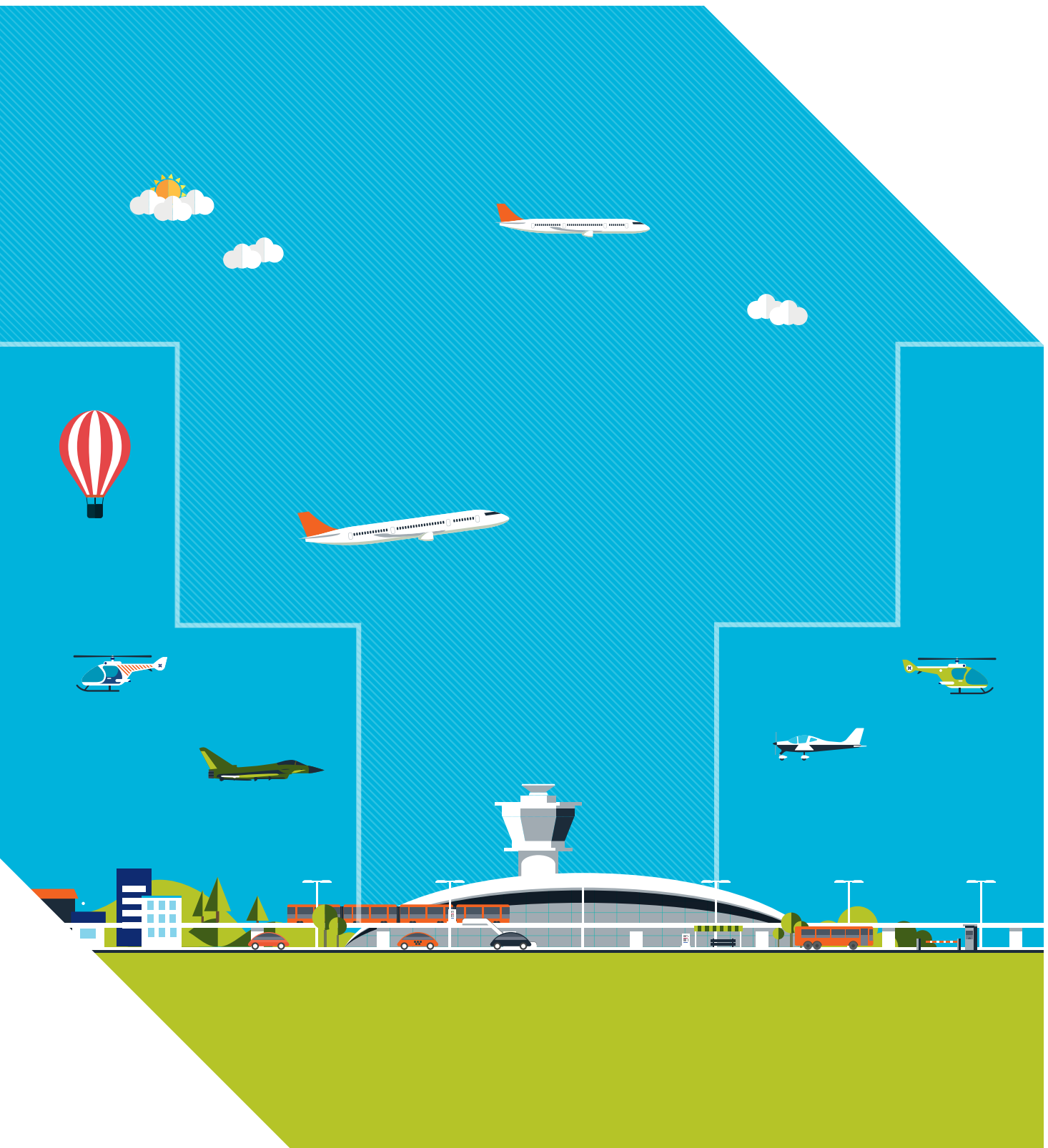


Draft for consultation



Draft airspace design guidance

CAP 1520



Tier categories	Tier 1	Stage 1	Stage 2	Stage 3	Stage 4	Stage 5	Stage 6	Stage 7	Backgrd Info
Glossary	Tier 2/3	A: S of Need	B: Environment	C: Consultation	D: Design	E: Options	F: Submission	G: Decision	H: PIR

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Enquiries regarding the content of this publication should be addressed to: airspace.policy@caa.co.uk

The latest version of this document is available in electronic format at www.caa.co.uk, where you may also register for e-mail notification of amendments.

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 • the law and who is involved
[CLICK HERE](#)

For more information about:
 • categories of airspace change
[CLICK HERE](#)

For more information about:
 • appraisals of airspace design options
[CLICK HERE](#)

For more information about:
 • consultation and engagement
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For more information about:
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Introduction

What is airspace?

1. In its simplest terms, airspace is the portion of the atmosphere controlled by a State above its territory and areas over the sea within which a State is committed by international treaty to provide air navigation services (which includes air traffic control). It is an invisible national asset. For air traffic control purposes, airspace can be divided into two main categories, controlled and uncontrolled. Controlled airspace is where air traffic control needs to have positive control over aircraft flying in that airspace to maintain safe separation between them. Uncontrolled airspace is airspace where aircraft are able to fly freely without being constrained by instructions in routeing or by air traffic control, unless they request such a routeing or control service.
2. Controlled airspace contains a network of corridors, or airways. They link the busy areas of airspace above major airports. At a lower level, control zones are established around each airport. These portions are therefore nearer the ground and closer to population centres. The CAA 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 its international obligations.
3. The defined blocks of controlled airspace, and flight procedures and routes within them such as standard departure and arrival routes, are together part of the overall airspace design. This airspace design is published in the UK Aeronautical Information Publication (AIP).

Changes to airspace

4. Changes to the design of UK airspace are proposed by an airspace change sponsor, usually an airport or a provider of air navigation services (including air traffic control). The CAA requires the change sponsor of any permanent change to the published airspace design to follow our **airspace change process**.
5. Airspace change proposals vary greatly in terms of size, scale of impact and complexity. Some may have little noticeable operational or environmental impact. Others may require a complex restructuring of airspace with consequences both for airspace users and the environment, including people on the ground impacted by noise. Because controlled airspace carries with it requirements that affect the aircraft and pilots that fly in it, an airspace change can impact airspace users in different ways. In addition, a revision to air traffic control procedures may not involve a change to the design of UK airspace, but it may still have consequences for other airspace users, the environment and people on the ground.
6. Subject to operational constraints (including safety), the design of airspace, and the airspace change process, do not specify, or limit future increases in, the volume of air traffic using a piece of airspace at any given point in time. The volume of air traffic using an airport may however be addressed by land-use planning conditions, where relevant.

CAA role

7. The CAA, as the independent aviation regulator, has responsibility for deciding whether to approve 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 design of airspace includes new and established air traffic routes and the areas which commercial aircraft use to fly into and out of airports, and the airspace allocated for use by military flights and General Aviation (i.e. private or recreational) flyers.¹

1. The definition of General Aviation varies, but is essentially all civil flying other than commercial airline operations. It therefore encompasses a wide range of aviation activity from powered parachutes, gliding and ballooning to corporate business jets, including all sport and recreational flying.

Introduction

8. We make these decisions in accordance with legal requirements to consider certain factors which include safety, the environment and the needs of users of airspace. For example, changes may be needed to enable UK airspace to accommodate more flights, to incorporate new technology, to allow aircraft to fly more direct routes or to keep them away from particular areas. When we are asked to consider a change to the design of UK airspace, we will consider the objective of the change. Before deciding whether to agree any change we then have to consider a range of factors set out in section 70 of the Transport Act 2000, including safety, security, operational and environmental impacts such as aircraft noise and emissions.

For more information about:

- **airspace**
- **the CAA's role**

CLICK HERE

The text in this section refers to the policy proposals and draft guidance on which the Department for Transport is currently consulting (click here for details). Should Government Directions, policy and guidance change after the consultation, this section will be updated accordingly.

9. In [2017], the CAA was given an additional role by the Government. As well as deciding whether to approve changes to the airspace design (which we now refer to as **Tier 1** changes), the CAA is also now responsible for approving some changes to the way the airspace is used within an existing airspace design, where procedures used by air traffic control are changed that have a potential noise impact on people on the ground. (We now refer to such changes as **Tier 2** changes.)

10. The Government also now requires the CAA to set guidance for the aviation industry to follow to give local communities better information about the noise impacts from other factors causing a change in the distribution of flights over time, including information on potential ways to mitigate adverse impacts. These factors include new destinations, new aircraft types, increasing demand by airspace users, and the introduction of new technology. The CAA has no approval role or legal enforcement powers here, but will promote best practice and improve transparency. (We now refer to such changes as **Tier 3** changes.)

For more information about:

- **categories of airspace change**

CLICK HERE

11. The CAA has reformed the airspace change process to ensure that it meets modern standards for regulatory decision-making, and is fair, transparent, consistent and proportionate. The process must be impartial and evidence-based, and must take account of the needs and interests of all affected stakeholders.
12. While not everyone will agree with every potential decision that changes the UK's airspace design, we want the methods used to reach those decisions to be well understood and respected.

For more information about:

- **current and past airspace change proposals**

CLICK HERE

Introduction

13. To ensure that the needs of all stakeholders are met, the process emphasises the importance of engagement. Engagement is the catch-all term we use to mean developing relationships with stakeholders, covering a variety of activities. Consultation, or a formal, notified period seeking input from stakeholders on proposals, is one element of engagement within the process, but engagement can also include information provision, regular and one-off meetings and fora, workshops, and ‘town hall’ discussions and other contact with third parties. The CAA takes a prominent role in approving the change sponsor’s consultation strategy.
14. Outside the airspace change process, the CAA undertakes regular stakeholder engagement with local communities, airports, air navigation services providers, General Aviation and the military at which national policy or process issues can be discussed. The responsibility for engaging with and informing communities about specific airspace change proposals rests with the change sponsor. The CAA should only engage with stakeholders at defined points in the process, and then in a fair and transparent way.

Who is this document for?

15. This document is intended to be read by the following stakeholders with an interest in changes that impact airspace, in no particular order:
- Sponsors of airspace change proposals. The change sponsor is usually an airport operator or an air navigation services provider, or the two in partnership may put forward a joint proposal. But a proposal can be put forward by anyone, including the Ministry of Defence, General Aviation stakeholders, or members of a local community.

- Communities affected by aviation noise or other environmental impacts, their representatives, councils and other elected representatives, bodies with an interest in aviation’s environmental impact
- Other service providers such as air traffic control and airports
- Airspace users, including airlines and other commercial operators, General Aviation and the Ministry of Defence
- The users of air transport services, i.e. passengers and shippers.

How to read this guidance document

16. This guidance document is divided into categories of airspace change – Tiers 1, 2 and 3, with three elements to Tier 1 (1a, 1b and 1c).
17. The main part of this guidance document concerns Tier 1a, the seven-stage airspace change process used for permanent changes to the published airspace design. The document guides you through each stage and describes what will happen at each stage of it, and why.
18. There are other ways that the airspace design or the way it is used can change, and the impacts of such changes can also vary greatly. Therefore this guidance also has shorter sections on the processes that apply to the other tier categories. These are Tiers 1b and 1c covering temporary changes and trials respectively, and Tiers 2 and 3 covering changes other than to the formal airspace design (as explained in paragraphs 9 and 10 above).
19. The appendices go into more detail about how to undertake or engage in various tasks associated with these processes. The appendices include the templates that need to be used, information about aspects that might need to be considered, and examples of best practice. The subjects covered by these appendices are:

Introduction

- preparing the Statement of Need ([appendix A](#))
 - environmental assessment of the impacts of the proposed change – including noise, CO₂ emissions and local air quality – and the metrics used ([appendix B](#))
 - consultation and engagement with stakeholders ([appendix C](#))
 - airspace design principles ([appendix D](#))
 - options appraisal ([appendix E](#))
 - preparing a formal proposal for submission to the CAA ([appendix F](#))
 - post-implementation review of the change ([appendix H](#)).
20. There are also two appendices for reference:
- CAA decision criteria ([appendix G](#))
 - a glossary of terms used in airspace change ([appendix I](#)).

Webpages with factual information

21. If you have questions about the process which this guidance does not answer, first look at the information on the CAA website at www.caa.co.uk/airspacechange. The CAA website has several pages of related factual information, including:
- [what is airspace](#) and what is an airspace change?
 - [\[to be added once portal in place\]](#) the airspace change portal, including the CAA's policy on moderating material uploaded to the portal and our obligations to disclose information²

² 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.

- the [Future Airspace Strategy](#)
- the [legal and policy context](#) within which the CAA must work, including Government Directions, the CAA's statutory objectives when carrying out this task and guidance and policy from government.

22. If you need more help in understanding any of these issues, then please email us at airspace.policy@caa.co.uk, but please be aware that we will only answer questions about national policy and process through this address, and not issues about specific airspace change proposals.

Legal framework

The text in this section refers to the policy proposals and draft guidance on which the Department for Transport is currently consulting ([click here for details](#)). Should Government Directions, policy and guidance change after the consultation, this section will be updated accordingly.

23. Under section 66 of the Transport Act 2000, the Secretary of State has given the CAA a number of airspace-related functions including: the duty to develop policy and strategy on the use and classification of airspace; to publish the UK airspace design; and to approve changes to it. Under section 70 of the Transport Act 2000, we have a duty to take a number of factors into account when considering whether to agree to an airspace change proposal, including taking account of specific guidance on our environmental objectives contained within the Air Navigation Guidance (last updated in [\[month, year\]](#)).

