information Regulations 2004. See <u>https://www.caa.co.uk/Our-work/Information-requests/Freedom-of-Information/</u>.

18. If you need more help in understanding any of these issues, then you can email us at <u>airspace.classification@caa.co.uk</u>, but please be aware that we will only answer questions about national policy and process through this address. To raise issues about specific airspace classification changes you should refer to the dedicated webpage for airspace classification at <u>www.caa.co.uk/airspaceclassification</u>.

## Legislative and policy basis for the procedure

#### Overview

- 19. The procedure for reviewing the classification of airspace must operate within the legal and policy framework set by government.
- 20. The CAA's statutory duties and functions in respect of airspace regulation are contained in Section 70 of the Transport Act 2000 and The Civil Aviation Authority (Air Navigation) Directions 2017 (as amended), which for convenience we refer to as the 'Air Navigation Directions', or in some cases just 'the Directions'.
- 21. The procedure for reviewing the classification of airspace is one of these CAA functions. Within the constraints of our statutory duties and government policy, the procedure is designed to be proportionate to its objectives and to be consistent with best-practice regulatory principles. It must also align with the CAA's longer-term strategy, in particular the Airspace Modernisation Strategy, to ensure that airspace planning is consistent with national and international obligations or standards and with new concepts such as the integration of new technologies.
- 22. To supplement the information below you may wish to refer to our webpage describing the <u>legal and policy context</u> within which the CAA must work, and to page 13 of <u>CAP 1616</u> which explains the relationship between CAA guidance and government policy.

#### **Air Navigation Directions**

23. Under sections 66 and 68 of the Transport Act 2000, the Secretary of State has given the CAA a number of airspace-related functions. As a result of these Air Navigation Directions<sup>6</sup>, the CAA has developed and published a national policy for the classification of UK airspace, classified UK airspace in accordance with that national policy, and published that classification.

<sup>&</sup>lt;sup>6</sup> Civil Aviation Authority (Air Navigation) Directions 2017, as amended by the <u>Civil Aviation Authority (Air Navigation) (Amendment) Directions 2018</u> and the <u>Civil Aviation Authority (Air Navigation) (Amendment)</u> <u>Directions 2019</u>. The 2017 Directions form an annex to the <u>Air Navigation Guidance 2017</u> and the 2018 and 2019 amendments will also be annexed in due course. For ease of reference, the CAA also produces a consolidated version. These can be found at <u>https://www.caa.co.uk/Commercial-industry/Airspace/Airspace-change/Legislative-framework-to-airspace-change/.</u>

- 24. Revised Directions issued in October 2019<sup>7</sup> also require the CAA in Direction 3(b) to:
  - regularly consider whether airspace classifications should be reviewed
  - carry out a review (which includes consultation with airspace users) where we consider a change to classification might be made, and
  - as we consider appropriate, amend any classification in accordance with procedures developed and published by the CAA for making such amendments.
- 25. Direction 3(ba) also requires that in developing the national airspace classification policy, classifying UK airspace, or amending the classification of a volume of airspace, the CAA must seek to ensure:
  - that the amount of controlled airspace is the minimum required to maintain a high standard of air safety, and
  - subject to overriding national security or defence requirements, that the needs of all airspace users are reflected on an equitable basis.

(The CAA understands 'equitable' to mean that needs are fairly accounted for, not that each user has the same and equal amount of airspace. The needs of different types of airspace user could vary considerably.)

26. Directions 3(a), 3(b) and 3(ba) are reproduced below. They are effective 1 December 2020.

## Extract from The Civil Aviation Authority (Air Navigation) Directions 2017 (as amended)

#### Directions 3(a),3(b),3(ba)

3. The CAA must—

(a) develop and publish a national policy for the classification of UK airspace;

(b) classify UK airspace in accordance with such national policy, publish such classification, regularly consider whether such classification should be reviewed, carry out a review (which includes consultation with airspace users) where the CAA considers a change to classification might be made and, as the CAA considers appropriate, amend any classification in

<sup>&</sup>lt;sup>7</sup> The Secretary of State's covering letter said that the revised Directions were designed to strengthen how airspace is managed. The letter also said that the Secretary of State was committed to see that the UK benefits from being the best place in the world to undertake General Aviation-related activities, and that enhancing the UK's existing airspace arrangements was key to achieving this objective.

accordance with procedures developed and published by the CAA for making such amendments;

(ba) in developing the national policy referred to in sub-paragraph (a), classifying UK airspace under sub-paragraph (b), or amending the classification of a volume of airspace under that sub-paragraph, seek to ensure that the amount of controlled airspace is the minimum required to maintain a high standard of air safety and, subject to overriding national security or defence requirements, that the needs of all airspace users is reflected on an equitable basis;

27. Unlike the airspace change process where the change sponsor presents a new airspace design to the CAA for approval, the procedure for reviewing the classification of airspace involves **the CAA itself** designing and proposing amendments to airspace. The wording of the Directions is sufficiently flexible for the procedure to accommodate proposals to make a classification more restrictive as well as less restrictive.

#### Sections 70 and 71 of the Transport Act 2000

- 28. Under section 70 of the Transport Act 2000, we have a duty to take a number of factors into account when exercising our air navigation functions, including whether to amend an airspace classification. Our duty to maintain a high standard of safety has priority over other factors. Those other factors include national or international obligations, and security, operational and environmental impacts such as aircraft noise and emissions, including taking account of any guidance on environmental objectives given by the Secretary of State.
- 29. Section 71 of the Transport Act 2000 allows the CAA to request any specific documents or information from an air navigation service provider for any purpose connected with our air navigation functions.

#### Air Traffic Management and Unmanned Aircraft Bill

30. Should the Air Traffic Management and Unmanned Aircraft Bill become law in the form currently drafted<sup>8</sup>, it will give the Secretary of State (or the CAA if powers are delegated) new powers to compel an air navigation service provider or airport (or other person with functions relating to air navigation):

<sup>&</sup>lt;sup>8</sup> The draft Bill can be viewed at <u>https://services.parliament.uk/bills/2019-21/airtrafficmanagementandunmannedaircraft.html</u>

- to prepare an airspace change proposal that will assist in the delivery of the CAA's airspace strategy
- to take steps towards the preparation of such an airspace change proposal
- to co-operate for the purpose of assisting another air navigation service provider, airport (or other person with functions relating to air navigation) to do the above

including following CAA procedures and having regard to its guidance and doing specified things by specified dates. In this context, 'airspace change proposal' includes a proposal to change the classification of a volume of airspace under this procedure.

#### **Secretary of State for Defence**

- 31. Direction 12 adds a provision in cases "where it appears to the CAA that there is a need to increase the volume, or alter the classification, of UK airspace, but to do so might, in the opinion of the CAA or the MoD [Ministry of Defence], have an adverse effect on the ability of the armed forces of the Crown to maintain their operational capability". The Directions require us to seek the approval of the Secretary of State for Defence before proceeding with any such change to UK airspace.
- 32. Where the Secretary of State for Defence is content with the proposed change, the CAA must ensure that such further consultation on the proposal is undertaken as required under the Directions. Where the Secretary of State for Defence is not content with the proposed change, the CAA may only approve the proposed change in accordance with directions given by the Secretary of State under section 68(3) of the Act.
- 33. We may therefore need to consult the Ministry of Defence on a proposal to change airspace classification, and seek its approval where appropriate, before proceeding with any consultation.

#### **Environmental guidance from the Secretary of State**

34. Section 70 requires the CAA to take account of the interests of any person other than an airspace user (which would include those on the ground) and of any guidance on environmental objectives given to the CAA by the Secretary of State when carrying out its air navigation functions as set out in the Air Navigation Directions. For our function relating to a change in airspace design (one which goes through the CAP 1616 process), this guidance is the Air Navigation Guidance 2017, last issued in October 2017. However, in respect of airspace classification, the guidance was amended by the Secretary of State's letter of 31 October 2019 accompanying the Directions.

- 35. In that letter, the Secretary of State stated that the CAA should consider the environmental consequences of a proposal we make for amending the classification of airspace, but he also specifically *disapplied* the existing Air Navigation Guidance. Because of the section 70 requirement, we must therefore make our own assessment of the potential environmental consequences. We have concluded that the principles we would use would be the same as the Air Navigation Guidance, but without any of the obligations on process that the guidance contains.<sup>9</sup>
- 36. Below is an extract from the Secretary of State's letter:

#### "Supplementary guidance to the Civil Aviation Authority (CAA) on environmental objectives when carrying out its air navigation functions

In accordance with section 70(2)(d) of the Transport Act 2000, the CAA should note that:

i. the environmental objectives set out in the Air Navigation Guidance 2014 and 2017, as well as the rest of that Guidance, are not to apply to:

- decisions whether to approve proposals for permanent changes to airspace design which seek to implement GNSS approaches without approach control; or
- decisions to amend the classification of any airspace in accordance with the amended Directions 2017 new direction 3(b) (airspace reclassification);

ii. this exemption from the Guidance is to apply with immediate effect and until further notice;

iii. although exempted, we expect sponsors of exempted proposals, including the CAA, to consider the potential environmental consequences of the proposals, and to engage with relevant communities as the CAA considers appropriate;

iv. the department will keep this exemption under review and will notify you of any change in this policy; and

v. the exemption will be incorporated into the Air Navigation Guidance when a suitable opportunity arises."

<sup>&</sup>lt;sup>9</sup> Our approach to the assessment of environmental impacts is on pages 49 to 50.

### Call-in by the Secretary of State

- 37. There is no ability for the Secretary of State to 'call-in' a CAA proposal under this procedure.
- 38. The position is different for a proposed change in airspace design made under the CAP 1616 process. In that case, if the 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 doing so. One of these criteria is where a proposal could lead to any volume of airspace classified as class G being reclassified as class A, C, D or E. This is set out in Direction 6(5)(d) of the Air Navigation Directions.
- 39. However, this only applies to the CAA's decision-making functions subject to the call-in requirements (Directions 4(1), 5(1), 5A(1)). There is no provision in the Directions for the Secretary of State to call-in a proposal by the CAA to amend airspace classification under the procedure that is the subject of this document.

### Alignment with the Airspace Modernisation Strategy

- 40. One of the CAA's functions is to have a strategy and plan for airspace. The CAA reviewed and rearticulated its airspace strategy in response to a government policy change that redefined our role when the Government's Air Navigation Directions were updated and republished in October 2017. In those Directions the Secretary of State gave the CAA a number of new roles, including developing a long-term strategy and plan for modernising UK airspace, with the objective to deliver quicker, quieter and cleaner journeys and more capacity for the benefit of those who use and are affected by UK airspace. Modernisation is critical to ensure that this invisible piece of the UK's national infrastructure is fit for purpose for the future. Prior to the Covid-19 pandemic, the UK's skies were accommodating increasing numbers of commercial flights, military activities and an active General Aviation sector, as well as new types of user such as remotely piloted aircraft systems.<sup>10</sup>
- 41. The CAA published the resulting Airspace Modernisation Strategy as CAP 1711<sup>11</sup> in December 2018, setting it in the context of the latest government policy, including on environmental impacts, demand from airspace users and technological developments (see overleaf). You can read the latest news about the strategy on our <u>website</u>.

<sup>&</sup>lt;sup>10</sup> Unmanned Aircraft may be referred to as drones, remotely piloted aircraft systems (RPAS), unmanned aerial vehicles (UAV), model aircraft or radio-controlled aircraft. For more information see <a href="https://www.caa.co.uk/Consumers/Unmanned-aircraft/Our-role/An-introduction-to-unmanned-aircraft-systems/">https://www.caa.co.uk/Consumers/Unmanned-aircraft/Our-role/An-introduction-to-unmanned-aircraft-systems/</a>

<sup>&</sup>lt;sup>11</sup> www.caa.co.uk/cap1711

- 42. The procedure for reviewing the classification of airspace may be used as one of the tools for delivering one of the 15 initiatives of the Airspace Modernisation Strategy. The procedure for reviewing the classification of airspace must therefore align with the Airspace Modernisation Strategy and dovetail with the other initiatives, to achieve the important, holistic approach to airspace modernisation.
- 43. The Review stage of this procedure will be used to develop a list of airspace volumes where a case could be made for a proposed amendment to the airspace classification. The classification procedure could aid improvement in the UK's compliance with ICAO requirements or to facilitate the introduction of new air traffic management concepts.
- 44. The list of airspace volumes where a case could be made for a proposed amendment to the classification will be formally adopted into the Airspace Modernisation Strategy.

#### Summary of legal and policy framework

- 45. In summary, the CAA must:
  - regularly consider whether to review the classification of airspace
  - consult airspace users as part of any review
  - where we consider an amendment to airspace classification might be made, amend it in accordance with a procedure that we must develop and publish
  - in developing that procedure and our usage policy, seek to ensure that the amount of controlled airspace is the minimum required to maintain a high standard of air safety and, subject to overriding national security or defence requirements, that the needs of all airspace users are reflected on an equitable basis
  - ensure that the outcome is consistent with the factors set out in section 70 of the Transport Act 2000, including complying with any environmental guidance given to us by the Secretary of State
  - consult the Ministry of Defence before making any amendment to airspace classification
  - ensure that the procedure is consistent with the Airspace Modernisation Strategy and best practice regulatory principles.
- 46. Our overriding objective will always be to maintain a high standard of safety.

Overview of the three-stage procedure for reviewing the classification of airspace

#### The three-stage procedure

- 47. The wording of the Directions gives us three distinct stages for this procedure: to **Consider** regularly whether we carry out a review of airspace classification; to carry out a **Review** (including consulting airspace users) where we consider a change might be made; and to **Amend** the classification as we consider appropriate.
- 48. We summarise each of those stages in the table below. Each stage is described in more detail on pages 25 to 61.