For more information about:
 • [the law and who is involved](#)
CLICK HERE

Introduction

Purpose of this guidance

24. The CAA's airspace change process in this published guidance sets out how we give effect to our role to approve changes to airspace design, and to the law and policy which govern our role. This guidance sets out the framework for the stages of the process and activities involved, from the conception of the need for a change to the airspace design, to consulting and engaging with those potentially impacted, assessing the impacts of different design options from a safety, operational and environmental perspective, and ultimately regulatory decision. Additionally, if the change is approved, this guidance covers implementation and subsequent review of that change.
25. All airspace change proposals are different, and often there are differing requirements and interests that may conflict. Where this happens, the law requires us to consider certain relevant factors and make the decision we think is reasonable, having regard to those factors as a whole. This means considering the needs of those requesting the change together with those affected by an airspace change proposal, whether they be other airspace users, service providers like airports, or those on the ground. It is therefore important for all parties to understand how the airspace change process works and how the CAA will reach its decision both in terms of process and the decision-making criteria.
26. It is therefore essential that the CAA publishes comprehensive, effective and accessible guidance material setting out:
- any government or CAA policies we are applying when making our decision
 - the process we will follow
 - what we expect from airspace change sponsors or others involved in the process
 - how we scale the process so that it remains proportionate to the aims.
27. A clear and consistent airspace change process requires effective guidance material. A lack of specific guidance could otherwise create variation in the approaches to airspace change proposals. For example, variation in the content of consultation documents can be interpreted as the change sponsor deliberately attempting to hide or obfuscate information, and the need for material to be clarified tends to lengthen the process. Our guidance also needs to be comprehensive, transparent, easy to use, and comprehensible to different audiences. It cross-references relevant reference documents for the technical design criteria that a change sponsor must adhere to.
28. This single guidance document is intended to be comprehensive. However, it will inevitably not anticipate all circumstances nor provide all of the answers that interested parties may need. Some issues will be local in nature or specific to a particular change where there is little past precedent. This is why the CAA assigns a project manager from its Airspace Regulation team to a specific change proposal to act as a focal point to provide such additional clarification and advice to the airspace change sponsor on how to implement the guidance where needed. Should it be necessary for the CAA to provide additional guidance to the change sponsor, the CAA will publish it.

Introduction

The relationship between CAA guidance and Government policy

29. It is important to recognise the difference between this process and the law and government policy concerning airspace (and in particular that concerning environmental impacts). The CAA's airspace change process must operate within the Government's policy framework. The CAA works closely with the Government to ensure clarity around our respective policy and decision roles in the airspace change process. However, the CAA cannot review government policy, nor can it make an airspace change decision that does not give effect to that policy.
30. The airspace change process is not designed to be a referendum on views, but it is designed to reach an outcome fairly having regard for the views of all the various stakeholder groups and having considered those views in accordance with section 70 of the Transport Act 2000. To achieve this outcome, there will have to be trade-offs where there are conflicting objectives, which could mean that some parties are more affected than others.

Every airspace change proposal is different and each is considered on a case-by-case basis. Some trade-offs are the subject of over-arching government policy, such as the altitude-based priorities, which determine how competing environmental priorities should be handled (see [Appendix B](#) for more information). Within the framework of government policy and legislation, the CAA is open-minded about the outcome of any airspace change proposal.

31. Although the Ministry of Defence is part of the Government, it can also be a change sponsor in its own right. Further, a civil change sponsor should treat the Ministry of Defence as an interested stakeholder and thus include it among the consultees in any consultation about an airspace change proposal. The CAA also has its own statutory obligations with regard to national security that will involve the Ministry of Defence.

Categories of airspace change

The text in this section refers to the policy proposals and draft guidance on which the Department for Transport is currently consulting (click here for details). Should Government Directions, policy and guidance change after the consultation, this section will be updated accordingly.

Introduction

32. There are many different ways that airspace design or the way airspace is used can change. The impacts of such changes will also vary greatly. A formal change to the airspace design may be just a change in nomenclature used by the aviation industry that has no effect other than an update of the relevant systems and manuals. Whereas, in contrast, it is possible for the airspace design to remain unchanged but the noise impacts on the ground to be altered considerably if aircraft are directed by air traffic control in a different way from before.
33. This section explains how these different changes are categorised into 'tiers' in line with guidance from the Government.

Three tiers of airspace change

34. Government guidance defines a three-tiered structure for airspace change, with Tier 1 itself having three sub-tiers. It is important to note that the formal airspace change process set out for Tier 1a only applies where a change is proposed to the published (or 'notified') airspace design.³ This guidance also explains the separate processes that apply for other types of change.
35. The largest section of this guidance concerns the formal airspace change process which the change sponsor is required to follow for a Tier 1a change, which is a permanent change to the 'notified' airspace design.

3. The airspace design is published in the UK Aeronautical Information Publication www.ais.org.uk.

36. Tier 1 incorporates two other variations of change to the 'notified' airspace design:
- Tier 1b is a temporary change
 - Tier 1c is a temporary operational trial of potential innovative airspace design or new technology (where the trial may or may not lead to a proposal for a permanent change under Tier 1a).
37. Tier 2 is a change to air traffic control operational procedures by an air navigation service provider causing a permanent and planned redistribution of air traffic, without changing the 'notified' airspace design.⁴
38. Tier 3 is a change in airline or airport operations as a result of weather, commercial decisions (such as routes flown or aircraft type), changing traffic volumes or magnetic variation⁵, causing a noticeable shift in the distribution of flights over a period of time. The CAA has no direct regulatory role in respect of Tier 3 (that is, no decision-making or enforcement powers), but will seek to influence the industry's behaviour regarding those changes through the guidance on best practice in this document.
39. Table 1 on the next page sets out the Government's three-tiered structure for categorising changes to the design of airspace or the way airspace is used.

4. Tier 2 changes may sometimes also be trialled. Any such trial would also be considered under the Tier 2 process (rather than Tier 1c).

5. Magnetic variation is the angle on the horizontal plane between magnetic north (the direction the north end of a compass needle points, corresponding to the direction of the Earth's magnetic field lines) and true north (the direction along a meridian towards the geographic North Pole). Variation changes as the position of the magnetic North Pole drifts, affecting compass bearings.

Categories of airspace change

Table 1: Categories of airspace change

Category of change	Process applying
Tier 1: changes to the 'notified' airspace design	
Tier 1a: A permanent change to the 'notified' airspace design	The airspace change process described in this guidance document
Tier 1b: A temporary change to the 'notified' airspace design (usually less than 90 days, except in extraordinary circumstances)	Before implementation: Stages 1, 3, 4 and 5 of the airspace change process During operation: engagement, monitoring and feedback to the CAA
Tier 1c: A temporary operational trial of potential innovative airspace design or new technology	Before implementation: Stage 1 and information provision During trial: engagement, monitoring and feedback to the CAA
Tier 2: no change to the 'notified' airspace design	
A change to air traffic control operational procedures by an air navigation service provider causing a permanent and planned redistribution of air traffic, without changing the 'notified' airspace design	<i>[Note: The CAA will introduce a suitable process for Tier 2 changes once the outcome of the Government airspace consultation is known – see the separate document forming Annex 2 (CAP 1522)]</i>
Tier 3: other changes to air operations	
A change in airline or airport operations as a result of weather, commercial decisions (such as routes flown or aircraft type), changing traffic volumes or magnetic variation, causing a noticeable shift in the distribution of flights over a period of time	Best practice engagement with communities by airports but no formal CAA involvement

The airspace change process (Tier 1a changes)

The text in this section refers to the policy proposals and draft guidance on which the Department for Transport is currently consulting ([click here for details](#)). Should Government Directions, policy and guidance change after the consultation, this section will be updated accordingly.

Overview

40. The previous section (Categories of airspace change) explained that there are different ways that the airspace design or the way it is used can change. Table 1 sets out the Government's three-tiered structure for airspace change, with Tier 1 itself having three sub-tiers.
41. This section concerns Tier 1a, permanent changes to the 'notified' airspace design, which require the CAA's approval. For such changes the CAA requires the change sponsor to follow the formal airspace change process, which is in seven stages, some of which have more than one step. However, these changes can vary hugely in size, scale and complexity, as explained later in this section. This variation has led the CAA to scale our process appropriately.
42. There are 'gateways' at four points in the process. At each gateway the change sponsor must satisfy the CAA that it has followed the process correctly before it can move to the next stage in the process. This guidance sets out what is needed to proceed to the next gateway.
43. It is important to note that passing a gateway successfully does not predetermine the CAA's final decision on the airspace change proposal. What it does is give more certainty to those interested in the proposal that the CAA has agreed to the steps taken to reach that point in the process.
44. This section is only about permanent changes to airspace design. The process for temporary changes to airspace design and operational trials of potential changes to airspace design are described separately under Tier 1b and Tier 1c respectively.

The seven-stage airspace change process

45. The seven-stage process begins with a meeting between the change sponsor and the CAA about the objective of a proposed airspace change, followed by engagement by the change sponsor with those potentially affected by the proposed change on the underlying design principles (**Stage 1** – completion of the 'Define' gateway). At this point, it may be necessary for the CAA to agree with the change sponsor the timeline against which we can accept the proposal, having regard to submissions by other parties. This is essential if we are to give certainty to the timescales set out in this guidance.
46. Continuing to liaise with stakeholders, the change sponsor develops one or more options and carries out an initial appraisal of the impacts, both positive and negative (**Stage 2** – completion of the 'Develop and assess' gateway). The change sponsor then prepares a consultation and assesses who should be consulted (**Stage 3** – Steps 3A and 3B – completion of the 'Consult' gateway). The change sponsor consults with those interested parties, including, where appropriate, local communities (**Stage 3** – Step 3C). In the light of responses (categorised in **Stage 3** – Step 3D), the change sponsor may modify the proposals before making a formal submission of the proposal to the CAA for a decision (**Stage 4**).
47. The CAA assesses the proposal, may hold a Public Evidence Session, may issue a draft decision and subsequently a final decision, or may issue a 'minded to' decision at the request of the Secretary of State who may have 'called in' the proposal (**Stage 5**). If the proposal is approved, and after it has been implemented (**Stage 6**), the CAA carries out a review of the change (**Stage 7**), usually after 12 months of operation.
48. Figure 1 gives an overview of the different stages of the process.

The airspace change process (Tier 1a changes)

Figure 1: Overview of the airspace change process



Backgrd Info	
Stage 7	G: Decision
Stage 6	F: Submission
Stage 5	E: Options
Stage 4	D: Design
Stage 3	C: Consultation
Stage 2	B: Environment
Stage 1	A: S of Need
Tier 1	Tier 2/3
Tier categories	Glossary

The airspace change process (Tier 1a changes)

Roles and responsibilities

49. The key participants involved in the airspace change process will have the following roles and responsibilities:

- The CAA is airspace regulator and primary decision-maker, and responsible for administering the airspace change process and providing guidance on the process to stakeholders. The CAA is bound by statutory duties and must adhere to Directions and guidance provided by the Government. The CAA runs an online airspace portal⁶ where airspace changes are submitted and monitored, stakeholder comments can be made and viewed, and relevant documentation can be viewed. The CAA will normally assign a project manager from the Airspace Regulation team who will act as a focal point for the airspace change sponsor in respect of a specific airspace change proposal. The CAA is not responsible for developing airspace designs or instigating airspace changes, other than in exceptional circumstances. Such circumstances may include a change to meet international obligations where no individual change sponsor can be identified, or one that is required to implement changes in national policy.
- The change sponsor owns the airspace change proposal and is responsible for developing it, including taking into account feedback from relevant stakeholders, in accordance with the guidance provided by the CAA and by the Government. Anyone can sponsor an airspace change proposal – although it is most typically an airport or an air navigation services provider.

- Stakeholders who may be impacted by airspace change will have the opportunity to discuss with change sponsors the principles underlying the airspace change and the development of options for the change. They will be consulted formally on a proposal and be able to submit information and views on all aspects of the process, in some cases directly to the CAA at a Public Evidence Session. They will have access to all relevant documentation, except for commercially (or national security) sensitive material, on the online portal.⁷
- Parliament and the Government are responsible for setting the CAA's statutory objectives, outlining the CAA's functions and responsibilities and providing guidance to the CAA. For certain types of airspace change, the Secretary of State may also decide to call-in a particular airspace change proposal and to make a decision instead of the CAA, which the CAA will then be required to implement.

6. The online portal is being developed in parallel with the development of this draft guidance.

7. Subject to legislation that requires the CAA to consider requests for us to disclose information that we hold – the Freedom of Information Act 2000 and Environmental Information Regulations 2004.

The airspace change process (Tier 1a changes)

Independent Commission for Civil Aviation Noise

The text in this section refers to the policy proposals and draft guidance on which the Department for Transport is currently consulting ([click here for details](#)). Should Government Directions, policy and guidance change after the consultation, this section will be updated accordingly.

In its consultation the Department for Transport proposed the creation of an Independent Commission on Civil Aviation Noise (ICCAN), which would input into the airspace change process at various points. Other than the text below, this CAA draft guidance on the airspace change process does not take into account ICCAN's proposed role, but the CAA will amend the guidance as necessary once the outcome is known, without consulting further.