Stage	Purpose	Outcome
(starting point)		
Consider	The CAA regularly (normally every two years) commits to carrying out a review of airspace classifications, unless this would be unreasonable. We make a yes/no decision at an internal meeting of senior airspace colleagues. If we decide not to do a review, we will defer it for a maximum of one year. Any decision to defer would be based on whether the CAA can reasonably anticipate having sufficient staff resource (including the necessary skillset) to carry out a review, taking into account: (a) whether there are national or international regulatory obligations to meet within a certain timeframe (b) whether there are airspace safety, efficiency, environmental or access benefits that a review might help to define and deliver (c) any outstanding priorities from previous reviews (d) Department for Transport advice or directions prioritising our airspace functions.	The CAA confirms that it is carrying out a review and when. We may limit the broad scope of the review if we choose. We notify aviation stakeholders of our decision and reasoning. This stage does not involve consultation or analysis of airspace volumes.
Review (The CAA has decided to carry out a review of airspace classification)	We use appropriate intelligence, including continuous monitoring of airspace safety, access or utilisation issues, to draw up a plan that lists airspace volumes where a case could be made for a proposed amendment to the classification, and a proposed schedule for when we will address them. We consult organisations in the Airspace Modernisation Strategy governance structure that represent airspace users, or are a conduit to them, for feedback on the plan including any strategic advice or other information they would like us to consider. (Periodically we may widen this to a public consultation.) When we receive suggestions, we apply filters to remove any change which would have a significant operational or environmental impact that makes it unsuitable for this procedure. We may not pursue an amendment to airspace that is the subject of an ongoing or recent airspace design change. We engage with relevant airspace controlling authorities to help refine the requirements for the next (Amend) stage. We publish a refined plan after consultation and adopt it as part of our Airspace Modernisation Strategy.	The CAA publishes a plan for airspace volumes where we could make a case for a proposed amendment to the classification (or for an alternative airspace management solution if this is a more appropriate or proportionate response).
Amend (The CAA has published a plan for airspace volumes where we could make a case for a proposed amendment to the classification)	For each airspace volume identified, the CAA develops further a formal proposal for amending the classification, with vital input from the designated airspace controlling authority. The proposal must satisfy the requirements of the Air Navigation Directions and the factors in section 70 of the Transport Act 2000. This includes the controlling authority developing the operational procedures and safety case with CAA assistance, but ultimately the controlling authority owning the safety component of the proposal. The CAA assesses any potential environmental impacts and adds this to the proposal. The CAA engages relevant stakeholders about the proposal and takes their feedback into account in finalising the formal proposal that amends the classification. When signed off by the manager of the CAA Airspace Classification team, this proposal is then passed to the CAA Airspace Regulation team for submission to the decision-making process.	After review by the CAA Airspace Regulation team, the CAA publishes its decision on each formal proposal for amending the classification. The airspace controlling authority implements any amended classification. After one year the CAA reviews the effective- ness of the change and whether further action is needed.

#### The CAA designs and proposes the amendment

- 49. The Air Navigation Directions give the CAA a different role from the existing CAP 1616 airspace change process for proposed changes in airspace design.<sup>12</sup> The procedure for reviewing the classification of airspace is functionally separate from the CAP 1616 process, which has given us some flexibility to keep it proportionate to the intended objective and tailor it accordingly. There is one important fundamental difference, which is that the Directions require the CAA to propose the classification change, whereas CAP 1616 airspace change proposals are, with a few exceptions, generally 'sponsored' by an airport or air navigation service provider, with the CAA acting only as regulator.<sup>13</sup> This means that for a classification change under this procedure, the CAA is involved in the design and proposal for the new airspace, with essential input from the designated controlling authority of the volume of airspace (i.e. the air navigation service provider). To accomplish this, these proposals are handled by a specialist CAA Airspace Classification team dedicated to this procedure that includes the skills to undertake airspace design.
- 50. There are some aspects of a proposed change in classification that, even with those skills, we cannot produce alone. We are reliant on the airspace controlling authority, as only they will have the local operational knowledge needed. The controlling authority will need to own the safety of the airspace, and therefore the operational procedures and safety case for the amended design, even if we assist them as they prepare it.
- 51. In the unlikely event that the controlling authority's input is not forthcoming, the Air Traffic Management and Unmanned Aircraft Bill would give the Secretary of State (or the CAA if powers are delegated) new powers to compel that input where it would assist in the delivery of the CAA's airspace strategy (see legal framework above).
- 52. The CAA's Airspace Regulation decision-making process assesses whether any amendment in classification complies with all relevant implementation requirements for airspace design and does not conflict with the airspace design overall. Although that formal decision comes at the end of the procedure, and is taken independently, there is still formal discussion between the CAA teams during the design process.

<sup>&</sup>lt;sup>12</sup> www.caa.co.uk/cap1616

<sup>&</sup>lt;sup>13</sup> Although the procedure is quite separate from the CAP 1616 airspace change process, any change in airspace design that is proposed by a sponsor under the CAP 1616 process could well include a change in airspace classification. This is unaffected by the separate procedure for reviewing classification. Also, as explained at the Review stage of this document, a proposal for a change in classification could of itself be deemed unsuitable for this procedure because it has potentially significant operational or environmental impacts that must be thoroughly assessed through the more detailed CAP 1616 process.

- 53. In applying the procedure, the CAA's aim is to remain proportionate to its objective and consistent with best-practice regulatory principles. We must also align with the CAA's Airspace Modernisation Strategy (CAP 1711 published in December 2018, or its successors) that seeks to modernise UK airspace through new operations, new airspace design and new technologies (see pages 15 to 16).
- 54. When considering proposals for a change in airspace design, the CAA already has a policy of keeping the volume of controlled airspace to the minimum necessary to meet the needs of UK airspace users and to comply with the UK's national or international regulatory obligations. The procedure for reviewing the classification of airspace gives us the opportunity, where it is appropriate and safe to do so, to make a change to a less restrictive airspace classification or to reduce the volume of airspace that is controlled. The procedure also accommodates proposals to make the classification more restrictive, where necessary.
- 55. The CAA may use this procedure to enable UK compliance with ICAO requirements on airspace classification, and to facilitate the introduction of new air traffic management concepts to support, for example, the integration of drones and other emerging technologies as part of airspace modernisation.<sup>14</sup>
- 56. In applying this procedure, our overriding objective will always be to maintain a high standard of safety. Expectations for what the procedure can reasonably deliver should always be seen in this context.

### Timeline for a specific proposal

- 57. The Directions do not oblige the CAA to adhere to any particular timeline. Because this is a new function for the CAA, run by a new Airspace Classification team doing airspace design work that until now has been done by the sponsor, not the CAA, we can for now only give a general guide to the likely timeline for a typical proposal, until the new procedure has been fully applied. The proposals will, in any case, be likely to vary considerably in their complexity. Each will require extensive analysis of data, followed by stakeholder consultation, more analysis, design work, cooperation with the airspace controlling authority, further consultation, review and implementation arrangements.
- 58. As a general guide, we can set some bounds for a specific proposal: in CAP 1616 we give a typical timeline for a Level 1 airspace change of 110 weeks, which, because of the potential impacts of the change, is likely to involve a more complex process than a classification change under this procedure. We can be

<sup>&</sup>lt;sup>14</sup> The procedure allows us to review whether the classification remains appropriate to the demands upon that volume of airspace – which could include future use by drones – and to propose a different classification if necessary, or the use of airspace in a flexible way. The procedure would not determine the way airspace is used or the classification policy.

reasonably confident therefore that a classification change under this procedure would take a shorter time. We do however have consultation or engagement exercises at both the Review and Amend stages. Should we need to allow eight or 12 weeks for those, plus time for preparation and analysis, this suggests a lower bound of around 50 weeks minimum, without taking into account other elements of the procedure.

59. Of course, the resources that we can devote to any one proposal will in part depend on how many changes are in the plan that we publish at the Review stage. This could easily affect individual timelines. Within the plan we expect to prioritise these proposals based on their individual merits (see page 43).

#### Collecting and analysing data to create an evidence base

- 60. Prior to the introduction of this procedure, the CAA had not routinely collected data on airspace utilisation. To obtain a solid evidence base, we are beginning to collect data (and devising mechanisms for how to do so in the future) that will allow us to carry out objective analysis of airspace utilisation by all airspace users. We have to work within our resource constraints, but we expect as a minimum to source data for a given volume of airspace that we have identified as of potential interest or which is the subject of a stakeholder suggestion where we need to verify what we are being told.
- 61. This means:
  - identifying what data we need (sufficient to meet our statutory obligations in support of this procedure, but not so extensive or granular that its collection and analysis would be unmanageable or disproportionate)
  - identifying who owns that data
  - if not owned by the CAA, establishing whether we can obtain that data, on what timescales and at what cost, and
  - analysing that data in a way that is meaningful and that will give us appropriate outputs.
- 62. We set out the data we have identified so far in the description of the Review stage on pages 30 to 33.

#### **Relevant stakeholders**

63. **Secretary of State:** The Secretary of State's objective for this procedure is for the CAA to regularly consider whether the classification of designated volumes of UK airspace requires review. The procedure allows the CAA, where it is appropriate and safe to do so, to use a less restrictive airspace classification or to reduce the volume of airspace that is controlled. In doing so, we will satisfy the obligation in new Direction 3(ba) to "seek to ensure [...] that the needs of all airspace users are reflected on an equitable basis" and potentially provide benefits for airspace users generally, including members of the General Aviation community, by allowing better access to it. In the longer term, as explained above, the procedure will also give us another tool to use in seeking to modernise airspace so as to maintain a high standard of safety and accommodate new users and new technology.

- 64. **Designated airspace controlling authority** of a volume of airspace: The main interested parties in the design and classification of airspace are, at higher altitudes, NERL (NATS En Route plc, the subsidiary of NATS which is air traffic control provider for upper airspace); at lower levels, airport operators and localised air traffic services providers; and the Ministry of Defence which has an interest in upper and lower airspace for diverse purposes.
- 65. **Airspace users** including airlines and other commercial operators, the Ministry of Defence, and the General Aviation community, which encompasses a wide range of aviation activity from microlights, gliders and balloons to corporate business jets. In the future, and depending on how airspace classes evolve, drone operators and other types of airspace user may also have an interest in the procedure. Controlled airspace can reduce the freedom to manoeuvre for certain users. At lower altitudes in particular, there is more of a challenge in balancing the differing (and often conflicting) requirements of a more diverse range of users without compromising safety. Depending on the airspace classification, leisure flyers, for example, may have to fly around controlled airspace, or seek permission to cross it. If a review suggests a volume of controlled airspace may be underutilised or larger than necessary, or its classification is no longer justified, then the CAA can consider its amendment.
- 66. **Communities:** those affected by aviation noise or other environmental impacts, their representatives, councils and other elected representatives, and organisations with an interest in aviation's environmental impact. We do not anticipate a significant environmental impact from a change made under this procedure, as it will not be used for any change that affects published or predictable aircraft tracks inside controlled airspace, such as changes to departure and arrival routes at aerodromes.
- 67. **Users of air transport services**, i.e. passengers and shippers: we do not anticipate that the procedure will have any impact on this group.

#### Transparency

68. As with the airspace change process, a prime objective of this procedure is that it is as transparent as possible throughout. Those with an interest in a change in airspace classification should feel confident that their voice has a formal place in the procedure. Openness also allows the CAA and the airspace controlling authority to see more clearly what is expected from them.

- 69. As described later in this document, we will publish our plan of airspace volumes where a case could be made for proposing an amendment to the classification, the refined plan after consultation, and the sequence in which we intend to progress each case with a starting date where known.
- 70. In terms of specific proposals, the default position is that the CAA will publish any documentation in relation to a proposal, including documents from and notes of meetings. We will consider withholding material:
  - for reasons of national security
  - which the CAA has agreed with the airspace controlling authority should not be made public, in order to protect the legitimate commercial interests of a person or business (in the same way that we are obliged to apply the Freedom of Information Act to any information held by the CAA)
  - containing personal information, in accordance with data protection law.
- 71. However, we do not anticipate needing to withhold large amounts of information and would only accept redaction of the minimum information necessary to comply with our obligations.

#### Airspace change portal / classification webpage

- 72. For the purpose of transparency in airspace change proposals, the CAA runs an online portal that holds all relevant information. Our intention is to adapt the portal to accommodate proposals for amending airspace classification under this procedure also. Until we achieve that, we are publishing relevant information on a dedicated webpage.
- 73. The webpage includes:
  - the status of the current review cycle (the stage, progress so far, proposed schedule)
  - where the Review stage is in progress, details of any plan, draft or final, that lists airspace volumes where a case could be made for a proposed amendment to the classification (or for an alternative airspace management solution if this is a more proportionate response)
  - where the Amend stage is in progress, details of any proposal for amending airspace classification that the CAA has made, and links to any public consultation (which will be accessed via the CAA's consultation website)
  - the CAA's decision on any amendment
  - the implementation arrangements for an amendment that has been approved by the CAA Airspace Regulation team

 the report by the CAA on the effectiveness of an amendment (or the alternative airspace management solution, as applicable), including input from the airspace controlling authority, stakeholder comments and any related follow-up actions.

#### **Reviewing the procedure**

- 74. We will review the effectiveness of the whole procedure three years after this document was first published, i.e. at the end of 2023. We may bring that review forward, for example if there is change in Government policy. In the interim we may issue revised editions of this document should clarifications be necessary once the procedure has been fully applied.
- 75. Currently our view is that there is unlikely to be a significant environmental impact from a change made under this procedure, but we cannot model the impacts outside controlled airspace and we have no specific guidance from the Department for Transport on assessing environmental impacts. If we see a correlation between increased noise complaints and classification amendments we will advise the Department for Transport, and reflect any policy changes they make in updates to the procedure.

## Consider stage

#### Summary of the Consider stage

- Every two years the CAA commits to carrying out a review, unless this would be unreasonable. The CAA may carry out a review sooner if there is an immediate safety need or a pressing national or international regulatory obligation.
- If we decide not to do a review, we will defer it for a maximum of one year.
- Any decision to defer is taken by an internal CAA meeting. The decision is based on whether the CAA can reasonably anticipate having sufficient staff resource (including the necessary skillset) to carry out a review, taking into account:

(a) whether there are national or international regulatory obligations to meet within a certain timeframe

(b) whether there are airspace safety, efficiency, environmental or access benefits that a review might help to define and deliver

(c) whether there are outstanding priorities from previous reviews

- (d) Department for Transport advice or directions prioritising our airspace functions.
- This is a simple yes/no binary decision confirming the timing of the review and does not involve any consultation or analysis of airspace volumes.

#### Purpose of the Consider stage

76. The purpose of this first stage is **a simple, binary yes/no decision** to confirm that we are holding a review, and the timing of the review. We may also sometimes need to limit the broad scope of the review, but nothing more. The Consider stage therefore does **not** involve any consultation or analysis of airspace volumes.

#### How often do we consider launching a review?

- 77. As explained earlier in the context of the legal and policy framework, the Air Navigation Directions require the CAA to consider regularly whether to carry out a review of airspace classifications. CAA policy is that 'regularly' in this context means **every two years.**
- 78. We would make an exception and launch an earlier review of classification if there were a pressing necessity for this outside the biennial cycle because of either:

- a new or amended regulatory requirement
- an immediate safety issue that requires resolution, based on intelligence derived from Mandatory Occurrence Reports or the CAA's safety oversight activities.

#### Basis for the decision confirming a review

- 79. The Directions go on to say (emphasis added) that the CAA must 'carry out a review...where the CAA considers a change to classification might be made...'. Therefore, at the Consider stage the decision to launch a review must be based on the CAA considering that a change to classification might be needed.
- 80. We want the procedure to be proportionate. While it may be superficially attractive to keep all airspace classifications under review at all times, the resources involved could be enormous, bearing in mind the extent of UK airspace, its complexity, the variety of airspace users, and the ever-changing extent to which a given volume of airspace might be used over time. It would require us to collect and analyse large quantities of data from other organisations on the use of UK airspace, which would be beyond the CAA's limited resources, and would not be a proportionate approach.
- 81. We therefore keep this first Consider stage very simple. We commit to carrying out a review of airspace classifications, unless this would be unreasonable. Our policy is that it would be unreasonable to carry out a review if we were unable to reassure ourselves that a review was likely to be worth doing and within our capabilities.
- 82. If we are not able to reassure ourselves, we may decide to defer the review by up to one year. That decision is taken at an internal CAA meeting of senior airspace staff, with sign-off by Manager, Future Airspace. The output of that meeting is a report that confirms when we are going to conduct the review, and a rationale. The report also sets out any scope limitation (see below).

#### Criteria we expect to take into account before confirming a review

- 83. For the purposes of that internal CAA meeting, any 'Consider' decision to defer would be based on whether the CAA can reasonably anticipate having sufficient staff resource (including the necessary skillset) to carry out a review, taking into account:
  - new or amended regulatory requirements whether from national law or international obligations from ICAO – in respect of airspace classification that need to be complied with within a certain timeframe

- whether we know of airspace safety, efficiency, environmental or access benefits that a review might help to define and deliver, for example in support of an initiative in the Airspace Modernisation Strategy
- whether there are outstanding priorities that we have gleaned from previous classification reviews
- Department for Transport advice or directions prioritising our airspace functions.
- 84. The meeting attendees decide what supporting information is available and appropriate for the above criteria. Outstanding priorities from a previous classification review are determined by a progress report that the CAA publishes with its Consider stage decision. The CAA also has high-level information from a variety of sources, as described in the next section explaining the Review stage.

#### Potentially limiting the scope of the review

- 85. The CAA could limit the review in scope. It is difficult to predict scenarios in advance where this might happen, but we give two examples below:
  - There may be known issues or opportunities in particular UK regions, but there may be insufficient CAA resources to review them all at once. We may decide to review one region first and review another region the following year, to make best use of our resources. Those indications of issues or opportunities would only be at a very high level, as we would have carried out no analysis.
  - Where we have a series of national or international regulatory obligations concerning airspace classification to comply with over a specified timescale, we may decide to focus a particular review on a specific obligation.
- 86. In both of these examples we would **not** be choosing particular volumes of airspace for potential review; that would come at the next stage (Review).

#### Outcome of the Consider stage

- 87. The outcome of the Consider stage is a report that confirms that we are going to conduct the review, or that we have chosen to defer it for up to a year, and a rationale, including a progress report showing outstanding priorities from previous classification reviews. The report will also confirm when we will launch our review, which would normally be straight away, but at this stage, prior to doing any analysis, we could give only a very broad timeline for the review (see pages 20 to 21). The report will also describe any scope limitation we see as reasonable.
- 88. We publish our report and inform aviation stakeholders, principally organisations in the Airspace Modernisation Strategy governance structure that represent

airspace users or that are a conduit to them.<sup>15</sup> This gives these representative organisations the opportunity to advise their members of the review and the likely CAA timeline.

<sup>&</sup>lt;sup>15</sup> We propose to inform members of the National Air Traffic Management Advisory Committee – an advisory meeting chaired by the CAA with representation across the UK aviation community, consulted for advice and views on airspace management and strategy matters – and also Airspace4All, Airlines UK, the Airport Operators Association, the British Airline Pilots Association, the Guild of Air Traffic Control Officers, the CAA's General and Business Aviation Strategic Forum, Industry Coordination for the Airspace Modernisation Strategy, the Ministry of Defence, NERL, the Airspace Change Organising Group and the CAA's UAS Stakeholder Forum.

## Review stage

#### Summary of the Review stage

- Our review is based on continuous monitoring of appropriate intelligence that we collect on an ongoing basis from a variety of sources including occurrence reports, feedback from our regulatory activity, and CAA online form FCS1522 for airspace users to report to the CAA any concerns about airspace access or refusal of air traffic services.
- We use this intelligence to draw up a plan that lists airspace volumes where a case could be made for a proposed amendment to the classification and a proposed schedule for addressing them.
- We consult organisations in the Airspace Modernisation Strategy governance structure that represent airspace users, or are a conduit to them, for feedback on the plan including any strategic advice or other information they would like us to consider.
- When we receive suggestions, we apply filters to remove any change which would have a significant operational or environmental impact that makes it unsuitable for this procedure. We may not pursue an amendment where the airspace is the subject of an ongoing or recent airspace design change. We engage with relevant airspace controlling authorities to help refine the requirements for the next (Amend) stage.
- We publish a refined plan after this consultation and adopt it as part of our Airspace Modernisation Strategy.

#### Purpose of the Review stage

- 89. The starting point for the Review stage is that the CAA has decided at the Consider stage to carry out a review of airspace classification.
- 90. The purpose of the Review stage is to carry out a review of airspace classifications to understand current problems, including safety and access issues. We use appropriate intelligence including objective analysis of available data relating to all airspace users to draw up a plan. The Air Navigation Directions require the CAA's review to include consultation with airspace users.
- 91. In addition to remedying safety issues, we will be particularly concerned with controlled airspace that is underused or larger than necessary, or no longer justified. The review will consider whether amending the classification of the airspace would provide benefits for different airspace users by allowing better access to it.

#### Information used to support the procedure

- 92. Key to the procedure is how we understand where there is a potential issue or opportunity for a change in classification. In the CAP 1616 airspace change process we are reliant on the change sponsor, usually an airport or air navigation service provider, coming to us with a proposal and all relevant supporting information. As noted earlier, this is where the classification review procedure differs. It is the CAA that must collect the intelligence and make the case, with essential appropriate input from the airspace controlling authority and airspace users. We must gather this information in a proportionate but effective way. The information we gather might be in the form of data collected about types of aircraft accessing airspace, or it might be the views of particular people or groups that is collected through consultation and engagement exercises, or more likely a composite of both.
- 93. We want the procedure to maximise the value from intelligence we gather, in particular airspace user feedback. We achieve this by being proactive in gathering airspace intelligence throughout the year. An aspiration that also supports this specific procedure is to encourage a better reporting culture at the individual airspace user level for both safety and airspace access or utilisation issues. With a suitable reporting and analysis structure in place and the right culture, we believe we can obtain better-value intelligence than we can from meetings or public consultation alone. Such reporting gives us data from the bottom level that we can tie in with other empirical evidence to give us a real picture of what is going on. We see this as an innovative and targeted approach to intelligence-gathering, supplemented by feedback we will capture when engaging with stakeholders through our day-to-day airspace regulatory work.
- 94. We therefore use the outputs from continuous monitoring of airspace safety, access or utilisation issues as the basis for drawing up a plan that lists airspace volumes where a case could be made for a proposed amendment to the classification (or other remedial action). This would come from a variety of sources as described below. The CAA has only limited resources to buy in data (such as surveillance data) and to analyse it. On an ongoing basis we actively explore what data is available and most valuable for our analysis, and how we get hold of that data.
- 95. The CAA has access to various forms of safety data. We also want to give strong encouragement to airspace users to express any airspace access or utilisation concerns, including refusals of crossing of controlled or managed airspace, via CAA online form FCS1522 *UK Airspace Access or Refusal of Air Traffic Services Report.* This gives us continuous feedback throughout the year, rather than us asking a one-off question.
- 96. At the Review stage of the procedure we consult airspace users about the plan including any strategic advice or other information they would like us to consider.

We say more about this below. We apply filters to remove from the plan any change which would have a significant operational or environmental impact that makes it unsuitable for this procedure. We may also not pursue an amendment to airspace that is the subject of an ongoing or recent airspace design change. We publish a refined plan after this consultation.

97. At the Amend stage, described in the next section, we analyse intelligence relating to those specific volumes of airspace in much more detail. We also require the designated controlling authority for the airspace concerned to provide more detailed information as we work with them to put together a formal amendment that aligns with our statutory duties. We then seek feedback on that amendment from relevant stakeholders. Proportionate consultation with relevant stakeholders therefore occurs at both the Review and Amend stages.

#### **Technical evidence**

- 98. We begin by using appropriate intelligence including objective analysis of available data relating to all airspace users to draw up a plan. The plan lists airspace volumes where a case could be made for a proposed amendment to the classification, or to identify where alternative airspace management arrangements might be a more appropriate and proportionate solution. Sources will include ongoing feedback from airspace users relating to airspace access or utilisation issues, as described above. We will also use the CAA's own high-level safety intelligence, derived from ongoing reports for this purpose, where there are indications that an existing airspace structure may have the potential to be a causal or contributory factor in a safety event.
- 99. In more detail, the intelligence includes:
  - continuous feedback from airspace users expressing any airspace access or utilisation concerns via CAA online form FCS1522 UK Airspace Access or Refusal of Air Traffic Services Report<sup>16</sup>. Following a redesign of the form in 2020, the CAA is raising awareness among airspace users through a publicity, education and awareness campaign of the form's purpose for making appropriate and accurate reports of access or utilisation concerns. We are continuously assessing these reports in the context of the other intelligence we have and, where appropriate, seeking timely feedback from the air traffic service units concerned.
  - civil Mandatory Occurrence Reports<sup>17</sup>, including reports and analysis by Local Airspace Infringement Teams relating to airspace issues

<sup>&</sup>lt;sup>16</sup> This form may be used to contact the CAA about being denied access to airspace, being refused an air traffic service, or being refused the type of air traffic service requested.

<sup>&</sup>lt;sup>17</sup> Mandatory Occurrence Reporting requires the reporting, analysis and follow up of occurrences in civil

- Military Aviation Authority analysis of MoD Defence Air Safety Occurrence Reports relating to airspace issues
- CHIRP (a confidential incident reporting programme) analysis of reports relating to airspace issues<sup>18</sup>
- intelligence gained from the broad spectrum of CAA regulatory oversight activities
- CAA-gathered aerodrome activity data highlighting trends in traffic numbers and types of operations derived from CAA airport statistics
- Air traffic service surveillance data. We are currently considering the available surveillance data and its applicability at the Review stage. The various methods of electronic conspicuity combined with radar sources means there are a number of options to consider to fully inform the use of the UK's airspace. Some are likely to incur a cost as well as legal agreement on the use and access to the data, as it is not owned by the CAA. Where we can obtain data, we will need to make a judgement on how best to use it with the limited resources available.<sup>19</sup> We may update this document with more detail on these data sources in due course.
- designated areas of outstanding natural beauty and national parks
- aeronautical charts and other reference information such as airspace structure, local considerations or topography
- internal planning information relating to ongoing and recent airspace change proposals
- progress report on the outcome from any previous classification reviews.
- 100. The CAA will hold the data and will be subject to the usual regulations on data protection and freedom of information. We will publish relevant aggregated and anonymised data that informs a proposal (see 'Transparency' on pages 22 to 23), but we will respect confidentiality in line with best practice on safety

https://www.caa.co.uk/Our-work/Make-a-report-or-complaint/MOR/Occurrence-reporting/

aviation and delivers a European just culture declaration. An occurrence means any safety-related event which endangers or which, if not corrected or addressed, could endanger an aircraft, its occupants or any other person. The purpose of occurrence reporting is to improve aviation safety by ensuring that relevant safety information relating to civil aviation is reported, collected, stored, protected, exchanged, disseminated and analysed. It is not to attribute blame or liability.