50. The Independent Commission on Civil Aviation Noise (ICCAN) will be involved with airspace change proposals at various points within the process.
51. Within the airspace change process, ICCAN's role is to:
 - advise on the best noise management techniques
 - advise on the accessibility of noise information
 - verify noise forecasts and noise data.
52. The CAA expects change sponsors to be mindful of ICCAN's role throughout the process, with particular emphasis at the following points:

Stage 3; Step 3C	The airspace change process described in this guidance document
Stage 3; Step 3D & Stage 4	The change sponsor should set out how it has treated ICCAN's response. If a change sponsor categorises ICCAN's advice and recommendations as potentially impacting on the final proposal, but subsequently elects not to incorporate the advice and recommendations into its final proposal, it must set out its reasoning for doing so. In assessing the proposal, the CAA will consider both ICCAN's advice and recommendations and the change sponsor's reasoning for deviating from them.
Stage 7	ICCAN will provide feedback during the post-implementation review: commenting on the effectiveness of noise mitigations and offering its perspective on the noise impact of the change following implementation. The CAA will consider ICCAN's feedback in deciding whether the change achieved the outcome expected or anticipated when the change was proposed.

53. In addition, ICCAN is expected to produce best-practice guidance on managing aviation noise. The CAA expects airspace change sponsors to be mindful of current best practice and to factor it into a proposal where relevant.

Backgrd Info	H: PIR
Stage 7	G: Decision
Stage 6	F: Submission
Stage 5	E: Options
Stage 4	D: Design
Stage 3	C: Consultation
Stage 2	B: Environment
Stage 1	A: S of Need
Tier 1	Tier 2/3
Tier categories	Glossary

The airspace change process (Tier 1a changes)

Key principles – gateway sign-offs, transparency, stakeholder engagement, proportionality

54. To progress an airspace change proposal to the point where a final decision whether to accept the proposed change is made, the change sponsor will need to satisfy the requirements set out in this guidance. In particular, the change sponsor must demonstrate:

- a genuine need for the airspace change
- that relevant options have been devised with the input of those affected
- that the impacts of those options have been properly assessed through the quality of the safety, operational and environmental analysis
- that a thorough consultation on the chosen option has been carried out and feedback taken into account
- that the formal submission to the CAA as a fully developed airspace change proposal contains all the information that the CAA and other stakeholders need in the right format.

55. If these things do not happen, then the CAA will not allow a gateway in the process to be passed.

Gateway sign-offs

56. To help change sponsors and affected stakeholders track how a proposal is progressing and to give greater certainty that the change sponsor is following the process correctly, the CAA applies a series of four gateway sign-offs during the seven-stage process. A sign-off provides the CAA's approval that relevant requirements and guidance have been adhered to and that the process has been followed up to that point, and gives the change sponsor the CAA's approval to move to the next stage in the process.

The purpose is to minimise any work having to be repeated, particularly in getting the supporting documentation for consultation right. **Passing a gateway successfully does not predetermine the CAA's later final decision on whether to accept the airspace change proposal.** Where the CAA is not satisfied that the requirements have been met, it is likely that the change sponsor would need to revisit the stage(s) concerned.

57. The criteria a change sponsor must meet for passing each of the four gateways and how we expect these to be achieved are set out at the relevant points in this guidance. The gateway assessment is an exercise in which the CAA will review and sign-off documentation evidencing that the criteria have been met. The four gateways and related change sponsor and CAA documents uploaded to the portal are:

- After Stage 1 Define: (a) The change sponsor will upload a short document setting out why the airspace change is an appropriate response to a specified problem or opportunity, and (b) design principles that the change sponsor has developed with stakeholders and will take into account in the design. The CAA will upload a statement accepting the design principles.
- After Stage 2 Develop and assess: an 'Initial' appraisal of each viable design option will be uploaded by the change sponsor and the CAA will upload an assessment of that appraisal.
- After Step 3B of Stage 3 Consultation: a fair, open and transparent consultation strategy and supporting documentation (including a 'Full' options appraisal) will be uploaded by the change sponsor. The CAA will upload its approval of the consultation strategy and documents including an assessment of the 'Full' options appraisal.
- After Stage 5 Decision: a document setting out how the CAA has come to a decision on the airspace change proposal.

The airspace change process (Tier 1a changes)

58. For all gateways except the fourth ('Decision') gateway, the CAA will hold internal monthly meetings for 'gateway assessments', according to a schedule published annually. These assessment meetings are a single, monthly opportunity for a change sponsor to pass a gateway. The annual schedule will ensure that all parties are aware of the potential timelines. The schedule will include deadlines that a change sponsor must meet for its proposal to be considered at each gateway meeting (such as all materials being submitted at least two weeks in advance). Subject to that deadline being met, the CAA will commit to making a decision about whether a gateway has been successfully passed in that meeting (as explained above, gateway sign-off is on process, not on the merits of a proposal). The CAA will record on the online portal whether a gateway has been passed or not.
59. If the CAA deems that a change proposal does not pass a gateway, the CAA will communicate this directly to the change sponsor and record the fact on the online portal, with a clear explanation as to why. Further discussion between the CAA and the change sponsor may be needed.

Transparency

60. A prime objective of the airspace change process is that it is as transparent as possible throughout. Those potentially affected by a change in airspace design should feel confident that their voice has a formal place in the process, if trust is not to be eroded. Openness also allows change sponsors to see more clearly what is expected from them.
61. The default position is therefore that all material in relation to a proposal is published, including documents from and notes of meetings, and the CAA monitors that this is happening. We will consider withholding material:

- for reasons of national security, or
 - which the CAA has agreed with the change sponsor 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).
62. However, we do not anticipate agreeing to withhold large amounts of information and would only accept redaction of the minimum information necessary to comply with our obligations.
63. For the purpose of transparency, the CAA runs an online portal on which change sponsors maintain relevant content. The online portal holds all relevant information on airspace change proposals, including consultation responses. Thus, in particular, interested parties are able to see, and be consulted on where appropriate:
- the original identified need as to why a change in airspace design is being considered
 - how (if at all) the CAA has agreed to scale the process for the application concerned
 - progress of a proposal through defined incremental 'gateways'
 - the principles underlying the airspace design, the options derived from those principles and the appraisal of those options
 - consultation material and any supporting documentation in an accessible format, adhering to best practice consultation principles
 - responses to the consultation (in real time, subject to moderation to remove material not appropriate for publication)
 - the change sponsor's comments on those responses and modifications to the proposal in the light of responses

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The airspace change process (Tier 1a changes)

- the formal proposal (and any final adjustments made to it) submitted to the CAA, including an executive summary and (in some cases) the details of a Public Evidence Session
- a CAA draft decision, where applicable, and comments received on that draft
- the fact that the Secretary of State has deemed it necessary to call-in a proposal, where applicable
- the CAA's (or Secretary of State's) decision including the underlying analysis and reasoning
- analysis from the post-implementation review, stakeholder feedback and the CAA's conclusions.

Stakeholder engagement

64. In contemplating any airspace change proposal, it is essential that the change sponsor considers the impacts on others and the implications those impacts may have, and engages with them appropriately. This includes the general public, their elected representatives and environmental interest groups; other airspace users; airport operators; and air navigation service providers. This document provides appropriate guidance on what is expected at each stage, with more detail in [Appendix C](#).

Safety assessment in the airspace change process

65. Each airspace change proposal will need a safety assessment, completed by the change sponsor and reviewed by the CAA at each stage in the airspace change process that an options appraisal takes place. This safety assessment will:

- describe the scope of the proposed airspace change
- identify new and changing hazards
- identify and quantify risks arising from those hazards
- set mitigations for those risks.

66. The CAA has published separate guidance (CAP 760) about the safety assessment.⁸

Scaling the process by assigning a 'Level' to each change proposal

67. It is important to recognise that airspace change proposals vary greatly in terms of size and complexity. A minor change to the boundaries of high-altitude airspace over the sea will be significantly different from a major reorganisation of flight paths at lower altitudes or over a built-up area near airports. Therefore the airspace change process must be sufficiently scalable to accommodate different types of proposal. By scalable, we mean that not all airspace change proposals necessarily need to be subjected to each and every element of the process. Consequently it is also very important that we set out clearly for change sponsors and those potentially impacted where the process may be subject to scaling.
68. Table 2 on page 23 illustrates how we categorise Tier 1a airspace change proposals into four 'Levels' depending on the characteristics of the change. For each Level we then apply the requirements of the process in a proportionate way.
69. The Levels are in part based on the altitude and area in which the changes occur. Broadly, the impact of any permanent change to the 'notified' airspace design in the Aeronautical Information Publication (Tier 1a) will fall into one of these categories:

8. 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 www.caa.co.uk/cap760

The airspace change process (Tier 1a changes)

- **Level 0:** a change to an existing published airspace design (i.e. the airspace structure and flight procedures) that concerns solely
 - nomenclature, or
 - qualifying remarks

in the Aeronautical Information Publication.

In view of the minimal CAA discretion needed to consider such a change, the change sponsor is only required to complete Step 1A (of Stage 1) before the CAA makes its decision. A list of the types of change to which Level 0 applies is set out in Table A2 in [Appendix A](#).

- **Level 1:** a change to the ‘notified’ airspace design in the Aeronautical Information Publication that affects traffic patterns below 7,000 feet (this altitude accords with the altitude-based priorities in the Government’s Air Navigation Guidance to the CAA)
- **Level 2:** a change to the ‘notified’ airspace design that does not affect traffic patterns below 7,000 feet; Level 2 is further sub-divided into Levels **2A**, **2B** and **2C** depending on impact (such as whether the change is over the sea, or above 20,000 feet, or removing existing airspace structure, etc)
- **Level M:** a change to the ‘notified’ airspace design sponsored by the Ministry of Defence, in which the CAA is required by the Government to disregard the environmental impacts of military operations when reaching its decision; Level M is further sub-divided into **M1** and **M2**, as explained in paragraph 75 below.

70. The categorisation of an airspace change proposal is not related to the size and capability of the change sponsor. So a proposal by a small regional airport could be Level 1 and a proposal by NATS, the biggest air navigation service provider in the UK, could be Level 2.

71. Level 1 changes will usually require more extensive consultation. The number of stakeholders potentially affected by a proposed airspace change will determine how extensive a consultation must be. We will normally require change sponsors to consult a wider range of stakeholders about Level 1 changes because of the priorities the CAA must give to environmental impacts when changes are below 7,000 feet, in accordance with the Government’s Air Navigation Guidance.
72. As explained in more detail under Stage 2 of the process, change sponsors have to undertake an options appraisal at Step 2B. This evidence base will determine the scope of the impact, and will be used by change sponsors when they develop their stakeholder consultation strategy. This means that in addition to the defined Levels, there is a general principle of scale built into the process. For example, an airport with less traffic is likely to have smaller impacts, and an airport with fewer local communities will have fewer people to make aware of the consultation. Therefore the resource a change sponsor will require for its consultation will depend on the extent of that impact.
73. The way the requirements of the process are scaled is set out in this guidance for each Stage and in some cases these reference the more detailed appendices.

The airspace change process (Tier 1a changes)

Level M

74. This Level is used for airspace changes sponsored by the Ministry of Defence, specifically those where Government Directions to the CAA require the CAA, in reaching its decision whether to agree the change to the airspace design, to disregard the potential environmental impact of airspace changes where there is no impact on civil operations.
75. The CAA must, however, continue to take into account the potential environmental impact of civil operations resulting from an airspace change proposed by the Ministry of Defence. Therefore there are two types of Level M changes:
- those which have a consequential effect on civil operations such that the change alters the distribution of civil traffic below 7,000 feet are categorised as **Level M1**; these are treated in a similar way to Level 1
 - those which do not have a consequential effect on civil operations at all, or an effect which does not alter the distribution of civil traffic below 7,000 feet, are both categorised as **Level M2**; these are treated in a similar way to Level 2, except that for changes that do not have a consequential affect on civil operations, environmental assessments are not required. This is shown in Table 2 below.
76. Outside the scope of Level M are some changes that the Ministry of Defence can make to the contents of the Aeronautical Information Publication that do not affect civil operations and do not require the CAA's permission or approval. These are listed in **Appendix A**.

Additional reasons for scaling the process

Release of controlled and segregated airspace

77. Where a sponsor proposes a change to the notified airspace design so as to remove or reduce the size of controlled or segregated airspace⁹, the CAA will consider allowing a reduced options appraisal and environmental assessment, unless the likely impact of releasing the airspace is difficult to predict. The change sponsor will still need to provide the CAA with a Statement of Need, and carry out appropriate consultation with aviation stakeholders impacted.
78. If as a result there are consequential changes to airspace arrangements within the remaining controlled or segregated airspace, such as changes to flight procedures, then the usual options appraisal requirements of the airspace change process will apply.

Temporary airspace changes (Tier 1b) and airspace trials (Tier 1c)

79. Where a change to the notified airspace design is for less than 90 days, or is only being trialled, the change falls outside the scope of the Tier 1a airspace change process. The Government's Air Navigation Guidance to the CAA defines these as Tier 1b and Tier 1c changes (see the relevant sections later in this guidance).

9. Such as a Danger Area. This scenario differs from a Level 2C change in that the potential impact of the proposed change on traffic patterns below 7,000 feet (above mean sea level) is uncertain.