<sup>&</sup>lt;sup>18</sup> <u>chirp.co.uk</u>

<sup>&</sup>lt;sup>19</sup> We are fully aware that NATS radar data is not the only source of surveillance data. We intend to use suitable sources of electronic conspicuity data to understand the demand from all airspace users, as well as coordination with controlling authorities and local airspace users to gain as complete a picture of demand as available within the constraints of our resources. This includes where aircraft are flying outside controlled airspace, in addition to a picture of how controlled airspace is being used.

reporting. In forecasting traffic volumes, we will take account of the effects of the Covid-19 pandemic on historic figures.

#### Drawing up the plan

- 101. At this point in the procedure, the CAA will have undertaken a detailed review of the volumes of controlled airspace that make up the initial plan. We will be considering whether the evidence shows that traffic patterns (perhaps because of changes in demand or aircraft operational behaviours) have changed the airspace requirement.
- 102. For a given volume of airspace we will seek early feedback from the relevant controlling authority on our findings. We would take into account its views on traffic demand or aircraft operational behaviours, and any local considerations or safety concerns that we may not have been aware of. We will also ask for the controlling authority's feedback on what has worked well as part of the airspace management. For example, where there are complaints that VFR traffic is having difficulty obtaining clearance for transits through a particular volume of controlled or managed airspace, we will consider data on successful airspace transits as well as refusals.
- 103. Some of the issues that our continuous monitoring reveals are likely to fall outside the classification procedure, because they are already dealt with by the CAA Airspace Regulation team. For example, where there are complaints that VFR traffic is having difficulty obtaining clearance for transits through a particular volume of controlled or managed airspace, or where restricted airspace is no longer needed.
- 104. Some volumes of airspace may not be suitable for this procedure. We need to filter these out before drawing up the plan. We discuss this further below.

## Filtering volumes of airspace that are not suitable for this procedure

105. In drawing up our list of possible opportunities, we apply a series of filters to remove proposals that are not appropriate for this procedure for amending airspace classification. This may be because they are already subject to an ongoing or recent change in airspace design, or because of the potential impacts that changing the classification might have.

#### Changes with an adverse effect on military operations

106. As explained in Chapter 2, the Air Navigation Directions require us to first seek the approval of the Secretary of State for Defence before increasing the volume of controlled airspace or altering the classification of UK airspace where to do so might, in the opinion of the CAA or the Ministry of Defence, have an adverse effect on the ability of the armed forces of the Crown to maintain their operational capability.

- 107. The CAA must therefore review whether there is the potential for any change to an airspace volume to meet those criteria:
  - where in our opinion there is no such potential, we will proceed with including it in our plan, or
  - where in our opinion there is such potential, we will filter out that airspace volume for further discussion with the Ministry of Defence, and depending on those discussions, we may seek the approval of the Secretary of State for Defence, after which:
    - where the Secretary of State for Defence is content, we will proceed with including it in our plan, or
    - where the Secretary of State for Defence is not content, the CAA may only approve the proposed change in accordance with directions given by the Secretary of State under section 68(3) of the Act, and therefore we will notify the Department for Transport).<sup>20</sup>

#### Airspace that is the subject of a change in airspace design

#### Where a change is at stages 1 to 4 of the CAP 1616 (or CAP 725) process

- 108. We will not normally consider under this procedure any volumes of airspace that are subject to an ongoing proposed change in airspace design (Levels 1, 2, M1 or M2) that is in progress between stages 1 and 4 of the CAP 1616, or its equivalent where subject to the CAP 725 process.<sup>21</sup> Through those stages of the process, the change sponsor must develop design options for the airspace (which includes the proposed classification), consult on its proposal and amend it in light of consultation feedback. Undertaking a classification amendment during this work would not be appropriate.
- 109. However, we may need to make exceptions to this policy, and assess individual volumes of airspace on a case-by-case basis, where justified. **For example**, where:
  - the Statement of Need was submitted after the airspace volume was identified in our plan at the Review stage, or

<sup>&</sup>lt;sup>20</sup> Direction 12(8) of the Air Navigation Directions.

<sup>&</sup>lt;sup>21</sup> The CAP 725 process was superseded by CAP 1616 in 2018, but a few airspace change proposals that were already underway at that time are still being considered under the old process. Where we mention elements of the CAP 1616 process here, these should be read as also applying to the nearest equivalent stages of the CAP 725 process.

- the airspace change proposal has been paused for more than a year, or a decision has been taken to delay it for more than a year, or
- the sponsor recognises that a change of circumstances has occurred that requires a revision to its Statement of Need.
- 110. We will take advice from the CAA Airspace Regulation team and from the Airspace Change Organising Group<sup>22</sup> where its work relates to the airspace change proposal.
- 111. For the purposes of this exception, we will assess each case on its merits taking into account the circumstances. For example, we need to ensure that any classification change aligns with, and does not jeopardise, the wider airspace modernisation programme, including future plans, impending national or international regulatory obligations and knock-on effects to adjacent airspace. If we see a case for proceeding, we will include it in our plan. In no instance would adding the volume of airspace to our plan impede the progress of the airspace change proposal.

## Where a change is at (or has recently completed) stages 5 to 7 of the CAP 1616 (or CAP 725) process

- 112. Any volumes of airspace that are subject to a change in airspace design (Levels 1, 2, M1 or M2) at **stages 5 to 7** of the CAP 1616 (or the earlier CAP 725) process, or where the outcome of the post-implementation review (stage 7) was decided less than three years ago, will be assessed by the CAA on a **case-by-case basis**.
- 113. It could be that the classification issue we found with that volume of airspace is sufficiently distinct from the airspace design change such that we can proceed with including it in our plan. We can only make this assessment when the airspace change proposal is sufficiently mature, i.e. at stage 5 or beyond. In no instance would adding the volume of airspace to our plan impede the progress of the airspace change proposal.
- 114. If it is not sufficiently distinct, then we will not normally consider that volume of airspace under the classification procedure, because it would not be appropriate to carry out a further review of the classification so soon after implementation. The CAA will have considered the design, dimensions and classification of the airspace when making our decision. The airspace change sponsor will have invested resources and money into the change and should have a reasonable expectation of a period of time to implement and monitor the change and benefit from its investment. This is why we wait three years after the outcome of the

<sup>&</sup>lt;sup>22</sup> The Airspace Change Organising Group, usually known as ACOG, was established in 2019 to coordinate the delivery of key aspects of the Airspace Modernisation Strategy. It operates impartially and is overseen by the CAA and Department for Transport. <u>https://www.ourfutureskies.uk/about-us/who-are-acog/</u>

post-implementation review before we consider reviewing the classification at a later date.

#### Alternative action where we cannot use the classification procedure

115. In cases where we do not progress a classification amendment through this procedure because of an ongoing or recent change in airspace design, we will instead formally notify the airspace change sponsor and (where appropriate) the Airspace Change Organising Group of the intelligence we have derived.

## Changes that would have significant operational or environmental impact

- 116. If, as we develop a proposal, we find that there would be a significant operational, safety or environmental impact, for example if we would need to make changes to departure and arrival routes at aerodromes, then we would not progress the proposal any further using the classification procedure. This is because such a proposal would constitute a significant change in airspace design, where the impacts must be thoroughly assessed through the more detailed CAP 1616 process. Instead we would recommend to the airspace controlling authority that it considers addressing the airspace issue concerned through an airspace design change in the future, or where appropriate we might discuss other solutions with them (such as enabling access to airspace in a flexible way).
- 117. Table 1 below sets out the criteria we apply for this filter:
  - the first part of the table relates to impacts where we will definitely <u>not</u> <u>consider</u> a change under this procedure
  - the second part relates to impacts where we <u>may consider</u> a change under this procedure, and
  - the third part gives examples of impacts where we will consider a change under this procedure.

#### Airspace considered in the preceding review cycle

- 118. We will also not consider any airspace volume that was in the immediately preceding classification review and where:
  - a classification change proposal is still at the Amend stage, or
  - an amendment to classification is complete but where the outcome of the effectiveness review was decided less than three years ago, or
  - a classification change was considered and rejected in the immediately preceding review, and the reasons for rejection remain valid.

Filter	Criteria	Comments
In developing options to amend any airspace classification, the CAA will not consider amending the classification of airspace under this procedure where:	<ul> <li>the amendment has the potential to affect the design of notified</li> <li>IAPs</li> <li>SIDs</li> <li>STARs</li> <li>standard departure routes (SDR)</li> <li>preferred departure routes (PDR)</li> <li>noise preferential routes (NPR), or</li> <li>ATS routes within existing volumes of controlled airspace</li> <li>where traffic demand for the continued use of these routes and procedures exists.</li> </ul>	Where the classification of a volume of airspace will not be amended through this procedure, but evidence gathered in the Consider, Review and/or Amend stages indicates a safety issue with that airspace volume, the CAA Airspace Classification team will advise the CAA Airspace Regulation and Air Traffic Management teams (as appropriate) so that they can progress the matter with the airspace controlling authority through the normal oversight process.
In developing options to amend any airspace classification, the CAA <b>may consider</b> amending an airspace classification under this procedure where:	<ul> <li>the amendment has the potential to affect:</li> <li>vectoring practices established in unit MATS Part 2 where vectoring is required to position aircraft onto the final approach track, or towards a point from which the flight-planned route can be continued; or</li> <li>areas of ATS delegation.</li> </ul>	The CAA will use an operational safety assessment to determine whether these changes are appropriate to be pursued under this procedure.

Table 1: Filter for determining whether a specific classification change is suitable for the procedure

Note: in each case the CAA will undertake engagement with the affected airspace controlling authority and other relevant stakeholders to ensure that their opinions are considered.

(continued overleaf)

Table 1: Filter for determining whether a specific classification change is suitable for the procedure (continued)

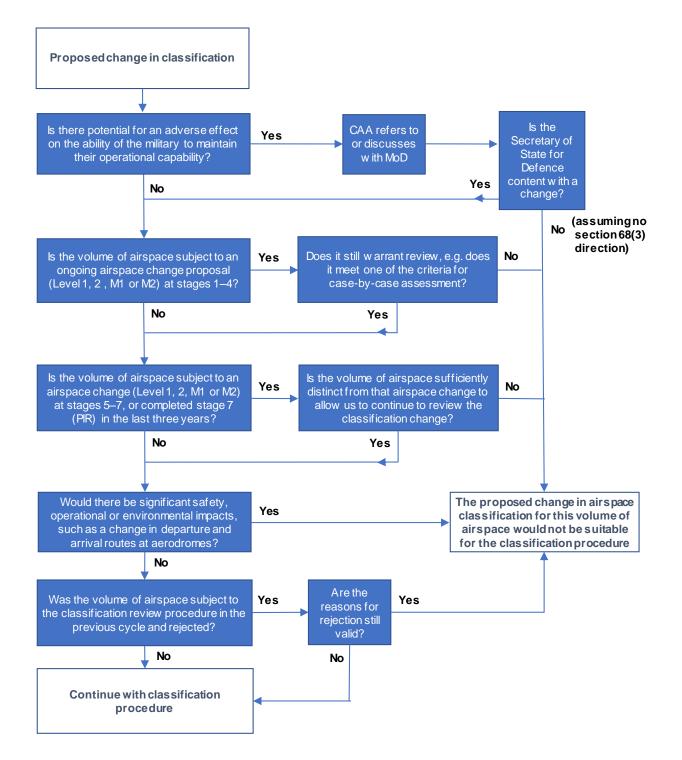
Filter	Criteria	Comments
In developing options to amend any airspace classification, the CAA will consider amending an airspace	<ul> <li>for example,</li> <li>it is demonstrated that traffic demand or aircraft operational behaviours have changed the airspace volume requirement</li> </ul>	
classification under this procedure where:	<ul> <li>it is subsequent to a change or withdrawal of notified:</li> <li>IAPs</li> <li>SIDs</li> <li>STARs</li> <li>standard departure routes (SDR)</li> <li>preferred departure routes (PDR)</li> <li>noise preferential routes (NPR)</li> <li>ATS routes, or</li> </ul>	
	<ul> <li>it is subsequent to the amendment or withdrawal of operational procedures and/or landing areas which render the volume of controlled airspace surplus to requirements, or</li> </ul>	
	<ul> <li>it has the potential to affect the flightpaths of aircraft transiting the airspace (i.e. not departing from or arriving at the aerodrome whose airspace is being reviewed) as follows:</li> <li>where flights may now need to decide whether to seek a crossing clearance for flight within a more restrictive airspace classification, or to route around that airspace, or</li> </ul>	
	- where flights may now be able to operate within airspace which they previously had not, due to the notification of a less restrictive airspace classification.	

Note: in each case the CAA will undertake engagement with the affected airspace controlling authority and other relevant stakeholders to ensure that their opinions are considered.

#### Summary of the filters at the Review stage

119. Figure 1 illustrates these filters in the form of a flowchart.





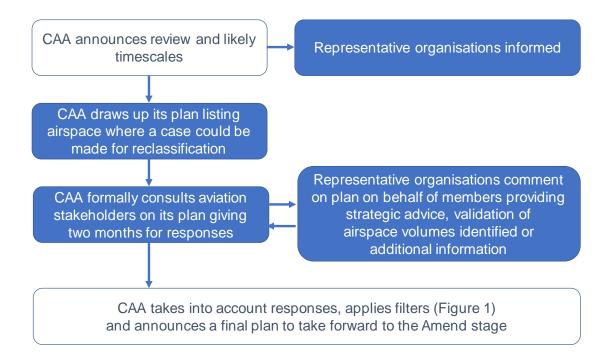
# **Consultation on the plan**

- 120. Having drawn up an initial plan of airspace volumes where a case could be made for a proposed amendment to the classification, we will consult aviation stakeholders on that plan. We will:
  - inform aviation stakeholders of those volumes of airspace we have identified for review; the consultation will be in writing, but we may supplement this with briefings and/or feedback sessions as appropriate with relevant stakeholders to hear their views first hand, as set out in a consultation strategy that we will draw up
  - seek validation of (and any additional evidence to support the need to review) those airspace volumes we have identified, and
  - consider any strategic advice or other additional information provided in response to the consultation; where this relates to a specific volume of airspace, it should ideally include supporting reasoning and evidence where possible. We will do our best to verify the information that is provided in the response, and, if a reasonable case can be made, we will consider adding to or amending the plan.
- 121. As mentioned at the end of the Consider stage, in identifying which aviation stakeholders to consult, we use the Airspace Modernisation Strategy governance structure to identify the best representatives of airspace users, or are a conduit to them. This procedure forms one of the initiatives in Airspace Modernisation Strategy, and because of that it is subject to certain governance requirements. The initiative must have an engagement plan, which will include continuous engagement by the CAA Airspace Classification team, and that engagement plan must reflect the entities listed in the Airspace Modernisation Strategy governance structure.<sup>23</sup> Our proposals and decisions will also be published, and there will be a standing item on the agenda of the CAA's main airspace engagement forum, the National Air Traffic Management Advisory Committee (see page 28).
- 122. Each organisation will be invited to make one response, regardless of its size or whether someone is a member of more than one group in the governance structure. We will make clear that respondents must give their organisation's views, not their own. It is essential that the input from these representative organisations is properly informed by the views of the members of the groups they represent.

For the latest version please see page 7 of CAP 1862 Airspace Modernisation – 2019 Progress Report www.caa.co.uk/cap1862. The original can be found in the governance annex to the Airspace Modernisation Strategy, published in December 2018 www.caa.co.uk/cap1711b.

- 123. When we seek feedback, we will normally allow two months for responses. We hope that this gives representative organisations sufficient time to collate input from their members, because we do not want to prolong the procedure unnecessarily. To help them plan for and meet this timeline, we will notify these organisations in advance of our intention to launch a review, as noted in the Consider stage. We then expect these organisations to advise their members of the likely CAA timetable and to invite their members to consider whether they have any feedback relating to the third bullet above. This should give each organisation sufficiently representative material that it can draw from when putting together its response.
- 124. We will ask respondents to support their suggestions with appropriate rationale and evidence where possible. We recognise that airspace users are likely to have only limited information with which to evidence a suggestion, so the CAA will complete the picture using other sources of information. We need to understand why the proposal is reasonable, how it would work and what the benefits and disbenefits would be.
- 125. It is our aim to keep this procedure as proportionate as possible, and that includes consultation. For example, if the proposals in the plan are relatively minor changes, with few impacts, the best-practice principles on consultation and engagement that are set out in CAP 1616 dictate a more proportionate approach than that outlined above. If the review is limited in scope, for example geographically, this may mean we target specific stakeholders with a local interest. We may also sometimes extend the consultation to a wider range of stakeholders, depending on the circumstances. The consultations will normally be published on our consultation website <a href="https://consultations.caa.co.uk/">https://consultations.caa.co.uk/</a> with access confined to the stakeholders we are consulting.
- 126. When we receive suggestions, we will again apply filters to remove changes that make them unsuitable for this procedure, as described above.
- 127. Figure 2 illustrates this in the form of a flowchart.

#### Figure 2: Consultation at the Review stage



# Consulting on airspace classification more widely

- 128. The procedure described above is based on a consultation of specific stakeholders, not a public consultation.
- 129. The CAA may decide on occasion to run a public consultation on airspace classification, in the interest of being fully open to new ideas and suggestions.<sup>24</sup> However, it would not be proportionate or appropriate to do this every two years; therefore the usual procedure will be that described earlier, and any wider public consultation will be on an ad hoc basis.

# Using the procedure to review broader classification needs

- 130. Each time we carry out a review, a plan will be produced. Following our first review in 2019–20, which helped us identify opportunities for more equitable access for other airspace users, our first plan focused on reducing the amount of controlled airspace.
- 131. The Air Navigation Directions give us additional flexibility in this function. Consistent with our duty to seek to ensure that the amount of controlled airspace is the minimum required to maintain a high standard of air safety and that the needs of all airspace users is reflected on an equitable basis, the new function

<sup>&</sup>lt;sup>24</sup> The CAA ran such a public consultation between December 2019 and March 2020, as a way of initiating a review prior to the introduction of the procedure that is the subject of this guidance. <u>https://consultations.caa.co.uk/corporate-communications/airspace-classification-review-2019-2020/</u>

gives us the ability to amend a classification to make it more, as well as less, restrictive.

- 132. This would be relevant where there is a need to address safety concerns that we identify from routine reporting of issues relating to airspace classification. The procedure must accommodate this possibility, because in carrying out this new function our overriding objective will always be to maintain a high standard of safety.
- 133. The procedure may therefore be used to enable compliance with, for example, ICAO requirements on airspace classification. Because the procedure allows us to review whether the classification remains appropriate to the demands upon that volume of airspace and to propose a different classification if necessary, or the use of airspace in a flexible way, it could be used to facilitate the introduction of new air traffic management concepts, including the integration of drones and other emerging technologies as part of airspace modernisation. The procedure would not determine the way airspace is used or the classification policy.

# Drawing up the final plan and prioritising changes

134. As we draw up the final plan, we will begin to identify the external airspace stakeholders specific to each airspace volume under consideration. We will also continue the preliminary engagement with the relevant airspace controlling authorities for each volume for airspace, in order to understand the issue or opportunity better as we finish the plan and before we embark on detailed analysis work.

#### Prioritising potential changes set out in the plan

- 135. Once we have our plan, we will set out the sequence in which we will begin to look at proposed changes, based on their anticipated impacts in terms of overall cost and benefits they bring. This cannot be a precise process, because only when detailed work begins can we assess the likely costs and benefits. Even then, it should be noted that assessing environmental impacts, as described earlier, will in most cases necessarily be in qualitative rather than quantitative terms. This procedure does not include a formal options appraisal (the means of assessing the possible different approaches to an airspace change for delivering a desired outcome) in the way that the CAP 1616 process does. It will therefore be a qualitative rationale that shapes our programme for the two-year review period.
- 136. For example, we might prioritise airspace where an obviously beneficial change can be achieved relatively quickly, easily and at little cost. Whereas we would give lower priority to a change that brought benefits of relatively small magnitude or which benefited relatively few airspace users but that required more holding, or less efficient flight profiles, or resulted in significant training and

implementation costs for air navigation service providers. There is clearly judgement on the part of the CAA in making these decisions and safety will be our overriding priority. We will aim to be as transparent as we can in explaining our reasoning for the priority we choose.

#### **Outcome of the Review stage**

- 137. The outcome of the Review stage is that the CAA publishes its final plan identifying the airspace volumes where we could make a case for the classification to be amended in accordance with our statutory duties, including the Secretary of State's Direction to the CAA about equitable access and the factors set in section 70 of the Transport Act 2000.
- 138. The plan will include:
  - a brief description of the airspace volumes where we believe a case could be made for a proposed amendment to the classification or where the introduction of alternative airspace management arrangements would be a more appropriate and proportionate solution
  - a brief statement of what opportunity or issue we are seeking to address for each specific airspace volume
  - a summary of our analysis of the airspace volumes that were subject to review, including:
    - the consultation responses we received and any action we took as a result and why
    - the rationale for excluding specific airspace volumes.
- 139. We will then adopt this plan as part of our Airspace Modernisation Strategy, and take the airspace volumes in this final plan forward to the Amend stage.

# Amend stage

# Summary of the Amend stage

- Our analysis of the intelligence we have collected becomes more detailed as we develop each case further into a proposal to amend the airspace classification, relying on vital input from the airspace controlling authority and working with other relevant stakeholders as necessary.
- Options might include changing the dimensions of the airspace (for example, reducing the size), changing the classification or enabling access to airspace through alternate air traffic management measures.
- The proposal must satisfy the requirements of the Air Navigation Directions and the factors in section 70 of the Transport Act 2000. The airspace controlling authority develops the operational procedures and safety case with CAA assistance, but ultimately the controlling authority owns the safety component of the proposal. The CAA assesses any potential environmental impacts and adds this to the proposal.
- The CAA consults relevant stakeholders about our proposal, identifying those stakeholders through the principles laid out in CAP 1616. We take into account feedback in finalising the formal proposal.
- This proposal, including an implementation plan, when signed off by the manager of the CAA Airspace Classification team, is then passed to the CAA Airspace Regulation team for decision-making.
- If the CAA Airspace Regulation team approves the proposal, the airspace controlling authority arranges implementation of the approved amendments.
- After one year the CAA Airspace Classification team reviews the effectiveness of the amendment, collating input from the controlling authority, relevant stakeholders and our own data. The CAA Airspace Regulation team reviews the report. We decide whether any further action is needed.

# Purpose of the Amend stage

- 140. The starting point for the Amend stage is the CAA plan that was developed at the Review stage and adopted into our Airspace Modernisation Strategy. The plan lists airspace volumes where a case could be made for a proposed amendment to the airspace classification (or enabling access to airspace in a flexible way if this is a more proportionate response).
- 141. The purpose of the Amend stage is to analyse each identified airspace volume in more detail, and, working closely with the designated airspace controlling

authority and other relevant stakeholders, to develop an amendment to the classification that satisfies our statutory duties, including the requirements of the Air Navigation Directions and the factors in section 70 of the Transport Act 2000. The Directions require that "The CAA must [...] in [...] amending the classification of a volume of airspace [...] seek to ensure that the amount of controlled airspace is the minimum required to maintain a high standard of air safety and, subject to overriding national security or defence requirements, that the needs of all airspace users is reflected on an equitable basis".

142. The Amend stage moves from the development of a proposal with the airspace controlling authority, taking into account feedback from consultation, to submission of the final proposal for CAA decision-making. The CAA reviews the effectiveness of a change that has been implemented after one year to see how it is performing.

# **Proposal development**

- 143. For each airspace volume in the plan, the CAA develops a proposal to determine whether an amendment to the classification is viable and would satisfy our statutory duties, including the requirements of the Secretary of State's Directions and the factors in section 70 of the Transport Act 2000. We will be relying on vital input from the airspace controlling authority and working with other relevant stakeholders as necessary. We will draw further on our technical evidence base, as well as requiring the controlling authority for the airspace concerned to provide detailed information that must feed into the formal amendment proposal. This information will help us define the optimum arrangement of new boundaries and related service provision.
- 144. In this procedure the CAA is responsible for identifying volumes of airspace and amending the classification correctly, with the controlling authority owning the safety risk by having to prepare the operational procedures and safety case, with our assistance. We collect evidence supporting the amendment, presenting this to the controlling authority, tasking it with the operational procedures and safety case.

# Complying with the legal and policy framework

- 145. For each case, the CAA sets out a statement of what opportunity or issue the proposal seeks to address. We include the cause of the issue or opportunity, why action is required and any associated factors or requirements that must be achieved (safety, operational, technical, and environmental).
- 146. In considering different options for how we might address that opportunity or issue, we must apply the necessary legal and policy framework. Design work will ensure that the proposal continues to be compliant with:

- ICAO SARPs (Standards and Recommended Practices) and PANS (Procedures for Airspace Navigation Services) relating to airspace design and any relevant national law
- relevant CAA policies and airspace design guidance
- relevant best practice published by the Independent Commission for Civil Aviation Noise (ICCAN)<sup>25</sup>, to the extent that this is applicable to the impacts anticipated

and also that the resulting proposal:

- is compliant with the CAA's statutory duties, including the factors in section 70 of the Transport Act 2000
- adheres to the Air Navigation Directions relating to airspace classification and takes account of the guidance relating to environmental objectives that the Secretary of State has given us (see 'environmental assessment' below).
- 147. Section 70 applies to the exercise of all our functions in the Air Navigation Directions, including this one. If in any particular case there is a conflict, we must apply those factors in the manner we think is reasonable having regard to them as a whole.
- 148. The Air Navigation Directions make specific reference to certain objectives in respect of this function ensuring that the amount of controlled airspace is the minimum required to maintain a high standard of air safety, and equitable access subject to national security and defence requirements but we must always consider the other section 70 factors.
- 149. The procedure therefore collects appropriate evidence for each factor to demonstrate that the requirements of section 70 are considered. We discuss the most important of these below our overriding safety objective; operational assessment and environmental impacts.
- 150. Should our deeper analysis reveal significant operational or environmental impacts from a proposal (see Table 1) that had not previously been apparent when we applied the filters at the Review stage (see Figure 1), then that proposal will not be pursued. As described in the Review stage, in such cases we would instead recommend to the airspace controlling authority that it considers addressing the airspace issue concerned through an airspace design change in the future, or where appropriate we might discuss other solutions with them (such as enabling access to airspace in a flexible way).

<sup>&</sup>lt;sup>25</sup> ICCAN is the independent UK body responsible for creating, compiling and disseminating best practice to the aviation industry on the management of civil aviation noise and advising government in this area.