The airspace change process (Tier 1a changes)

Table 2: Summary of scaling of Tier 1a airspace changes (see next page for notes)

<p>Level 1: High impact* changes to notified airspace design A change that <u>will</u> alter traffic patterns below 7,000 feet over a populated area</p>	<p>Level 2: Medium to low impact* changes to notified airspace design A change that <u>will not</u> alter traffic patterns below 7,000 feet over a populated area</p>
<p>The Government’s Air Navigation Guidance states that below 7,000 feet is the maximum height at which noise is an impact for consideration, i.e. Government guidance indicates that the proposal:</p>	
<p>Could have a noise impact that should be taken into consideration</p>	<p>Will not have a noise impact that should be taken into consideration</p>
<p>Level 1: Typically a large-scale change which alters aircraft tracks or dispersion, or reduces aircraft height over land, below 7,000 feet (above mean sea level) over a populated area, such as:</p> <ul style="list-style-type: none"> • changes to departure and arrival routes at airports • changes which have a significant impact on other aviation stakeholders 	<p>Level 2A: Typically a change which alters aircraft tracks, or reduces aircraft height over land, below 20,000 feet (above mean sea level) but at or above 7,000 feet (above mean sea level), such as:</p> <ul style="list-style-type: none"> • changes to Air Traffic Service (ATS) routes • establishment of new controlled airspace below 20,000 feet (above mean sea level). <p>Level 2B: Typically a change:</p> <ul style="list-style-type: none"> • to controlled airspace that occurs over the sea or at 20,000 feet (above mean sea level) and above, or • outside controlled airspace at or above 7,000 feet (above mean sea level) <p>Level 2C: Typically a change which reflects:</p> <ul style="list-style-type: none"> • the current use of the airspace concerned, such as a DCT*** to ATS Route, or • the removal of established airspace structure (such as Standard Instrument Departure truncation) <p>and which does not alter traffic patterns below 7,000 feet (above mean sea level)</p>
<p>Level 0: Changes to nomenclature or qualifying remarks** of the notified airspace design A change that <u>will not</u> alter traffic patterns</p>	<p>Level M: Changes to notified airspace structure by MoD</p> <p>Level M1: a change that will alter traffic patterns of civil operations below 7,000 feet over a populated area</p> <p>Level M2: a change that will not alter traffic patterns of civil operations (a) below 7,000 feet over a populated area or b) at all</p>

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The airspace change process (Tier 1a changes)

Notes to Table 2

- * 'Impact' includes all potential impact: see for example [Appendix B](#) (environmental assessment) which describes how potential impacts must be assessed. This is because the real impact will not be known until the airspace change has been designed and implemented.
- ** 'Qualifying remarks' means those which relate to an existing airspace design published in the Aeronautical Information Publication.
- *** DCT means 'direct', a routeing which can be flight-planned by an operator, but which is not a 'notified' Air Traffic Service (ATS) route published in the Aeronautical Information Publication.

The CAA may depart from this scaling where there are overriding national security or safety considerations.

The Government requires the CAA to ensure that the aviation industry takes account of the elevation (height) of the specific surface level involved when developing its airspace proposals or seeking to amend its operational procedures. This is particularly the case when such proposals may affect airspace at an altitude lower than 7,000 feet (amsl) and in circumstances where the actual height of the land directly beneath may be hundreds of feet or higher above sea level.

Changes which are outside the scope of this guidance

The text in this section refers to the policy proposals and draft guidance on which the Department for Transport is currently consulting ([click here for details](#)). Should Government Directions, policy and guidance change after the consultation, this section will be updated accordingly.

Noise Preferential Routes

80. Aircraft departing from certain airports follow Noise Preferential Routes – set departure routes agreed by Government or local planning authorities – 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 nor covered by this guidance. At airports where it has responsibility, the Government is transferring that responsibility to the airports concerned.

Timescales

81. The timescale for completion of the full airspace change process will inevitably depend on the complexity of the airspace design and the potential impacts of the change. These factors will determine the amount of design work and analysis of the impact of different options, the degree of consultation and engagement needed with those affected, and how quickly a solution can be developed that takes their views into account. Timescales will also depend on the amount of resource that the change sponsor can dedicate to developing the proposal and producing the associated documentation.
82. Nevertheless, it is possible to define how long some elements are likely to take, and we can build some overall guidance around this (Figure 2 overleaf) to aid proportionality from a time-keeping perspective. In individual cases, the change sponsor will be required to submit a timeline for the CAA to review, agree and publish. The CAA will commit to timeframes for decisions at each of the four gateway sign-offs, and for the decision on the final proposal, subject to change sponsors meeting their own commitments.

The airspace change process (Tier 1a changes)

Figure 2: Typical timeline for a Level 1 airspace change



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Stage 1

Define

Process overview

<p>Stage 1 DEFINE</p>	<p>Step 1A Assess requirement</p> <p>The change sponsor prepares a Statement of Need setting out what airspace issue it is seeking to address. Having reviewed the Statement of Need, the CAA meets with the change sponsor to agree whether an airspace change is a relevant option to consider, and to have a first discussion about the appropriate scale of the airspace change process.</p>
	<p>Step 1B Design principles</p> <p>The design principles encompass the safety, environmental and operational criteria and strategic policy objectives that the change sponsor aims for in developing the airspace change proposal. They are developed through engagement with stakeholders and form a qualitative structure against which design options can be evaluated. Early engagement with stakeholders, optionally facilitated by a third party, should help to avoid disagreement later in the process.</p>
<p>DEFINE Gateway</p>	

Introduction

83. The first stage of the process, the ‘Define’ stage, is divided into Step 1A, where the change sponsor prepares a Statement of Need setting out what airspace issue it seeks to address, and Step 1B, the development of design principles. Step 1A is applied to all Levels of permanent change to the airspace design. Step 1B is applied to Levels 1 and 2 but not Level 0. Stage 1 completes with the CAA’s sign-off of the ‘Define’ gateway.

Step 1A Assess requirement

84. Once a change sponsor has identified the need for a change in airspace design, the first step is for the change sponsor to prepare a Statement of Need. The change sponsor then meets with the CAA to discuss the need for a change and how the change sponsor will progress through the airspace change process.

Statement of Need

- 85. The Statement of Need must set out clearly the identified need as to why an airspace change is being considered. More information is at [Appendix A](#), including the template which the change sponsor must use.
- 86. The change sponsor must be explicit in what issue it is seeking to address and what outcome it wishes to achieve. The change sponsor initiates the airspace change process by submitting the Statement of Need to the CAA using the portal, where it will be visible to all. However, the CAA will allow the change sponsor to redact commercially (or national security) sensitive material from the published version (subject to Freedom of Information Act requirements).

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Stage 1

Define

For more information about:

- the Statement of Need, see Appendix A

[CLICK HERE](#)

87. The CAA's review of the Statement of Need determines whether the airspace change process should be initiated. This determination will be the topic of an assessment meeting, and the outcome will be published on the portal. If the change sponsor is seeking for the proposal to be considered as a Level 0 change, this must be clearly indicated in the Statement of Need.
88. Having verified that the proposal falls within scope of the airspace change process, the CAA will assign a project manager from the Airspace Regulation team who will act as a focal point for the change sponsor and who will contact the change sponsor to set up a formal assessment meeting, minutes of which will be published on the online portal.
89. The CAA regards Step 1A as the initiation of the process. It exists for the CAA to confirm that the proposal concerned falls within the scope of the formal airspace change process. As with other stages in the process, transparency is very important. A Statement of Need is always published on the online portal, even when it does not result in the initiation of the process. After the assessment meeting, the change sponsor may update the Statement of Need and the updated version will be published as 'Version 2' on the online portal. When the CAA verifies that the proposal falls within the scope of the airspace change process, we will clearly indicate on the portal which version of the Statement is being verified.

Examples of where an airspace change is an appropriate response to address particular issues or opportunities

90. An airspace change is characterised by a change to the 'notified' airspace design as published in the UK Aeronautical Information Publication. Examples include:
 - a change in the classification of the airspace¹⁰
 - changes to the lateral or vertical dimensions of existing controlled airspace
 - new, or changes to, Standard Instrument Departure Routes, Standard Arrival Routes or other published arrival routes within controlled airspace
 - introduction of, or significant changes to, holding patterns¹¹
 - changes to the lateral or vertical dimensions of Special Use Airspace such as Danger Areas, Restricted or Prohibited airspace, or Temporary Reserved Areas
 - changes to the hours of operation of existing airspace structures
 - delegation of air navigation services to an adjacent State.

10. Classifications are defined by the International Civil Aviation Organization. In the UK, controlled airspace will normally be Class A, C or D. The normal default background classification will be Class G, unless flight safety or air traffic management reasons require a higher classification.

11. 'Significant' means a complete re-alignment or re-orientation of the hold, or a lowering of the minimum holding altitude. An airspace change proposal is not needed for changes caused by magnetic variation.

Stage 1

Define

Steps to follow when changes other than to the permanent airspace design are proposed

91. The airspace change process is different for changes falling under the Tier 2 and Tier 3 categories (see Categories of airspace change earlier in this document) which must follow their own processes. However, there will need to be communication with those impacted by Tier 2 and Tier 3 changes. Further information is given under the Tier 2 and Tier 3 headings elsewhere in this guidance document.

Assessment meeting

92. Each airspace change proposal is different. Drawing from the Statement of Need, the assessment meeting allows the change sponsor to discuss with the CAA the issues giving rise to the proposed change, how the change will address those issues, and how the change sponsor intends to proceed. This will include the merits of the proposed airspace change in terms of safety, efficiency, providing environmental benefits or mitigating its environmental impact to the greatest extent possible. This is a fundamental first step in the airspace change process.

93. The CAA's role is to provide advice and guidance on what the airspace change process will require from the change sponsor, and how the CAA will evaluate the outputs throughout the process. There will be a discussion of how the process is scaled according to the potential impacts of the proposal (the scaling 'Level'). The CAA will refer to the Information Pack for airspace change sponsors which is available on the online portal.¹² The change sponsor will provide the CAA with its proposed target timescales (see 'Timescales' above).

94. In particular the meeting will cover the steps the change sponsor will need to take to ensure that it properly takes into account the impacts of any change on those affected and designs its proposal accordingly. These steps will include engagement with relevant stakeholders on the underlying design principles, drawing up a longlist of options, appraisal of the impacts of those options, and formal consultation on the chosen option(s). In this way the change sponsor can collect the evidence necessary to develop a proposal which both meets its own needs while ensuring a proportionate impact on those affected. Those impacted may include the general public living beneath the existing and proposed airspace design, other airspace users, airports and air navigation service providers (more information about engagement is in [Appendix C](#)).

95. The outcome of the meeting will be a decision from the CAA on whether an airspace change is a relevant option to investigate, as well as a first, provisional indication of the appropriate scaling Level. The CAA's confirmation of the Level will follow once the change sponsor has completed its option development and options appraisal (Steps 2A and 2B respectively). The change sponsor produces minutes of the meeting which will be reviewed by the CAA and published on the online portal. This demonstrates to the CAA that the change sponsor has understood any guidance and advice that has been given.

96. The CAA will publish on the online portal its determination as to whether the proposal in the Statement of Need falls within the scope of the formal airspace change process. If a new version is submitted by the change sponsor, it will indicate clearly where changes have been made following discussions, and the CAA will be clear as to which version it determines falls within the scope of the airspace change process. The change sponsor will be asked to write to the CAA confirming whether or not it wishes to proceed with the development of a proposal.

12. CAP 1465b www.caa.co.uk/cap1465b
[Final guidance will link to an updated version]

Stage 1

Define

Scaling of Step 1A

97. This step will not be scaled, as it will be the first step in the process, and the CAA will not yet know the scope of the potential proposal. The Statement of Need will include questions to help identify the status of potential Level 0 and Level M changes.

Outputs from Step 1A to be uploaded to the online portal	
Output	Produced and uploaded by
Statement of Need (all versions, including full and redacted final version)	Change sponsor
Assessment meeting minutes	Change sponsor
Proposed timescales for the process	Change sponsor

Step 1B Design principles

The text in this section refers to the policy proposals and draft guidance on which the Department for Transport is currently consulting (click here for details). In particular it is strongly linked to the principles the CAA is given by the Government on noise policy objectives and any priorities it may want us to apply in our assessment. Should Government Directions, policy and guidance change after the consultation, this section will be updated accordingly.

98. The second step of Stage 1 is for the change sponsor to identify and communicate the design principles to be applied to the airspace change design.

99. The design principles encompass the safety, environmental and operational criteria and the strategic policy objectives that the change sponsor seeks to achieve in developing the airspace change proposal. They take account of government policy documents (such as the Air Navigation Guidance on the CAA's environmental objectives) and any local criteria such as section 106 planning agreements or other planning conditions, and Noise Preferential Routes or other noise abatement procedures imposed on the airport by the Secretary of State under section 78 of the Civil Aviation Act 1982 or by the Local Planning Authority. The design principles form a framework against which airspace change design options can be evaluated. Once a change sponsor begins to select technical solutions that meet the intended need, it would then need to ensure compliance with regulatory guidance (see [Appendix F](#)).

Stage 1

Define

100. An important part of Step 1B is for the design principles to be drawn up through discussion between the change sponsor and affected stakeholders at this early stage in the process. Local stakeholders should generally include elected community representatives, local community groups, the airport consultative committee and representatives of local General Aviation organisations or clubs. The change sponsor may consider convening a focus group with a mix of representatives. In the case of changes with higher potential impacts, the CAA may recommend the use by the change sponsor of an independent third-party facilitator to make early engagement with stakeholders on design principles more effective. Potentially a facilitator could also be used in later formal consultation.

For more information about:

- **consultation and engagement, see [Appendix C](#)**
- **design principles, see [Appendix D](#)**
- **technical criteria, see [Appendix F](#)**

101. The aim is for there to be a good level of understanding by change sponsors as to what design considerations are important to stakeholders, such as predictable respite from noise for communities and access for General Aviation. This could be a key stage in preventing misunderstanding or later disagreements by facilitating conversations, particularly concerning changes with more significant potential impacts. This should avoid significant iteration and re-work of the airspace change design stage, and should make the later consultation phase (Stage 3) more constructive.

102. The design principles will naturally be based around some fundamentals such as safety, throughput of traffic, and environmental impacts. But they must also be developed in

a local context, in accordance with national policy. They might address local trade-offs that need to be made, for example by addressing whether aircraft should, as a priority, avoid flying over specific local areas or populations. Where possible these discussions should identify whether stakeholders can identify common priorities, although the CAA acknowledges that unanimous agreement on the principles could be unlikely. Some of the principles may contradict one another and some may be prioritised over others.

103. It is important that the design principles are set through a two-way process and involve effective wide-ranging local engagement. **Appendix C** (consultation and engagement) and **Appendix D** (design principles) respectively set out in more detail what this engagement should look like and the design issues that might arise. Appendix D also sets out questions that the change sponsor may wish to consider. However, we are not expecting the change sponsor to carry out a lengthy or detailed consultation, since this will take place in Stage 3 of the process.

104. Change sponsors must seek feedback from stakeholders on the proposed airspace change proposal Level at the design principles stage, as one of the key engagement points. This should include discussion about the altitude of the change and should consider the height of local terrain (in relation to mean sea level).

105. The design principles and the outcome of the engagement activity must be submitted to the CAA for review. Where the change sponsor is unable to reach agreement with local stakeholders on commonly accepted design principles, or on the likely Level categorisation, the reasons for differing views should be recorded and drawn to the CAA's attention, with reasons given as to how the change sponsor developed the final design principles.

Stage 1

Define

CAA acceptance of the change sponsor’s development of design principles

106. The change sponsor’s design principles provide a framework or reference point that it will use when drawing up, and later considering and comparing, all the options open to it to address the airspace issue that it has identified and in respect of which it wishes to propose an airspace change.

107. The design principles are not criteria that will determine whether the final option proposed by the change sponsor to the CAA (Stage 4) is acceptable or not. The design principles will, however, influence the CAA’s assessment of the change sponsor’s ‘Initial’ options appraisal (Stage 2) and ‘Full’ options appraisal (Stage 3) as well as being part of the information available to us when we make our decision (Stage 5).

Scaling of Step 1B

108. For Level 1, Level 2, Level M1 and Level M2 changes, the engagement expected at Step 1B will be with:

- directly affected local aviation stakeholders

- members of the National Air Traffic Management Advisory Committee

- relevant national organisations

and, for Level 1 and Level M1 changes, also with:

- communities affected by potential impacts (such as noise or economic growth) associated with the change.

109. Step 1B is not required for Level 0 changes.

110. However, the Level of the change will not be confirmed until Step 2B. Therefore, Step 1B may need to be revisited if a change is initially judged as likely to be Level 2. This would be where a change sponsor subsequently determines at Step 2B that its proposal could alter the distribution of traffic below 7,000 feet and is thus Level 1, requiring the change sponsor to re-engage and include affected communities. We envisage this to be a rare occurrence, but a change sponsor with a change initially judged as likely to be Level 2 may nevertheless wish to consider whether it should engage with communities and their representative organisations at the outset during Steps 1B and 2A.

Outputs from Step 1B to be uploaded to the online portal

Output	Produced and uploaded by
Airspace change proposal design principles	Change sponsor
Explanation of how these were influenced through the engagement process	Change sponsor
Acceptance of change sponsor’s design principles	CAA

Stage 1

Define

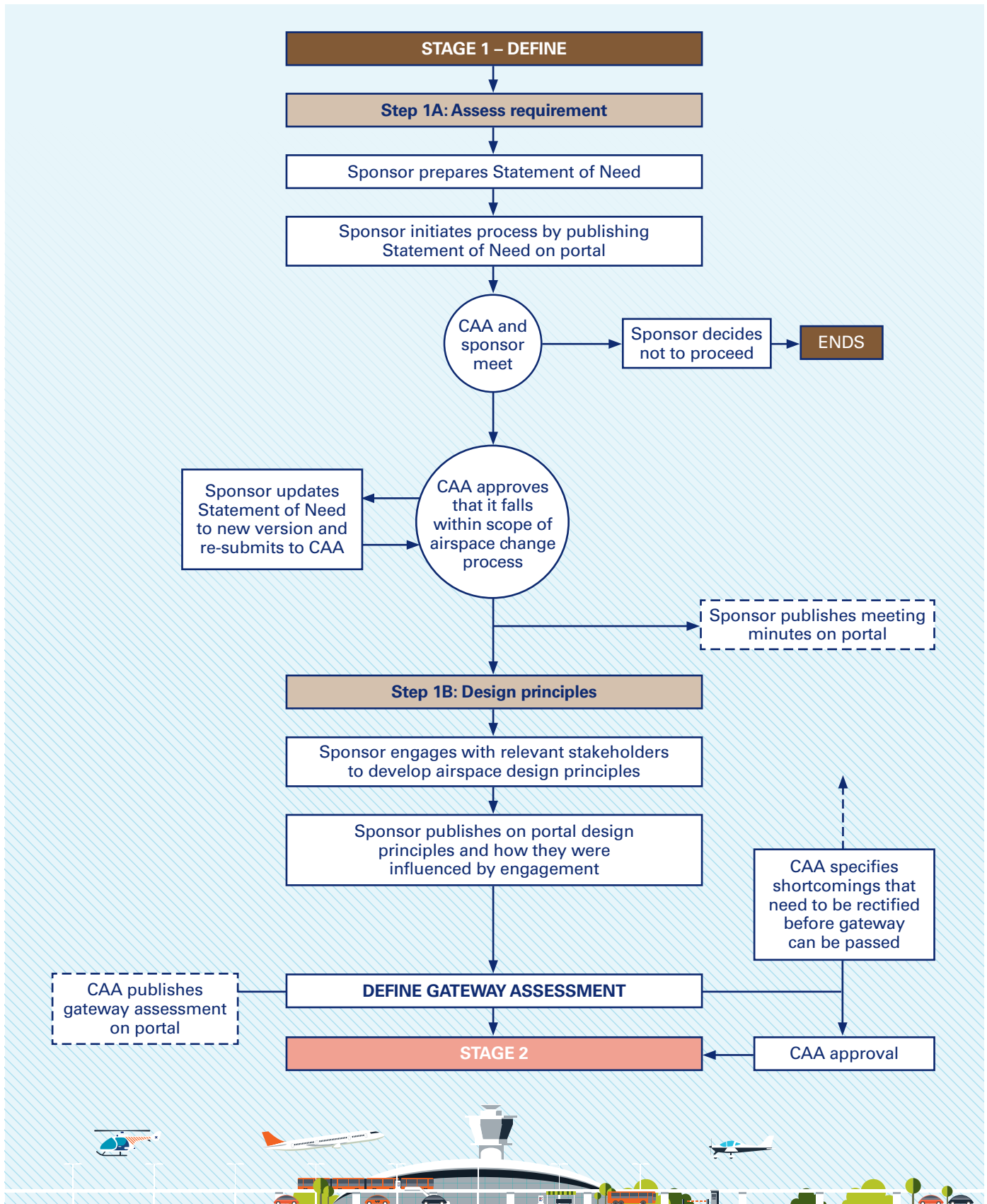
DEFINE GATEWAY

In order for the CAA to sign-off the 'Define' gateway:

- the change sponsor must have produced a Statement of Need that the CAA has approved against the requirements in Appendix A
- the change sponsor must have met with the CAA to discuss the airspace change process and demonstrated that it understands what will be required of it
- the CAA must have agreed the change sponsor's proposed timescales
- the change sponsor must have produced design principles
- the change sponsor must have explained to the CAA's satisfaction how the design principles were influenced through stakeholder engagement against the requirements in Appendix D
- the CAA must have accepted the process and approach used to develop the design principles against the requirements in Appendix D
- the CAA must have accepted the design principles as a well-founded shortlist of principles to inform the development of airspace design options

Stage 1

Define

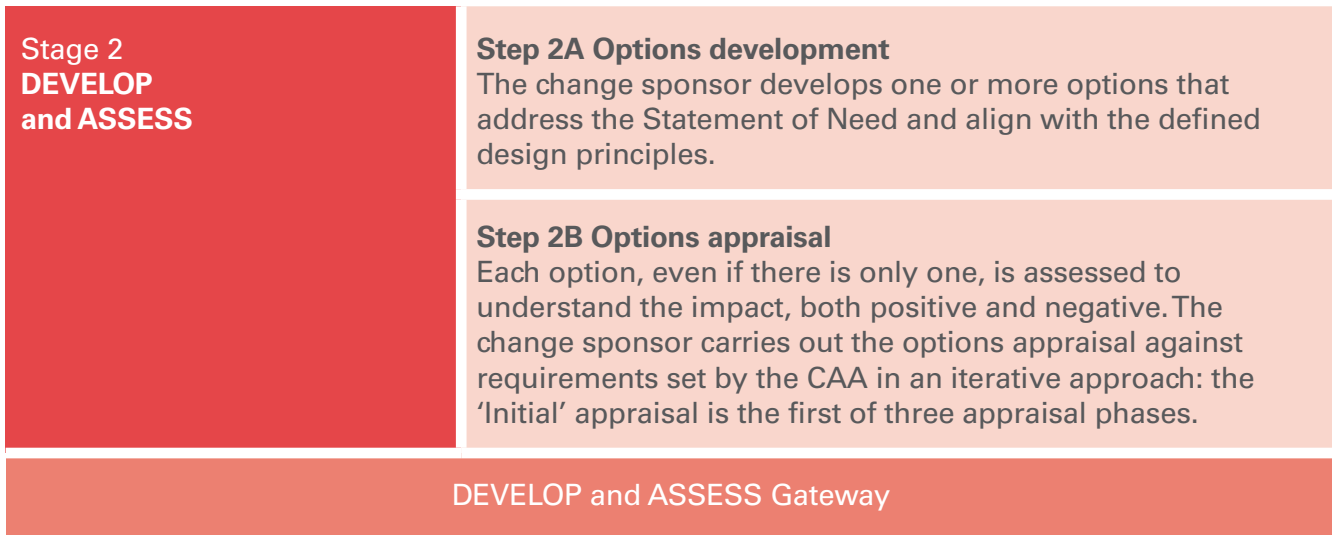


Backgrd Info	Stage 7	Stage 6	Stage 5	Stage 4	Stage 3	Stage 2	Stage 1	Tier 1	Tier 2/3	Tier categories
H: PIR	G: Decision	F: Submission	E: Options	D: Design	C: Consultation	B: Environment	A: S of Need			Glossary

Stage 2

Develop and assess

Process overview



Introduction

111. Having passed the 'Define' gateway, Stage 2 is where the change sponsor develops options for the airspace change. In Step 2A, the change sponsor develops a longlist of options that address the Statement of Need and that align with the design principles from Stage 1. In Step 2B the change sponsor carries out an 'Initial' appraisal of the impacts of the different options, which it will later refine. Stage 2 completes with the CAA's sign-off of the 'Develop and Assess' gateway.

Step 2A Options development

112. Step 2A requires the change sponsor to develop a first longlist of options that address the Statement of Need and that align with the design principles from Stage 1. The change sponsor preliminarily tests these with the same stakeholders it engaged with in Stage 1 at Step 1B. The change sponsor then produces a design principle evaluation that sets out how its design options have responded to the design principles.

113. All design options must be compliant with the technical criteria set out in **Appendix F**. These criteria form the basic structure on which the change sponsor can build a formal proposal. It is vital that the change sponsor identifies any critical interdependencies with neighbouring air navigation services providers (operational, technical or training) and establishes plans to resolve any issues that arise. The change sponsor may wish to evaluate particular options by undertaking simulations or, where there is technical innovation or a design technique that can only be validated through an operational trial, by a live flight trial. Flight trials would be subject to a separate Tier 1c process.

For more information about:

- **consultation and engagement, see [Appendix C](#)**
- **design principles, see [Appendix D](#)**
- **options appraisal, see [Appendix E](#)**

Backgrd Info	H: PIR
Stage 7	G: Decision
Stage 6	F: Submission
Stage 5	E: Options
Stage 4	D: Design
Stage 3	C: Consultation
Stage 2	B: Environment
Stage 1	A: S of Need
Tier 1	Tier 2/3
Tier categories	Glossary

Stage 2

Develop and assess

- 114. Sometimes there will only be limited scope for multiple design options, with few realistic options available. This could, for example, be because of international standards or the physical constraints of adjacent airspace or flight procedures. Where this is the case, change sponsors will have to explain to stakeholders and the CAA why this is the case, with appropriate evidence.
- 115. The change sponsor publishes the list of options and the design principles evaluation on the online portal that allows the CAA to review how the change sponsor’s design options have responded to the design principles. At this step, the CAA does not assess the appropriateness of any of the individual options, nor do we approve the airspace change at this stage. We simply consider, and where appropriate give approval that the change sponsor has in our view identified all the possible options and evaluated the design options against the design principles in a fair and consistent manner, and that they are compliant with the required technical criteria.
- 116. **Appendix D** and **Appendix E** set out more detailed guidance on the design process and options being considered and developed, including the technical criteria.