# Safety assessment

- 151. Local operational knowledge for the airspace in question is essential in order to develop the safety case. Also, once a proposal is implemented, the airspace controlling authority will own the safety component. It must therefore be the airspace controlling authority that develops the operational procedures and safety case with CAA assistance.
- 152. The safety assessment by the airspace controlling authority must comply with ATM/ANS.OR.010<sup>26</sup> and will:
  - describe the scope of the proposed airspace classification change
  - identify new and changing hazards
  - identify and quantify risks arising from those hazards
  - set mitigations for those risks.
- 153. The CAA has published separate guidance (CAP 760) about safety assessment.<sup>27</sup>
- 154. We will publish plain-English summaries of the safety assessment by the airspace controlling authority and of the CAA's review so that affected stakeholders can see that the controlling authority has demonstrated that it has properly considered the potential safety impacts of the proposed change. The summaries may exclude material which the CAA is satisfied should be kept confidential.
- 155. The CAA will review the air traffic safety risks associated with the airspace design and, where appropriate, whether the level of air traffic service resource and infrastructure is appropriate to support the change safely. The CAA will review whether the air traffic procedures associated with the change are adequately safe, that those procedures support the operational environment and that all appropriate risks have been considered. The CAA will also review the design of the proposal from a safety perspective, to ensure aspects such as instrument flight procedures are not adversely impacted or route spacing is not compromised by any amendment proposal.

# **Operational assessment**

156. The CAA will set the operational objectives for the change. Again, local operational knowledge will be essential to complete the operational case for the proposal, requiring essential input from the airspace controlling authority.

<sup>&</sup>lt;sup>26</sup> EU Regulation No 2017/373 ATM/ANS implementing rules Annex III or the equivalent in national law.

<sup>&</sup>lt;sup>27</sup> CAP 760 Guidance on the Conduct of Hazard Identification, Risk Assessment and the Production of Safety Cases: For Aerodrome Operators and Air Traffic Service Providers <u>www.caa.co.uk/cap760</u>

157. Working with the controlling authority, the CAA will ensure that the proposed airspace design and associated operational arrangements are fit for purpose, and that it meets relevant regulatory requirements. We will also assess whether adequate resource exists to deliver the change, and whether adequate communications, navigation and surveillance infrastructure exists to enable the change to take place; that maps and diagrams explain clearly the nature of the proposal; and that operational impacts on all airspace users, airfields and on traffic levels have been considered and mitigated appropriately.

# **Environmental impacts**

#### **Guidance from the Secretary of State**

- 158. The CAA is required by section 70 to take account of any guidance on environmental objectives given to the CAA by the Secretary of State. For a change in airspace design going through the CAP 1616 process, this guidance is the Air Navigation Guidance 2017.
- 159. As explained in the earlier section explaining the legislative and policy basis for the procedure (page 14), when the Secretary of State wrote to the CAA in 2019 giving us Directions about this procedure for amending airspace classification, he said that the environmental objectives set out in the Air Navigation Guidance 2014 and 2017, as well as the rest of that Guidance, are not to apply to decisions under this procedure. However, the letter also says that he expected the CAA to consider the potential environmental consequences of proposals under the procedure, and to engage with relevant communities as the CAA considers appropriate.
- 160. In consequence, in the absence of environmental guidance from the Secretary of State, the CAA has had to determine its own environmental objectives when making decisions under this procedure. We will do so with reference to background government policy, including but not limited to, the Climate Change Act 2008, the Aviation Policy Framework 2013 and the Noise Policy Statement for England 2010. We conclude that applying those background documents to determine our own environmental objectives will lead to the same environmental objectives as are set out in the Air Navigation Guidance.

#### **Environmental assessment**

- 161. As far as we are able to, the CAA will assess any potential environmental impacts and add this to the proposal.
- 162. As we describe in more detail in the context of the Review stage, we do not envisage any significant environmental impacts from a classification change, such as might be caused by changes to departure and arrival routes at aerodromes, because these would have been filtered out at an earlier stage in the procedure.

- 163. The environmental impacts of a classification amendment under this procedure could be uncertain and probably cannot be modelled. For example, removing controlled airspace effectively opens up that volume of airspace to all flights. If the airspace were previously relatively unused (hence the reclassification), there could potentially be an increase in noise from new low-level traffic. Because the airspace is not controlled, we cannot estimate how frequent those new flights are or where and at what height they will overfly those on the ground. Therefore, we are unlikely to be able to model noise or other environmental impacts.
- 164. That means we cannot use the detailed assessment for airspace change proposals that is described in CAP 1616 and its environmental technical annex CAP 1616a. Nor would we apply the options appraisal of costs and benefits that is set out in the Air Navigation Guidance, or the Government 'WebTAG' quantitative methodology.
- 165. For these reasons, making any assessment of the environmental impacts would, at least for a change to a less restrictive classification, be a **qualitative not quantitative exercise**. Even then, although the impact is unlikely to be zero, the amount of information we can give interested stakeholders about the impact will be limited.

# Forms that the proposal may take

- 166. The CAA develops and evaluates the preferred solution that will address the opportunity or issue identified and complies with the legal and policy framework. The amendment itself could be:
  - a change to the existing controlled airspace boundaries, and/or
  - a change of airspace classification.
- 167. Where no change is possible, or where it is a more proportionate solution, the CAA will encourage the controlling authority to use alternative air traffic management measures that better support access to shared airspace for all users. This could take various forms, such as:
  - Letters of Agreement, an operational agreement between an air navigation service provider and airspace users, usually bilateral, giving primacy to specified airspace users in a defined region of airspace at specified times under specified conditions,<sup>28</sup> or

<sup>&</sup>lt;sup>28</sup> Some examples can be viewed on the British Gliding Association website. <u>https://members.gliding.co.uk/library/loas/</u>

a flexible use<sup>29</sup> arrangement that would see the closure of some or part of the controlled airspace when it is not required for planned IFR flights. It might be possible to switch the airspace classification according to time of day; for example where a commercial aerodrome has no night-time operations, the classification is downgraded during those hours according to a fixed schedule which is recorded and published through NOTAMs. Longer term, technological developments may allow for real-time flexibility negating those schedule limitations.

# Working in cooperation with the airspace controlling authority

- 168. The cooperation between the CAA and the designated airspace controlling authority on the amendment is a key feature of the Amend stage.
- 169. Any amendment to classification needs a supporting safety argument, and this will be written by the CAA when the best option has been chosen. However, the CAA accepts that it lacks the technical knowledge of a volume of airspace at a local level, because the CAA does not operate the airspace. We will therefore not be able to design the whole amendment on our own.
- 170. The CAA will resource the necessary airspace design expertise, but to support that design work and the necessary safety case we need information from the controlling authority about the utilisation of that airspace. This includes the controlling authority developing the operational procedures and safety case with CAA assistance where required.
- 171. The CAA will produce evidence as to why the change is necessary. We therefore expect full cooperation from the controlling authority and other relevant stakeholders. We recognise that there could be a resource cost incurred by the controlling authority, and the CAA will do its best to minimise this, using our own resources where we can. But any cost the controlling authority does incur should be seen as part of the cost of managing that airspace effectively, in view of the supporting case the CAA will present about the need for change.
- 172. The CAA bears the risk of identifying volumes of airspace and amending the classification correctly, with the controlling authority owning the safety risk by having to prepare the operational procedures and safety case, with our assistance. We mitigate our risk by collecting evidence supporting the change, presenting this to the controlling authority, tasking it with the operational procedures and safety case, and the CAA consulting on the full proposal to make us aware of anything else we may consider taking into account.

<sup>&</sup>lt;sup>29</sup> Note that this differs from Flexible Use of Airspace (FUA), which is a specific airspace management concept defined by ICAO whereby airspace is no longer designated as either pure civil or military airspace, but rather be considered as one continuum in which all airspace user requirements have to be accommodated.

- 173. In the unlikely event that the controlling authority's input is not forthcoming, the Air Traffic Management and Unmanned Aircraft Bill, should it become law, would give the Secretary of State (or the CAA if powers are delegated) new powers to compel that input where it would assist in the delivery of the CAA's airspace strategy.
- 174. If necessary, we have powers under section 71 of the Transport Act 2000 to request any specific documents or information from an air navigation service provider for any purpose connected with our air navigation functions.
- 175. The legislative and policy framework is described on pages 10 to 16.

#### Outputs from proposal development

- 176. In order to complete a draft formal proposal on which to consult relevant stakeholders, the following outputs from the Amend stage so far are needed:
  - operational case for preferred option to take forward for engagement with stakeholders
  - rationale for options chosen/not chosen
  - HAZID (initial identification of safety issue) conducted by the airspace controlling authority for the preferred option
  - identification, in qualitative terms and as far as practicable, of potential environmental implications of the proposed change
  - assessment of how the requirements of section 70 of the Transport Act 2000 have been considered.

## Consulting stakeholders for feedback on the proposal

#### Why we consult

- 177. Our prime consideration is that the amendment can be implemented safely and that it is operationally workable. We also need to consider the implications of the amendment for airspace users and anyone else affected. We do not envisage extensive consultation being necessary at the Amend stage, and the Air Navigation Directions do not specifically require it. However, because the amendments will have impacts on airspace users and other relevant stakeholders, we must consult those affected to make sure that:
  - we clearly communicate our proposed amendment
  - they have an opportunity to inform us of the positive and negative impacts of an amendment, and help us consider mitigations to negative impacts
  - they can see how their views have been captured and considered before we implement an amendment.

#### **Proportionate approach**

- 178. We will follow the best-practice principles on consultation and engagement that are set out in CAP 1616.
- 179. It is our aim to keep this procedure as proportionate as possible, and that includes consultation. If the proposal is a relatively minor change, with few impacts, the best-practice principles on consultation will dictate a proportionate approach. For example, in many cases we may decide that having informed affected stakeholders of a change, we do not need to ask for written responses through a formal consultation. Instead we can get the feedback we need by organising engagement sessions or other events. Nevertheless, the procedure still needs to be transparent. Because stakeholder feedback provided in those sessions or other (public or private) events will not be submitted to us in a formal consultation response but through verbal statements or conversations, we will make it visible through a summary on the webpage with a clear indication of how it has been considered.

#### **Consultation and engagement strategy**

- 180. We cover some of the main principles below. It should be noted, however, that not all of these principles will need to be applied in respect of every proposal.
- 181. For each proposal we develop a stakeholder consultation and engagement strategy. (We use engagement as a catch-all term for developing relationships with stakeholders, whether in writing or through meetings.) We will do so in conjunction with the airspace controlling authority, and where appropriate the airport operator, which may be better placed (in terms of experience and communication channels) to identify relevant, and in particular local, stakeholders. The fundamental principles of effective consultation are targeting the right audience, communicating in a way that suits the audience, and giving the audience the tools to make informative, valuable contributions to the proposal's development. There could be a wide variation between individual proposals depending on the anticipated impact.
- 182. The strategy describes with whom we will engage and how. It sets out who may be affected, positively or negatively, by the proposed change (a stakeholder map), including airspace users, airports using neighbouring airspace or air navigation service providers that might experience consequential impacts as a result of our proposal. Where a change may impact on General Aviation's access to airspace, we will communicate directly with local flying clubs, schools and airfields, as well as with the national bodies representing these types of activity, as appropriate. Should we be able to identify any impacts on specific communities, our strategy will address who needs to be contacted. An option may be to use the airfield's consultative committee, or its local noise management body. As explained earlier in this document, we do not envisage

any significant environmental impacts from a classification change, because these would have been filtered out at an earlier stage in the procedure.

- 183. The stakeholder map may involve some organisations representing airspace users that we consulted at the Review stage, but because it is likely to be more focused at the local level, there will be other interested stakeholders who may be directly impacted. The CAA will therefore normally adopt a targeted approach and, taking advice from the airspace controlling authority, focus our engagement with stakeholders affected by the proposal at the local level where we can.
- 184. As well as this stakeholder map, our strategy for each proposal also includes:
  - how we will inform stakeholders about the consultation
  - how consultation and supporting materials will be developed to suit a range of audiences, such as how technical information will be communicated in an accessible way
  - what opportunities audiences will have to engage and respond (channels used), at which times (timetable of activity), including the period of the consultation
  - the use of the most up-to-date and credible, clearly reference sources of data.

#### **Commencing consultation**

- 185. Once we have finalised our strategy, we can commence our targeted consultation. We do this in a fair, open and transparent manner using, as appropriate, the CAA's consultation website and/or the dedicated webpages on airspace classification. These are the primary means of sharing information between the CAA and consultees. Respondents will be expected to use our consultation website to download documents and to submit their responses including any supporting documents. Those responses will be recorded and published on the website as they are received, subject to the CAA moderating them to remove any unacceptable material.<sup>30</sup>
- 186. We will also use the airspace classification webpage to maintain a transparent record of any other engagement activity with stakeholders throughout the procedure. Doing so will support our interactions with stakeholders and help to explain and justify any changes we might make to the original proposal we are consulting on.
- 187. We will adopt a flexible, best-practice approach when setting a deadline for responses based on the anticipated impact of the proposal, the audience we are consulting and the method of consultation.

<sup>&</sup>lt;sup>30</sup> We will moderate responses solely to prevent publication of defamatory, libellous or offensive remarks, or material that causes legal issues like copyright infringement or personal data. <u>www.caa.co.uk/cap1619</u>.

### Amending the proposal in the light of stakeholder feedback

188. When the period of consultation has ended, we will collate, review and categorise responses. We will then know which responses have the potential to impact on the proposal – because they include new information or ideas that we believe could lead to us modifying or rethinking the proposal – and those that do not. We then look more closely at the former category and decide whether or not it is appropriate to amend our proposal, working closely with the airspace controlling authority. We will be fully transparent about the comments and suggestions we do and do not take on board, and the reasons why. We will do so through a consultation response document that we will publish alongside the final proposal.

# Submission of the final proposal to CAA Airspace Regulation decision-making process

189. Having taken account of stakeholder feedback, the CAA continues to work closely with the airspace controlling authority to complete the final proposal, including implementation requirements.