Scaling of Step 2A

- 117. The CAA will scale its process requirements for Step 2A in the same way as at Step 1B above. Note the point above that the Level is only confirmed at Step 2B and that Steps 1B and 2A may need to be revisited.
- 118. Military sponsors of airspace changes must complete Step 2A. However, where the Ministry of Defence’s proposed change is not anticipated to impact on civil operations, the Government has directed that the CAA should not take into account the environmental impact of the proposed change when making our decision (at Stage 5). Therefore, in such cases the Ministry of Defence need not preliminarily test its options appraisal with communities affected by potential impacts. However, for a Level M1 change, a military proposal anticipated to affect civil operations must take the environmental impact of those effects into account. Therefore in this scenario the Ministry of Defence must discuss options with local communities.
- 119. Step 2A is not required for Level 0 changes.

Outputs from Step 2A to be uploaded to the online portal	
Output	Produced and uploaded by
Airspace change design options	Change sponsor
Design principle evaluation	Change sponsor

Step 2B Options appraisal

- 120. Step 2B requires the change sponsor to carry out an ‘Initial’ appraisal of the impacts of each of the options identified in Step 2A (the first of three iterative phases of options appraisal, as explained below). This highlights to change

sponsors, stakeholders and the CAA the relative differences between the impacts, both positive and negative, of each option. The change sponsor assesses each option against a ‘do nothing’ scenario (the ‘counterfactual’), even where there is only a single change option, to understand these impacts.

Backgrd Info	H: PIR
Stage 7	G: Decision
Stage 6	F: Submission
Stage 5	E: Options
Stage 4	D: Design
Stage 3	C: Consultation
Stage 2	B: Environment
Stage 1	A: S of Need
Tier 1	Tier 2/3
Tier categories	Glossary

Stage 2

Develop and assess

121. The change sponsor submits its options appraisal to the CAA through the online portal for review after each phase. The CAA prepares its own assessment of the appraisal in the form of a review paper, and publishes this on the online portal (see [Appendix E](#)).

Methodology

122. The CAA acknowledges that airspace change decisions cannot be reduced to an entirely numerically driven exercise. Numerical values are not a substitute for policy direction on which outcomes are important in the design of airspace. However, a systematic process that includes a degree of quantification in relation to the costs and benefits of a particular airspace change proposal helps to provide consistency in options appraisal for all concerned. It also provides additional data helping the CAA to make the best possible decision against a background of increasing scarcity of airspace capacity.

123. The appraisal must be modelled on the factors that the CAA is required to consider under Section 70 of the Transport Act 2000. To minimise the risk of a change sponsor being accused of skewing evidence and detail towards its favoured option, options need to be appraised in the same way in each phase, including 'do nothing' comparisons. This appraisal therefore needs to be objective, repeatable and consistent against defined criteria.

For more information about:

- **environmental metrics and assessment, see [Appendix B](#)**
- **options appraisal, see [Appendix E](#)**

124. Wherever possible, the options appraisal should seek to monetise impacts adopting the rigour, structure and approach of a cost-benefit analysis. [Appendix E](#) sets out what is required:

- how the change sponsor should assess each airspace change option, including:
 - the criteria to be assessed
 - the preferred methodologies and tools for the analysis
 - how to monetise costs and benefits for the specified criteria
 - instances where numerical values would be overridden by policy considerations, and
 - what those policy aims are
- how the analysis helps to identify those who should be consulted on the airspace change proposal at Stage 3, and
- any challenges associated with gathering the necessary data to inform that position.

125. More specific guidance on assessing the environmental impacts of an airspace change – including noise, CO₂ emissions and local air quality – is contained in [Appendix B](#). This describes the relevant methodologies and metrics that the CAA will use for its environmental assessment.

126. Each 'people overflown' metric used in the appraisal must apply national policy and therefore include housing, hospitals, schools etc that have planning permission. It must also have regard to local plans, such as what is anticipated under Local Development Frameworks.

127. The appraisal should use WebTAG¹³, the Department for Transport's appraisal method, for health impacts associated with noise, and potentially for other impacts where possible.

13. For more information see <https://www.gov.uk/guidance/transport-analysis-guidance-webtag>.

Stage 2

Develop and assess

Safety assessment

128. At each stage in the airspace change process that an options appraisal takes place, the change sponsor will be required to submit a safety assessment. As with other evidence required for the options appraisal, we expect the detail of the safety assessment to increase further along in the process, as the number of options reduces. This is explained further in [Appendix E](#). The CAA will review the safety assessment as part of its decision-making, in accordance with Government policy and legislation – noting that Section 70 of the Transport Act 2000 states that the CAA must “maintain a high standard of safety”.
129. The change sponsor will be required to provide a plain English summary of the safety assessment and the CAA will provide a plain English summary of its review (i.e. a summary of the Letter of Acceptance, which forms the CAA’s review of the safety assessment) when it makes a decision. These documents will be published on the online portal. The purpose of a summary is not to limit the information made available, but to ensure that it is clear and comprehensible. When the airspace change is likely to have a detrimental effect on a significant number of stakeholders (such as General Aviation or local communities), those stakeholders have a reasonable expectation that the change sponsor has demonstrated that it has properly considered the potential safety impacts of its proposal.

The text in this section refers to the policy proposals and draft guidance on which the Department for Transport is currently consulting ([click here for details](#)). Should Government Directions, policy and guidance change after the consultation, this section will be updated accordingly.

The link to the Government’s Air Navigation Guidance

130. The methodology for options appraisal has been developed with the Government’s input, so that it matches both the environmental assessment that the Government’s Air Navigation Guidance specifies that we undertake and the evidence that the Secretary of State would need to review should the Secretary of State be the ultimate decision-maker (see Stage 5). The methodology is therefore dependent on government policy.

Phases of options appraisal

131. The change sponsor is not required to go into a full level of detail at Step 2B for every option on the longlist. Instead, the options appraisal evolves through three phased iterations, with the CAA reviewing the appraisal at each phase.
132. Those phases are:
- ‘Initial’ appraisal (at Step 2B with the CAA review at the ‘Develop and Assess’ gateway)
 - ‘Full’ appraisal (at Step 3A with the CAA review at Step 3B and the subsequent ‘Consult’ gateway)
 - ‘Final’ appraisal (at Step 4A, with the CAA review after the formal submission of the airspace change proposal at the end of Stage 4).
133. This builds the evidence base as the proposal matures, and is therefore a proportionate approach because it avoids the need for expensive detail on every potential design option. It is also more informative, by ensuring that the detail matures in line with the proposal, and that a reasonable evidence base is made available to all stakeholders early on and increasingly throughout the process. Thus less detail will be required for the Initial appraisal. For example, it may be based on qualitative information rather than quantitative analysis.

Stage 2

Develop and assess

Scaling of Step 2B

134. All sponsors of Level 1, Level 2 and Level M changes will need to complete the options appraisal, as this is an essential piece of evidence in both understanding the impacts of the potential change and setting the Level of the change. However, there will be an implicit

scale to the collection of evidence as the altitude-based priorities in the Government's environmental guidance to the CAA differ and so require different analysis for Level 2 and Level M2 changes.

135. Step 2B is not required for Level 0 changes.

Outputs from Step 2B to be uploaded to the online portal

Output	Produced and uploaded by
Options appraisal (phase I – Initial)	Change sponsor
Options appraisal assessment (phase I – Initial)	CAA

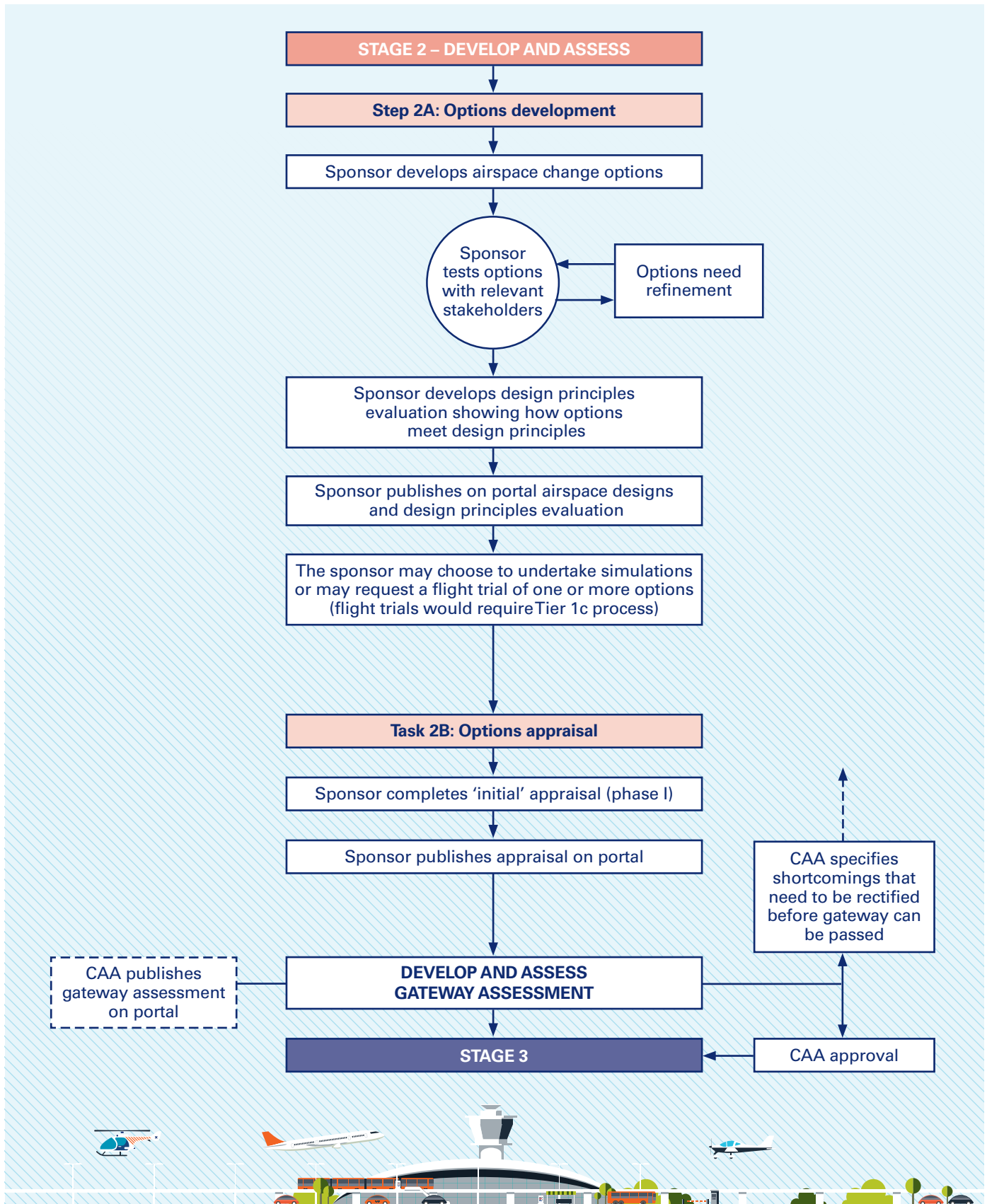
DEVELOP AND ASSESS GATEWAY

In order for the CAA to sign-off the 'Develop and Assess' gateway:

- the change sponsor must have produced a comprehensive list of airspace change design options
- the change sponsor must have engaged with relevant stakeholders to explore those options to the CAA's satisfaction against the requirements in Appendix C
- the change sponsor must have produced a design principle evaluation that the CAA has accepted, showing how its design options have responded to the design principles
- the change sponsor must have produced an Initial options appraisal (phase I)
- the CAA must have produced and then published an assessment that the options appraisal is satisfactory against the requirements in Appendix E

Stage 2

Develop and assess



Backgr Info	
Stage 7	G: Decision
Stage 6	F: Submission
Stage 5	E: Options
Stage 4	D: Design
Stage 3	C: Consultation
Stage 2	B: Environment
Stage 1	A: S of Need
Tier 1	
Tier 2/3	
Tier categories	Glossary

Stage 3

Consult

Process overview

Stage 3 CONSULT	Step 3A Consultation preparation The change sponsor plans its stakeholder consultation and engagement, and prepares consultation documents, including the second-phase 'Full' options appraisal with more rigorous evidence for its chosen option(s).
	Step 3B Consultation approval The CAA reviews and where appropriate approves the consultation strategy. This is to ensure the strategy is comprehensive, the materials clear and appropriate, and the questions unbiased.
CONSULT Gateway	
	Step 3C Commence consultation The change sponsor implements its consultation strategy and launches the consultation.
	Step 3D Collate and review responses Consultation responses made through the online portal are collated, reviewed and categorised.

Introduction

136. Having passed the 'Develop and assess' gateway, Stage 3 is where the change sponsor prepares and launches its formal consultation.
137. Stage 3 is where the change sponsor prepares its consultation strategy (Step 3A) including a more comprehensive Full appraisal of the option(s) it is proceeding with at this stage. The CAA approves the consultation strategy and carries out a further review of the options appraisal in its Full version (Step 3B). Completion of Step 3B forms the third 'Consult' gateway in the process. The change sponsor then launches the consultation (Step 3C) and collates and reviews the responses (Step 3D).

138. The consultation phase is a key part of the airspace change process. It allows the change sponsor to gather information and to understand views about the impact of a particular proposal. It allows consultees to provide relevant and timely feedback to the change sponsor. There may be differing views between different stakeholder groups.
139. If the overall process is to function correctly, it is crucial that the consultation is open, fair, transparent and effective, and that the CAA can evidence that it is holding the change sponsor to account in this respect. Stakeholders must also have confidence that the CAA is holding the change sponsor accountable both for the way it acts on the responses it receives and for providing timely feedback on those responses. Consequently

Backgrd Info	Stage 7	Stage 6	Stage 5	Stage 4	Stage 3	Stage 2	Stage 1	Tier 1	Tier 2/3	Tier categories
H: PIR	G: Decision	F: Submission	E: Options	D: Design	C: Consultation	B: Environment	A: S of Need			Glossary

Stage 3

Consult

the CAA reviews and approves all consultation material, and monitors the consultation process through the online portal on which all material and responses are published (see [Appendix C](#)). This includes the CAA moderating consultation responses to remove material not appropriate for publication, and observing how the change sponsor is responding to those that require an immediate answer (using ‘frequently asked questions’ if necessary).

140. A badly managed consultation, for example with consultation documents needing to be amended and re-issued, not only increases the cost and timescales for the change sponsor but also loses the confidence of those being consulted.

141. Some key consultation requirements are that:

- the CAA approves the consultation material
- meaningful material is available in a form that does not require technical knowledge to understand and respond to it
- a clear statement of the current situation is given, as well as clarity on what is being proposed
- stakeholders reading the consultation – including those with no technical expertise – can understand the potential impact of the proposed changes on them, and any technical information is as far as possible explained in terms that they can understand
- all consultation material is published on the online portal, including
 - the consultation itself and any supporting material
 - all formal responses to the consultation
 - the change sponsor’s categorisation of responses into those that may lead to a change in the design and those that would not

- questions about the consultation and the change sponsor’s replies.

142. With the post-implementation review (Stage 7) in mind, the change sponsor must make clear to stakeholders in the consultation documents the extent to which the proposed airspace change, once implemented, is reversible if it does not achieve the objectives it is designed to achieve. Changes that accommodate mandatory new technology or which have strong interdependencies may be very difficult or even impossible to reverse. Therefore where an airspace change has not achieved its objectives, the solution may need to be a redesign rather than reversion to the pre-airspace-change position.

143. [Appendix C](#) sets out more detailed guidance on the consultation requirements of Stage 3.

Scaling of Stage 3

144. The extent of consultation and supporting materials, and the supporting activities needed, for example public meetings (possibly using a third-party facilitator), focus groups or surveys, will depend greatly on the scale and nature of the airspace change, in particular whether it is Level 1 or Level 2.

145. Level M1 changes will require a consultation. However, the consultation strategy will need to reflect that the Government has directed the CAA not to take into account the environmental impact of military aircraft and operations. Therefore for a Level M2 (which either does not affect civil operations or does not affect civil operations such that the distribution of traffic changes below 7,000 feet) there is no requirement to consult with communities. There remains a requirement to consult with aviation industry stakeholders, but the CAA may agree to a shorter consultation period than would apply for the equivalent Level 1 or Level 2 change.

Stage 3

Consult

146. Stage 3 is not required for Level 0 changes.
147. The scale of consultation will have been discussed already at the assessment meeting with the CAA at Step 1A. The likely effectiveness of the consultation will be an important part of the CAA's approval of the consultation strategy documents and supporting material at the 'Consult' gateway.

Step 3A Consultation preparation

148. Step 3A requires the change sponsor to decide on its consultation strategy and to prepare the consultation documents. The aim of consultation is that stakeholders who may be affected, both positively and negatively, have an appropriate opportunity to comment on proposals based on a reasonable understanding of them. Enough information must be provided for those consulted to have the opportunity to understand the impacts and trade-offs and can give informed responses.
149. **Appendix C** includes guidance describing best practice in effective approaches to engagement, consultation material and activities. As noted at Step 1B, open consultations, and the wider stakeholder engagement necessary to facilitate effective consultation, could benefit from change sponsors appointing an independent third party to act as a neutral facilitator and to moderate interaction with stakeholders, at least for airspace changes with a potentially significant impact. Where appropriate, the change sponsor may therefore want to seek the advice and support of external experts in consultation and public engagement.

For more information about:

- **consultation and engagement, see [Appendix C](#)**
- **options appraisal, see [Appendix E](#)**

150. The overriding aim is to ensure anyone who may be affected by a change can see and understand what is proposed, and respond in the knowledge that the CAA is holding the change sponsor to account and reviewing the responses through the online portal.
151. The CAA requires the change sponsor to develop an appropriate, targeted strategy to facilitate airspace change consultation. We appreciate the complexities associated with consulting with all potentially affected stakeholders, including the number of people and audiences involved, overcoming past 'history', conflicting airspace priorities, and the technical nature of some proposals.
152. We note that different audiences have different requirements. The scale and nature of consultation required will also differ depending on the number and nature of affected stakeholders as well as the nature and scale of impact upon them. Using a Full version (see page 44) of the options appraisal developed at Step 2B, which narrows the options to one (or to a shortlist), the change sponsor draws up a consultation strategy. This should cover:
- who may be affected by the change (audience map) and what their information needs are (including consideration of any seldom-heard audiences)
 - how the change sponsor will inform them of the consultation (assessment of communication requirements)
 - 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 (including those with no internet access) will have to engage and respond (channels used), at which times (timetable of activity), including the period of the consultation

Stage 3

Consult

- what steps will be taken to minimise the chances of the consultation strategy failing and to generate an appropriate level of participation and response if the strategy does fall short of expectations (safeguards and further options).

153. Where stakeholders include specific communities, the change sponsor should prepare a strategy as to whether or not any properties need to be contacted individually, or set out other reasonable methods of reaching communities (such as through local media, social media, local authority communications, or advertising). The change sponsor should use **Appendix C** to consider which other organisations, groups or communities should be consulted. For example, where a change may impact on General Aviation's access to airspace, the change sponsor will need to communicate directly with local flying clubs and schools, as well as with the national bodies representing these types of activity. An airport may find it useful to use the airport consultative committee, or its local noise management body, as one initial basis for a focus group.

154. The change sponsor uses the portal to submit the consultation strategy and the draft consultation documents to the CAA for approval prior to them being published (see **Appendix C** for more on what the CAA will require).

Scaling of Step 3A

155. The duration of the consultation should be proportionate to the scale of change and the numbers of potentially affected stakeholders, and will be advised by the CAA using any relevant government guidance or best practice. Normally 12 weeks should be allowed for responses. Where a change sponsor provides a strong rationale, the CAA will consider a reduced consultation period where the request is reasonable and this is a proportionate

solution. Where a consultation period falls over holiday periods, it may be necessary for the change sponsor to lengthen the consultation period to give local committees and national bodies time to consult their members.

156. See 'Scaling of Stage 3' above regarding Level M and Level 0 changes.

'Full' options appraisal

157. As noted at Step 2B, the options appraisal evolves through three phased iterations, with the CAA reviewing the information in the appraisal at each phase, including safety information. As detailed in **Appendix B** and **Appendix E**, the second 'Full' phase in Step 3A requires the change sponsor to develop more rigorous evidence for its remaining option(s), compared as before with a 'do nothing' option.

158. After review by the CAA at Step 3B and sign-off at the 'Consult' gateway, the change sponsor includes the options appraisal in the package of documents on which it consults at Step 3C. This assists the change sponsor in identifying potential impacts and mapping potentially affected stakeholders, and allows those being consulted to see the potential impacts of different options and provide more information or comment. The responses to the consultation then allow the change sponsor to update the options appraisal in the light of any new information (and if necessary re-consult, as explained on page 51).

Stage 3

Consult

Outputs from Step 3A to be uploaded to the online portal

Output	Produced and uploaded by
Draft consultation strategy (viewable only by the CAA, pending approval for consultation launch)	Change sponsor
Draft consultation documents (viewable only by the CAA, pending approval for consultation launch)	Change sponsor
Options appraisal (phase II – Full) (viewable only by the CAA, pending approval for consultation launch)	Change sponsor

Step 3B Consultation approval

159. In Step 3B the CAA reviews and gives its approval that the consultation strategy and consultation documents meet the requirements for an open, fair and transparent consultation. In particular, they will need to be comprehensive, the materials clear and appropriate and the questions unbiased.

160. The CAA will verify that:

- the consultation documents will address all the reasonable requirements of the consultees identified by the options appraisal
- the strategy to communicate with them is sufficient and appropriate
- the consultation period is of appropriate duration based upon the scale and impact of the airspace change.

161. The CAA will issue a statement as to whether it considers these aspects of the consultation are adequate and, if not, where they fall short, in which case the process returns to

Step 3A for the change sponsor to update the consultation preparations. At the consultation approval at Step 3B the CAA will not offer comment explicitly or implicitly on the merits or otherwise of the airspace change proposal. This will come at the decision-making stage (Stage 5).

For more information about:

- **consultation and engagement, see [Appendix C](#)**

162. The CAA also reviews the Full options appraisal and publishes an assessment (see [Appendix B](#) and [Appendix E](#)) of the appraisal process without offering comment on the merits of the individual options.

163. If the CAA is able to approve successful completion of these outputs, then the consultation strategy and Full options appraisal are published on the portal, and Stage 3B completes with the CAA's sign-off of the 'Consult' gateway.

Stage 3

Consult

Outputs from Step 3B to be uploaded to the online portal

Output	Produced and uploaded by
Statement on approval of consultation strategy	CAA
Publication of consultation strategy	Change sponsor
Publication of options appraisal (phase II – Full)	Change sponsor
Options appraisal assessment (phase II – Full)	CAA

CONSULT GATEWAY

In order for the CAA to sign-off the 'Consult' gateway:

- the change sponsor must have produced a consultation strategy
- the change sponsor must have produced appropriate and effective consultation documents and supporting materials
- the change sponsor must have produced a Full options appraisal (phase II)
- the CAA must have published a statement approving the consultation documents and supporting material as satisfactory against the requirements in Appendix C
- the CAA must have completed and published an assessment that the options appraisal is satisfactory against the requirements in Appendix E

Stage 3

Consult

Step 3C Commence consultation

164. Having passed the 'Consult' gateway after Step 3B, the change sponsor implements its consultation strategy. The change sponsor issues the consultation documents, and publishes them on the online portal alongside the earlier material. The change sponsor maintains records to demonstrate that all reasonable actions have been taken to ensure stakeholders are informed of the consultation and have been offered the opportunity to engage with it.
165. **Appendix C** provides more guidance for those being consulted about the purpose of consultation, the nature of information being sought and how the change sponsor will use this. The online portal explains how to make a response.
166. The change sponsor must actively monitor the online portal for responses. If the change sponsor identifies that a response can be answered prior to the end of the consultation, they are free to do so. All correspondence between consultees and the change sponsor must be visible for everyone to read, and this will be achieved using the portal. It may be impractical for the change sponsor to respond to every consultee question individually during the consultation, but we expect the change sponsor to maintain a 'frequently asked questions' page on the portal to answer questions.
167. Consultation responses will be published on the portal as they are received (subject to moderation as explained below). The content of all responses will therefore be visible to all on the portal. However, the visibility of personal information (name, address, contact information etc) can be confined to the CAA and relevant sponsor should someone prefer this information not to be published on the portal.
168. It is possible that the ability to view responses will create a greater number of responses, with potential volume-related practical difficulties. The CAA sees this approach as essential to maintain the transparency of the process, and volume alone does not alter the validity of the point being made nor does it turn the consultation into a referendum, i.e. the outcome will not be determined by the relative quantities of the different views expressed. The online portal will however limit responses to one per individual (verified by email address). The portal will require respondents to give a supporting explanation for any objection to or support for the proposal.
169. The change sponsor must be able to demonstrate to the CAA that best practice has been followed to elicit a response from consultees. For example, we recommend that a reminder be sent when the consultation response deadline is approaching.
170. The online portal will be the primary means of sharing information between the CAA, change sponsor and stakeholders. We do not expect the change sponsor to maintain a separate, offline process. Respondents will therefore be expected to download documents from the portal, and to upload their responses to the portal.

For more information about:

- **consultation and engagement, see [Appendix C](#)**

Stage 3

Consult

171. However, the CAA has been made aware that there remains some demand for responses to be made by post rather than via the online portal from those stakeholders who do not have adequate access to the internet. Our expectation is that the change sponsor will give instructions for the submission of postal responses, in the same way that it should, as part of its consultation strategy, have considered whether to use printed media to publicise its consultation, in order to capture these stakeholders. To maintain transparency, the change sponsor must upload offline responses to the portal without delay.¹⁴ The CAA sees no justification for allowing responses by email direct to the change sponsor or to the CAA, rather than using the online portal. We will therefore permit sponsors to disregard them, as such responses could equally have been made via the portal.

172. If errors or confusion arise during the consultation process, the CAA may intervene to ask the change sponsor how they intend to remedy the problem and potentially to extend the consultation period in order to do so. In such a case we will review the strategy with the change sponsor and subsequently monitor whether it is adhered to.

173. Before responses are published on the portal, the CAA will moderate them to remove unacceptable material.¹⁵ Guidelines on what we regard as unacceptable can be found [here](#), but broadly 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.