#### Operational unit implementation plan

- 190. Before the proposal is submitted for decision-making, we will work with the airspace controlling authority to:
  - identify the implementation date to align with the AIRAC (Aeronautical Information Regulation and Control) cycle
  - finalise operational procedures and revisions to local instructions; for example, updates to the Manual of Air Traffic Services (MATS Part 2)
  - develop an implementation plan, ensuring training and awareness material, charting and procedure updates, and AIS submission to promulgate the changes through the Integrated Aeronautical Information Package
  - identify unit system changes (i.e. radar maps, frequency assessment).

# Submission document outlining the CAA's formal proposal for a classification change

191. We formally submit the final proposal, including all relevant documentation from the proposal development, plus the operational unit implementation plan, to the CAA Airspace Regulation team for a decision. The proposal is published on a webpage dedicated to airspace classification, with redactions confined to the minimum where the criteria under the heading 'Transparency' on page 22 (in the overview of the three-stage procedure) are met.

- 192. Notwithstanding the likelihood of classification proposals varying in characteristics, we will structure the submission in accordance with a standard template. This makes it easier for anyone interested in airspace classification changes to see what is being proposed. The template will identify the main characteristics of the proposal (akin to an executive summary) and will be structured using standard headings including safety, operational, environmental and consultation, drawing from the earlier outputs in the procedure. The form of the submission is set out in more detail in Appendix A.
- 193. The default position is that all material in relation to a proposal is published. We anticipate redaction of the minimum information necessary to comply with our legal obligations.
- 194. The decision-making process will assess whether the amendment complies with all relevant implementation requirements for airspace design and does not conflict with the airspace design overall. Although that formal decision would come at the end of the procedure, there would obviously need to be formal discussion between the CAA teams during the design process.
- 195. The CAA will issue a decision that we will publish, countersigned by the CAA's Head of Airspace, ATM and Aerodromes.

# **Reviewing the effectiveness of the change**

- 196. As with any change in airspace design, it is essential that the effectiveness of the change is monitored once implemented. The purpose is to verify that the revised classification (or alternative airspace management solution) is performing as expected, from an operational, safety and environmental perspective, and whether the anticipated impacts and benefits of the change that the CAA approved have in practice been delivered.
- 197. This is not a review of the decision on the classification change, and neither is it a re-run of the original decision process.
- 198. As the proposer of the classification change, the CAA Airspace Classification team will collate information for the creation of a report which it will provide to the CAA Airspace Regulation team. This will normally be a year after implementation. (Of course, if significant issues are identified before then, the CAA will take appropriate action earlier.)
- 199. As the ambition of the change to the classification of airspace will have been to provide greater flexibility for airspace users, the report will require input from airspace users and the controlling authority. The CAA will also review independent surveillance data and reports that will provide an overview of the effectiveness of the change.

- 200. Although the CAA is the proposer of the change, the controlling authority will be better placed than the CAA to monitor many of these impacts, to the extent possible. It will be continually assessing the performance of the airspace for which it is responsible for operational effectiveness and for safety as part of its ongoing safety management system. It will also be the recipient of any noise complaints relating to the airspace, for example. These considerations form the basis of its input to the CAA. Where the controlling authority is no longer responsible for a volume of airspace, its input will reflect that.
- 201. Therefore, as soon as the change is implemented, the controlling authority begins to review how the change is performing. The controlling authority should openly solicit and monitor feedback from airspace users or anyone else impacted. This includes monitoring any complaints from those on the ground about noise. The review should cover the 12 months after implementation, to ensure both summer and winter seasons are included. We allow two months for the controlling authority to give us its input, and we will publish it.
- 202. Stakeholders then have 28 days from publication of this information to submit to us evidence or views about the data that they want taken into account as we begin the review.
- 203. There could be limits to what impacts can be monitored and assessed from an environmental perspective where airspace classification moves to Class G, by the very nature of the airspace. For example, noise complaints in respect of newly uncontrolled airspace may go to a local airfield or the CAA rather than the controlling authority.
- 204. The final report will identify:
  - any impacts different from those expected
  - what modifications are required for impacts that vary from those which were anticipated at the time the CAA made its decision to approve the change, and
  - any learning points where impacts vary from those which were anticipated.

#### Outcome of the review of effectiveness of the change

- 205. Within three months of receiving the information from the controlling authority the CAA will aim to publish its report and state whether we are satisfied with the outcome of the classification change or whether further action is needed.
- 206. We will state whether we consider the outcome open, closed, or partially satisfied:
  - we will consider it closed if the implemented change in operational procedures satisfactorily achieves – within acceptable tolerance limits – the objective and terms of the CAA's approval

- we will consider it open if we are not satisfied with the report (if, for example, we believe the analysis to be inconclusive) and will work with the controlling authority to rectify the shortcomings in the report
- we will consider it partially satisfied if the change requires modifications to better achieve the objective and terms of the CAA's approval.
- 207. In the third case, the CAA will require that those modifications are then further monitored for effectiveness. Once the modifications have been implemented and operated for a period (approximately six months), there are three further possible outcomes:
  - noting that the modifications did not better achieve the objective and terms of the CAA's approval, we may conclude that the original change was satisfactory and is confirmed; or
  - noting that the modifications did not better achieve the objective and terms of the CAA's approval, we may conclude that the original change was not satisfactory and therefore is not confirmed (in which case we will work with the controlling authority on a revised proposal or a reversal of the change, where possible; or
  - we may conclude that the modifications do better within acceptable tolerance limits – achieve the objective and terms of the CAA's approval and so the change will be confirmed.
- 208. Each time we start a new review cycle, we will want to refer to these reports to inform the Consider stage as to whether there are outstanding priorities from a previous review cycle.

#### Appendix A

# Information presented to the CAA Airspace Regulation team for a regulatory decision

The format for the final formal proposal to amend the classification of a volume of airspace presented to the CAA Airspace Regulation team will be consistent with that used for a proposed change in airspace design. The information collated as part of the proposal will follow the template below.

#### 1. Contents

#### 2. Introduction

#### 3. Executive summary

A concise summary of the activity that has led to and influenced the classification change proposal, highlighting any changes to the proposal resulting from feedback to any stakeholder engagement undertaken.

#### 4. Current airspace description

A description of the current operation including the current airspace classification, construct of the airspace, types of aircraft operations, existing local flying agreements and Letters of Agreement, and any identified local constraints that affect the operation.

#### 5. Reason for change

A description of the need for change developed through the Review stage of the procedure, describing the issues and identifying clear objectives to be addressed through any proposed amendment and the type of change that could be considered; a classification change may not be the only or preferred amendment solution.

#### 6. Proposed airspace description

A description of the proposed airspace design and operation, including the proposed amended airspace, any controlling authority changes of responsibility, required local agreements and procedures and any potential usage description and data that supports it.

#### 7. Impacts and consultation

A summary of the airspace classification amendment engagement activities, who with and why, to inform the potential impact considerations of any proposal.

#### 8. Analysis of options

A summary of any other options considered and why the proposed option was chosen.

#### 9. Airspace description requirements

A fuller description of the proposed change, building on item 6 above, including the airspace classification and amended dimensions, detail of any local procedures and agreements, how it addresses the reasons for change, any controlling authority arrangements and the potential use of the airspace, such as level of demand and types of traffic, if known.

#### 10. Safety assessment

Developed in accordance with CAP 760 Guidance on the Conduct of Hazard Identification, Risk Assessment and the Production of Safety Cases: For Aerodrome Operators and Air Traffic Service Providers.

#### 11. Operational impact

A description of the potential impact of the change on all airspace users, a usage estimate of the airspace volume, and who, if any, have management responsibilities within the revised airspace volume.

#### 12. Supporting infrastructure/resources

Outline of the supporting infrastructure and resources considering the implications on Communications, Navigation and Surveillance requirements and the associated ground infrastructure and contingency procedures as required.

#### 13. Airspace and infrastructure

The airspace amendment shall comply with the airspace and infrastructure requirements set out in UK policy or ICAO standards and recommended practices. Any differences should be explained and evidenced for that difference presented.

The intended timing of the amendment will be notified here and aligned with the AIRAC cycle.

Amendment notification and training requirements to deliver the amendment will be described along with identification of the stakeholders impacted.

#### 14. Operational agreements

The need for operating agreements shall be considered as part of the proposal.

Should there be any other aviation activity (military low flying, gliding, parachuting, microlight site etc) in the vicinity of the reclassified airspace and no suitable operating agreements or air traffic control procedures can be devised, the CAA shall act to resolve any conflicting interests.

#### 15. Environmental assessment

Environmental assessments will be based on qualitative statements; data on movement types and demand will be included where available and known with indications of potential impacts where these can be reasonably predicted. The environmental assessment should take into account noise impacts, CO<sub>2</sub> emissions, local air quality and impact upon tranquillity, notably on Areas of Outstanding Natural Beauty or National Parks.

The impacts shall be summarised and conclusions described. If there is expected to be no impact on any or all of the above there should be a rationale to explain that conclusion.

#### 16. Annexes

Supporting evidence and agreements reached in the development of the amendment proposals will be included as annexes.

#### Appendix B

# Glossary

Although we have avoided the use of abbreviations where possible in this document, in the interests of completeness we have included below some common abbreviations – as well as other terms – that relate to airspace classification or airspace change.

Term	Abbreviation	Description
Advisory route	ADR	A designated route along which air traffic advisory service is available.
Aerodrome traffic zone	ATZ	Aerodrome traffic zone – normally, circular zones around an aerodrome where pilots and ATS providers must follow specific requirements.
Aeronautical Information Publication	AIP	Long-term information essential to air navigation, including the detailed structure of UK airspace and flight procedures, which forms part of the UK Integrated Aeronautical Information Package. Sometimes informally known as the Air Pilot. Publication is the responsibility of the CAA but is carried out under licence by NATS. www.ais.org.uk
Aeronautical Information Regulation and Control	AIRAC	For operationally significant changes, the AIRAC cycle is used where revisions are produced every 56 days (double AIRAC cycle) or 28 days (single AIRAC cycle). These changes are received well in advance so that users of the aeronautical data can update their flight management systems that are used to guide aircraft along their flightplans.
Aeronautical Information Regulation and Control cycle	AIRAC cycle	28-day cycle over which changes to the AIP are made. See Aeronautical Information Regulation and Control.
Air Navigation Directions		The Civil Aviation Authority (Air Navigation) Directions 2017 (as amended) set out the CAA's air navigation duties and are jointly issued by the Secretary of State for Transport and the Secretary of State for Defence. For ease of reference, the CAA also produces a consolidated version. These can be found at: <u>https://www.caa.co.uk/Commercial- industry/Airspace/Airspace-change/Legislative- framework-to-airspace-change/</u>

Air Navigation Guidance	ANG	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, October 2017, Department for Transport Guidance from the Secretary of State which the CAA is required to take account of when considering airspace change or PPR proposals. https://www.gov.uk/government/publications/uk- air-navigation-guidance-2017
Air navigation service provider	ANSP	An organisation which operates the technical system, infrastructure, procedures and rules of an air navigation service system, which may include air traffic control.
Air traffic control	ATC	Service from an air navigation service provider providing guidance to aircraft through controlled airspace.
Air traffic management	АТМ	The combined processes of air traffic control, air traffic flow management, and aeronautical information services. ATM can also mean air transport movement.
Air traffic service	ATS	Generic term that covers flight information services, alerting services, air traffic advisory services, air traffic control services (area control service, approach control service or aerodrome control service) and aerodrome flight information services.
Air transport movement	АТМ	Air transport movements are landings or take- offs of aircraft used for the transport of passengers, cargo or mail on commercial terms. ATM can also mean air traffic management.
Airspace Change Organising Group	ACOG	The Airspace Change Organising Group was established in 2019 to coordinate the delivery of key aspects of the Airspace Modernisation Strategy. It operates impartially and is overseen by the CAA and Department for Transport. <u>https://www.ourfutureskies.uk/about-us/who-are- acog/</u>
Airspace change process		The staged process an airspace change sponsor follows to submit a proposed change in airspace design to the CAA for a decision. <u>www.caa.co.uk/cap1616</u>
Airspace change proposal		A request (usually from an airport or air navigation service provider) for a permanent change to the design of UK airspace.

Airanaaa		Airanaaa alaasificationa ara dafinad hu tha
Airspace classification		Airspace classifications are defined by the International Civil Aviation Organization. In the UK, controlled airspace will normally be Class A, C, D or E. The normal default background classification will be Class G, unless flight safety or air traffic management reasons require a higher classification.
Airspace controlling authority		The aerodrome or air navigation service provider responsible for the air traffic service delivered in an airspace volume.
Airspace design		Together, the airspace structure and flight procedures.
Airspace infringement		When an aircraft enters controlled airspace without having previously obtained permission to do so from the airspace controlling authority.
Airspace Modernisation Strategy	AMS	A co-ordinated strategy and plan for the use of UK airspace for air navigation up to 2040, including for the modernisation of the use of such airspace. prepared and maintained by the CAA, incorporating the previous Future Airspace Strategy. <u>www.caa.co.uk/cap1711</u> The CAA must report to the Secretary of State annually on the delivery of the strategy. <u>https://www.caa.co.uk/Commercial- industry/Airspace/Airspace-Modernisation- Strategy/About-the-strategy/</u>
Airspace Modernisation Strategy governance structure		Governance structure for airspace modernisation, designed to oversee the delivery of the initiatives contained within the Airspace Modernisation Strategy. <u>www.caa.co.uk/cap1711b</u> See above for progress report updates.
Airspace structure		Designated volumes of airspace within identified characteristics, including the equipment aircraft wanting to enter that airspace must carry and actions pilots must carry out before entering that airspace.
		The volumes of airspace are designed to ensure the safe and optimal operation of aircraft. Airspace structures consist of:
		<ul> <li>(a) controlled airspace, namely control zones, control areas, terminal control areas and airways</li> </ul>
		(b) airspace restrictions, namely danger, restricted and prohibited areas
		(c) radio mandatory zones, transponder mandatory zones
		(d) other airspaces specified by the CAA when defining the airspace change process, such as, for example, flight information zones, aerodrome traffic zones, temporary segregated areas, temporary reserved areas or free-route airspace.

Airspace4All Ltd	A4A	Implementation group representing VFR (Visual Flight Rules) community interests (including General Aviation) in airspace matters, including modernisation strategy. Formerly known as the Future Airspace Strategy VFR Implementation Group Ltd (FASVIG). <u>https://airspace4all.org/</u>
Airway		A corridor of controlled airspace of defined width with a defined lower base, extending to Flight Level 245 (a nominal altitude of 24,500 feet) unless otherwise denoted.
Area of outstanding natural beauty	AONB	An area of countryside which has been designated for conservation because of its significant landscape value, recognising its national importance.
CAP 1616		See airspace change process.
Carbon dioxide	CO <sub>2</sub>	Naturally occurring atmospheric gas, which causes greenhouse effects leading to global warming, and ocean acidification in increased concentrations.
Classes or classification of airspace		See airspace classification.
Conditional route		An airspace route that is only available under certain circumstances.
Consultation		Formal process seeking input into a decision, undertaken in line with the Gunning Principles, and government guidance.
Control area	СТА	Area of controlled airspace, usually surrounding an aerodrome, extending from ground level to a specified altitude.
Control zone	CTR	Area of controlled airspace, usually surrounding an aerodrome, extending between two specified altitudes.
Controlled airspace	CAS	Airspace in which air traffic control must have control over aircraft to maintain safe separation between them.
Danger Area		Airspace within which activities dangerous to the flight of aircraft may exist at notified times.
Electronic conspicuity	EC	Electronic or digital means of alerting others to the position of an aircraft.

En-route phase		That part of the flight from the end of the take- off and initial climb phase to the commencement of the approach and landing phase.
Engagement		Catch-all term for developing relationships with stakeholders, covering a variety of activities including but not limited to consultation, information provision, regular and one-off meetings and fora, workshops and town hall discussions.
Flexible use of airspace	FUA	A specific airspace management concept based on the fundamental principle that airspace should no longer be designated as either pure civil or military airspace, but rather be considered as one continuum in which all airspace user requirements may be accommodated by varying classification and/or access rules.
Flight information region	FIR	Specified region of airspace, coordinated through the International Civil Aviation Organization.
Flight procedures		Part of the airspace design. A set of predetermined segments intended to be followed by a pilot when arriving to or departing from an aerodrome.
Flight rules		Aircraft can operate under Visual Flight Rules (VFR) or Instrument Flight Rules (IFR). There is also an intermediate form, Special Visual Flight Rules (SVFR).
General Aviation	GA	Essentially all civil flying other than commercial airline operations, which therefore encompasses a wide range of aviation activity from microlights, gliders and balloons to corporate business jets, and includes all sport and leisure flying.
Gunning principles		Principles that set out the legal expectations surrounding formal consultation.
Independent Commission on Civil Aviation Noise	ICCAN	The independent UK body responsible for creating, compiling and disseminating best practice to the aviation industry on the management of civil aviation noise and advising government in this area.
Instrument approach procedure	IAP	A set series of aircraft manoeuvres from the initial approach to landing.
Instrument flight procedures	IFP	Procedures designed to international/ national criteria, published in the UK AIP, flown by aircraft with reference to ground-based or satellite-based navigation aids and most usually associated with arrival at or departure from an airport.

Instrument flight rules	IFR	The rules under which a pilot can fly and navigate an aircraft, in certain weather conditions, primarily through use of on-board instruments.
International Civil Aviation Organization	ICAO	The agency of the United Nations responsible for international standards for civil aviation which the UK is bound by international treaty to implement.
International Civil Aviation Organization standards and recommended practices	ICAO SARPs	Technical specifications set by the International Civil Aviation Organization for aviation, implemented and regulated national by states globally to manage safety risks.
Letter of Agreement	LoA	Operational agreement between air navigation service providers and airspace users.
Local air quality	LAQ	Measure of pollutants in the air.
Lower air traffic services route	Lower ATS Route	An air traffic route notified in the UK aeronautical information publication in lower airspace.
Lower airspace		Controlled airspace below Flight Level 245 (a nominal altitude of 24,500 feet).
Manual of Air Traffic Services	MATS	The Manual of Air Traffic Services (MATS) contains procedures, instructions and information which are intended to form the basis of air traffic services within the UK. It is published for use by civil air traffic controllers and for the general interest of a wider audience. It is arranged in two parts.
Manual of Air Traffic Services Part 1	MATS Pt 1	Instructions that apply to all UK Air Traffic Service Units (published by the CAA as CAP 493 <u>www.caa.co.uk/cap493</u> )
Manual of Air Traffic Services Part 2	MATS Pt 2	Instructions that apply to a particular Air Traffic Service Unit, produced locally and approved by the CAA, amplifying and interpreting, at local level, MATS Part 1 instructions. It underpins how an air navigation service provider's air traffic controllers manage aircraft, and in turn influences their decisions. Any authorisation required by MATS Part 1 appears in the MATS Part 2.
National Air Traffic Management Advisory Committee	NATMAC	National Air Traffic Management Advisory Committee. An advisory body chaired by the CAA with representation across the UK aviation community, consulted for advice and views on airspace management and strategy matters.
NATS		The biggest air navigation service provider in the UK, formerly National Air Traffic Services. Parent company of NERL (NATS (En Route) plc) and NSL (NATS Services Limited). <u>www.nats.co.uk</u>

NATS En Route plc	NERL	Subsidiary of NATS Holdings Ltd and the sole provider of air traffic control services for aircraft flying en route in UK airspace. NERL also provides some air traffic control services in the eastern part of the North Atlantic, as well as providing a combined approach function (London Approach) for five London airports.
NATS Services Ltd	NSL	Subsidiary of NATS Holdings Ltd providing air traffic services on a commercial basis.
Noise preferential route	NPR	Aircraft departing from certain airports follow set departure routes agreed by government or the local authority, with the aim of providing certainty in respect of, and, where possible, minimising noise impacts on the ground. Noise Preferential Routes are not decided by the CAA.
Non-governmental organisation	NGO	An organisation that is neither a part of a government nor a conventional for-profit business.
NOTAM		A notice distributed by means of telecommunication containing information concerning the establishment, condition or change in any aeronautical facility, service, procedure or hazard, the timely knowledge of which is essential to personnel concerned with flight operations.
Notified airspace design		Details of airspace structure and procedures published in the UK Aeronautical Information Publication.
Operational procedure		In this context, a set of step-by-step instructions relating to air traffic control operations that form part of a written manual.
Options appraisal		A means of assessing the possible different approaches for delivering a desired outcome. As a high-level objective, a comprehensive list of options is derived, which is then whittled down through a shortlist to the optimal option for delivery. At the core of an options appraisal is an assessment of the cost and benefits of the proposal. As part of the analysis, the change sponsor is required to put as many costs and benefits as possible into monetary terms, to allow for a direct comparison between options. When quantification of costs and benefits may not be possible or proportionate, a qualitative description of the costs and benefits can be used. The appraisal must use WebTAG, the Department for Transport's appraisal guidance, for health impacts associated with noise, and potentially for other impacts, where possible.

Performance- based navigation	PBN	A concept developed by ICAO that moves aviation away from the traditional use of aircraft navigating by ground-based beacons to a system more reliant on airborne technologies, utilising area navigation and global navigation satellite systems. (Air Navigation Guidance 2017). More specifically, area navigation based on performance requirements for aircraft operating along an ATS route, or an instrument approach procedure or in a designated airspace. (ICAO Doc 9613) <u>https://www.icao.int</u>
Planned and permanent redistribution of air traffic	PPR	A category of airspace change where there is no change in airspace design, but there is a planned and permanent redistribution of air traffic through changes in air traffic control operational procedure. "Planned and permanent" means other than a day-to-day or at the time decision taken by an air traffic controller or other decision- maker.
Planned/Preferred Departure Route	PDR	See Standard Departure Route.
Portal		The CAA's airspace change portal – an online portal containing details of all current and previous airspace changes, including the ability to respond to consultations. <u>https://airspacechange.caa.co.uk</u>
Prohibited area		An area of airspace of defined dimensions within which the flight of aircraft is prohibited.
Radio mandatory zone	RMZ	Defined airspace structure in which the carriage and operation of radio equipment is mandatory unless previously agreed.
Relevant PPR		The subset of PPRs which must be approved by the CAA before a proposed change can be implemented.
Remotely piloted air system	RPAS	A powered aircraft without a human pilot on board which is piloted remotely, also known as an unmanned aerial system or vehicle (UAS or UAV) or drone.
Representative group		Stakeholder group that gathers together those with similar interests in a proposal. It could be at an industry level (for instance the Airport Operators Association), national level (for instance the Aviation Environment Federation) or local level (for instance HACAN).
Restricted area		An area of airspace of defined dimensions within which the flight of aircraft is restricted in accordance with certain conditions.
Safety buffer requirement		CAA policy setting out requirements for a safety buffer between classes of airspace.

Secondary surveillance radar	SSR	Type of radar which both detects and sets position of aircraft in the air, and also receives information from the aircraft.
Single European sky	SES	European legislation that supports a programme of modernisation and harmonisation of airspace structures and air traffic control methods for a more systemised and efficient European air traffic management system.
Special visual flight rules	SVFR	A special case of operating under visual flight rules.
Sponsor (or change sponsor)		An organisation that proposes, or sponsors, a change to the airspace design in accordance with the CAA's airspace change process.
Stakeholder		A party interested in a change in airspace design or classification or a PPR proposal.
Standard arrival route	STAR	Published flight procedures followed by aircraft on an Instrument Flight Rules (IFR) flightplan just before reaching a destination airport. More specifically, a STAR is a designated IFR arrival route linking a significant point, normally on an ATS route, with a point from which a published Instrument Approach Procedure (IAP) can be commenced.
Standard departure route	SDR	ICAO uses this term to refer to IFR departure routes in general. Certain UK aerodromes use either this term or 'Preferred Departure Route' or 'Planned Departure Route' (both PDR) to define IFR departure procedures that leave, or remain outside, controlled airspace and have no direct connectivity to the en-route ATS system. However, misinterpretation of each of these terms and inconsistency in their application has led to confusion as to the purpose and application of such procedures. Therefore, it is the CAA's intention to progressively remove all references to both terms in order to remove such confusion. Within the UK, the term Standard Instrument Departure (SID) is the sole term to be used in the context of routes providing designated IFR departure procedures that remain wholly within controlled airspace and permit direct connectivity with the en-route ATS system. See CAP 778, Policy and Guidance for the Design and Operation of Departure Procedures in UK Airspace (paragraph 1.3) <u>www.caa.co.uk/cap778</u>
Standard instrument departure	SID	Published flight procedures followed by aircraft on an Instrument Flight Rules (IFR) flight plan immediately after take-off. More specifically, a SID is a designated IFR departure route linking the aerodrome or a specified runway of the aerodrome with a specified significant point, normally on a designated ATS route, at which the en-route phase of a flight commences.

Terminal air navigation services	TANS	Terminal air navigation services comprise two elements: the 'radar approach and departure' (approach control) service, and the aerodrome control service. The approach service typically takes control of the aircraft from the en-route service within 40–50 nautical miles of the airport, and sequences aircraft for landing before handing over to aerodrome control. It also takes control of aircraft on departure from aerodrome control. Aerodrome control manages (visually from the airport's control tower) aircraft taking off and
		landing, and ground movement control of aircraft taxiing between the runway and the stands. These two elements of terminal air navigation
		services are provided by the airport (acting as an air navigation service provider) itself, or by a third-party air navigation services provider.
Terminal control area		Area of controlled airspace surrounding an airport.
Terminal manoeuvring area	ТМА	A designated area of controlled airspace surrounding a major airport where there is a high volume of traffic.
Tranquillity		There is no universally accepted definition of tranquillity. In general terms it can be defined as a state of calm. The consideration of impacts upon tranquillity for airspace changes is with specific reference to National Parks and Areas of Outstanding Natural Beauty (AONB), plus any locally identified 'tranquil' areas that are identified through community engagement and are subsequently reflected within an airspace change proposal's design principles.
Transponder mandatory zone	ТМΖ	Defined airspace structure in which the carriage and operation of transponder equipment is mandatory unless previously agreed.
Transport Analysis Guidance	WebTAG	DfT transport options analysis and modelling tool and associated guidance. <u>https://www.gov.uk/guidance/transport-analysis-</u> guidance-webtag
Uncontrolled airspace		Airspace in which aircraft are able to fly freely through the airspace without being constrained by instructions in routeing or by air traffic control, unless they require an air traffic service.
Unmanned aerial system	UAS	See RPAS.
Unmanned aerial vehicle	UAV	
Upper airspace		Controlled airspace above Flight Level 245 (a nominal altitude of 24,500 feet).

Visual flight rules	VFR	The rules under which a pilot can fly and navigate an aircraft, in certain weather conditions, by seeing where the aircraft is going.
Visual reference point	VRP	Fixed point on land or sea used by pilots to fix position of their aircraft in relation to their route.
WebTAG		See Transport Analysis Guidance.