Outputs from Step 3C to be uploaded to the online portal

Output	Produced and uploaded by
Publication of consultation documents and supporting material	Change sponsor
Queries on proposal	Consultees
Responses to queries, FAQs, engagement record	Change sponsor
Consultation responses	Consultees (moderated by the CAA prior to publication, and uploaded by the change sponsor where submitted by post)

14. The CAA will reconsider in the light of experience whether the offline response mechanism is still necessary when we conduct a review of the airspace change process three years after implementation, to judge whether the administrative burden of uploading, monitoring and analysing postal responses remains proportionate.

15. The CAA's review after three years will also reconsider in the light of experience whether it is practical for the CAA to carry out this moderation role. We may decide, instead, that the change sponsor should moderate the responses in accordance with CAA guidance, requiring change sponsors to seek our approval before any redactions are made.

Tier categories

Glossary

Tier 1

Tier 2/3

Stage 1

A: S of Need

Stage 2

B: Environment

Stage 3

C: Consultation

Stage 4

D: Design

Stage 5

E: Options

Stage 6

F: Submission

Stage 7

G: Decision

Backgrd Info

H: PIR

Stage 3

Consult

Step 3D Collate and review responses

174. Step 3D requires the change sponsor to carry out a fair, transparent and comprehensive review and categorisation of consultation responses. More detailed guidance is given in [Appendix C](#).

175. The portal will maintain a transparent and complete record of online consultation responses, and of paper responses which the change sponsor has uploaded. It may be that some feedback is not provided through a formal consultation response but more informally, for example through feedback given at public events, or comments made in private or public meetings. The change sponsor should decide how to introduce this feedback into the process in a transparent way. It may be that the change sponsor requests that such feedback be repeated formally via the portal, as it may not be proportionate to record and upload every point arising. What would not be appropriate would be for the change sponsor to take such feedback into account without making it transparent that it has or why it has done so.

For more information about:

- **consultation and engagement, see [Appendix C](#)**

176. The change sponsor must review the responses and categorise them into those that present information that may lead to a change in the design and those that do not, including those raising issues which are outside the change sponsor’s control (such as government policy). The CAA will review a sample of this categorisation of responses and take a view on whether the categorisation has been done fairly. If necessary, we will ask the change sponsor to change a categorisation. The categorisation for each consultation response will be published on the online portal.

177. When the final proposal is submitted, the CAA will check that the issues raised in the responses when categorised have been dealt with by the sponsor appropriately. This could be by addressing the issue fully, by mitigating the issue to the greatest extent possible (with an appropriate rationale), or by rejecting the issue on justifiable grounds that are explained in the consultation response document.

Scaling of Step 3D

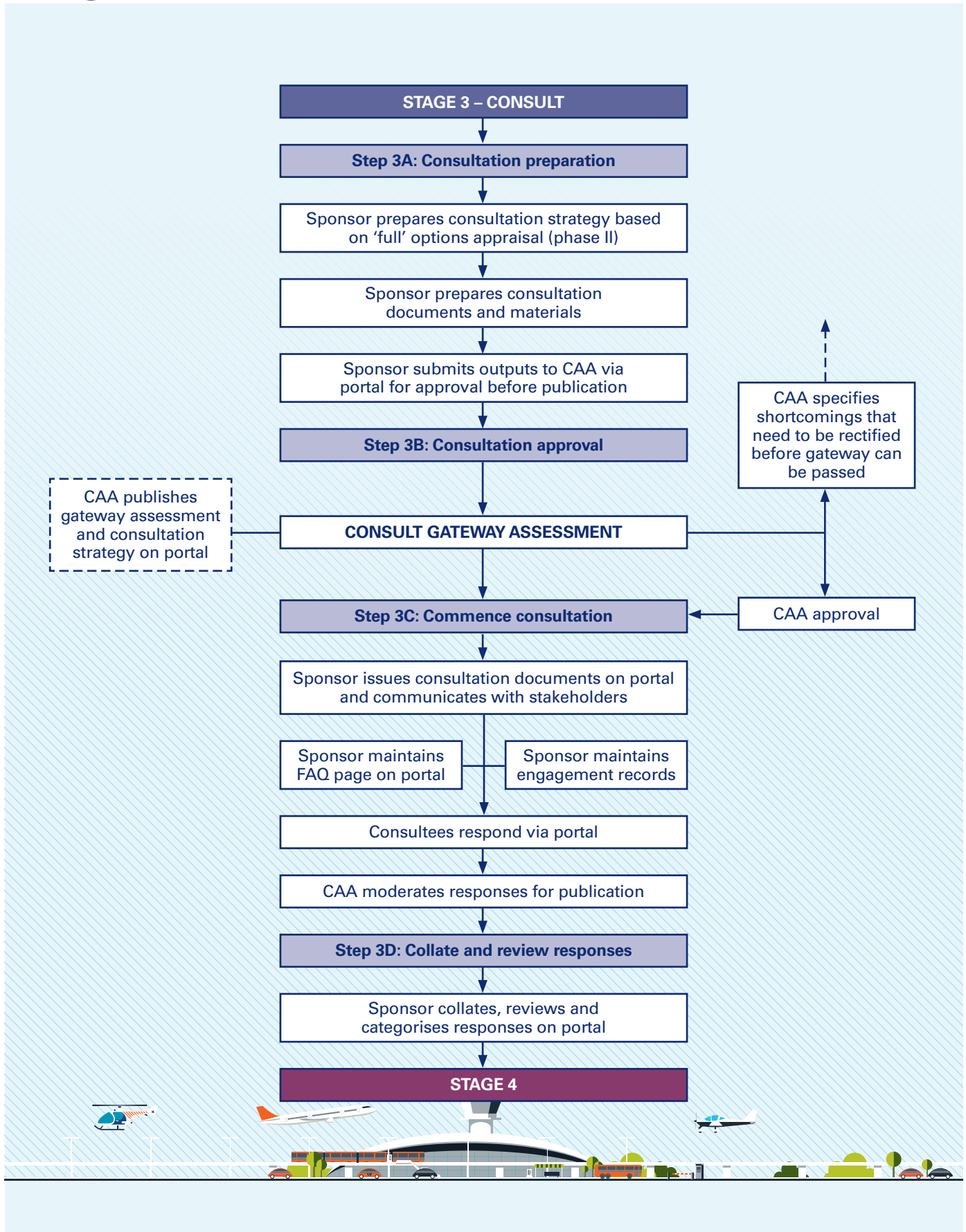
178. Change sponsors proposing Level 1 changes should expect Step 3D to require more resource than Level 2 changes, as there are likely to be more stakeholder responses to catalogue and take into account when they update their design.

179. For Level M see the introductory comments to Stage 3 about scaling. Step 3D is not required for Level 0 changes.

Outputs from Step 3D to be uploaded to the online portal	
Output	Produced and uploaded by
Categorisation of responses	Change sponsor
Categorisation of responses approval statement	CAA

Tier categories	Tier 1	Tier 2/3	Tier 3	Tier 4	Tier 5	Tier 6	Tier 7	Tier 8	Tier 9	Tier 10	Tier 11	Tier 12	Tier 13	Tier 14	Tier 15	Tier 16	Tier 17	Tier 18	Tier 19	Tier 20	Tier 21	Tier 22	Tier 23	Tier 24	Tier 25	Tier 26	Tier 27	Tier 28	Tier 29	Tier 30	Tier 31	Tier 32	Tier 33	Tier 34	Tier 35	Tier 36	Tier 37	Tier 38	Tier 39	Tier 40	Tier 41	Tier 42	Tier 43	Tier 44	Tier 45	Tier 46	Tier 47	Tier 48	Tier 49	Tier 50	Tier 51	Tier 52	Tier 53	Tier 54	Tier 55	Tier 56	Tier 57	Tier 58	Tier 59	Tier 60	Tier 61	Tier 62	Tier 63	Tier 64	Tier 65	Tier 66	Tier 67	Tier 68	Tier 69	Tier 70	Tier 71	Tier 72	Tier 73	Tier 74	Tier 75	Tier 76	Tier 77	Tier 78	Tier 79	Tier 80	Tier 81	Tier 82	Tier 83	Tier 84	Tier 85	Tier 86	Tier 87	Tier 88	Tier 89	Tier 90	Tier 91	Tier 92	Tier 93	Tier 94	Tier 95	Tier 96	Tier 97	Tier 98	Tier 99	Tier 100
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Stage 3



Backgrd Info	Stage 7	Stage 6	Stage 5	Stage 4	Stage 3	Stage 2	Stage 1	Tier 1	Tier categories
H: PIR	G: Decision	F: Submission	E: Options	D: Design	C: Consultation	B: Environment	A: S of Need	Tier 2/3	Glossary

Stage 4

Update and submit

Process overview

Stage 4 UPDATE AND SUBMIT	Step 4A Update design The change sponsor considers the consultation responses, identifies any consequent design changes, and updates the options appraisal, submitting these to the CAA for review.
	Step 4B Submit airspace change proposal to CAA The change sponsor prepares the formal airspace change proposal using a template and submits it to the CAA.

Introduction

180. Stage 4 commences when the consultation closing date has passed and the responses have been collated, reviewed and categorised by the change sponsor. The timing of Stage 4 will be determined by the size, scale and complexity of the proposed change.

181. The key point of Stage 4 is for the change sponsor to consider the need to update the design of the airspace change in the light of the information in the responses received (Step 4A). The update also includes completing the Final options appraisal (see Stage 2 above). The change sponsor then makes the formal submission of the airspace change proposal to the CAA (Step 4B).

Scaling of Stage 4

182. Stage 4 is required for Level 1, Level 2, Level M1 and Level M2 changes, but not for Level 0.

Step 4A Update design

183. As with all stages of the process, the online portal plays a crucial role in allowing everyone to see how the change sponsor takes consultation feedback into account in developing and progressing its proposal. Step 4A is sub-divided into further individual steps to show this more clearly:

- the change sponsor reviews the consultation responses (which it has categorised at Step 3D)
- from those responses identified for further consideration, the change sponsor considers the merits and practical possibilities of amending the airspace change design, if possible, to address the issues raised in those responses
- this may include selecting one option over another if more than one was consulted on
- the change sponsor updates the options appraisal to the Final version, using the same approach as in the earlier phases, if this is needed in order to take account of the revised impacts of any new design features
- the change sponsor publishes on the online portal a consultation response document, deriving and aggregating key themes and messages from the responses; providing feedback to consultees; and containing supporting evidence justifying how it has or has not been able to modify its proposal, or chosen a particular option, in light of those responses and themes. This will include an explanation of why the change sponsor has rejected particular requests, if any. This should create an auditable trail between the responses, options appraisal and modifications

Stage 4

Update and submit

- the change sponsor publishes on the portal the updated design and Final options appraisal.
- if the options appraisal reveals that the impact of the design has changed fundamentally, the change sponsor may wish to pause at this point and discuss with the CAA whether it should undertake a second consultation.

For more information about:

- **environmental metrics and assessment, see [Appendix B](#)**
- **consultation and engagement, see [Appendix C](#)**
- **design principles, see [Appendix D](#)**
- **options appraisal, see [Appendix E](#)**

184. The change sponsor must be prepared to respond to what it learns from the consultation and to make changes, even if this requires major modifications, where appropriate. Below are some objective principles for the level of change in impact identified by the Final options appraisal (when compared with the Full options appraisal in the consultation) that would trigger a second round of consultation. This will depend on the extent of the change to the anticipated impact and whether new parties are affected. To keep the process proportionate, the CAA would not expect the change sponsor to re-consult on changes that have only a minor effect on the potential impacts identified (see page 52).

Guidance on re-consultation

185. The change sponsor must re-consult where there is a fundamental difference between the proposals consulted on and those which the change sponsor subsequently applies for. This includes, but is not limited to, any change to the proposal that:
- introduces additional airspace or new routes
 - alters the intended use of the existing airspace such that a significant number of stakeholders previously not consulted are now impacted
 - alters the intended use of the existing airspace such that the impact on one or more stakeholders already consulted has changed substantially and negatively.
186. If a change sponsor is in doubt whether the modifications justify re consultation, it should err on the side of doing so. Unless the proposal has changed considerably, or new people are affected, the re-consultation period can be less than the full 12 weeks. It is also not intended that there should be a never-ending cycle of consult-modify-consult. The CAA will provide advice, but ultimately whether the change sponsor has acted reasonably will form part of the CAA's assessment and its final decision on the airspace change proposal.
187. As before, the online portal should be used for all exchanges between the change sponsor and consultees, so that an accurate, complete and transparent record is maintained.

Backgrd Info	H: PIR
Stage 7	G: Decision
Stage 6	F: Submission
Stage 5	E: Options
Stage 4	D: Design
Stage 3	C: Consultation
Stage 2	B: Environment
Stage 1	A: S of Need
Tier 1	Tier 2/3
Tier categories	Glossary

Stage 4

Update and submit

Outputs from Step 4A to be uploaded to the online portal

Output	Produced and uploaded by
Consultation response document showing design changes in light of responses	Change sponsor
Options appraisal (phase III – Final)	Change sponsor
Revised design	Change sponsor

Step 4B Submit airspace change proposal

188. At Step 4B the change sponsor prepares and submits the formal airspace change proposal to the CAA, including the Final options appraisal. The proposal is published on the portal. This will inform the Public Evidence Session which, should one be held, will take place a minimum of four weeks later. The published version of the formal proposal may have some elements redacted to protect commercially (or national security) sensitive information.

For more information about:

- **Submission of a formal proposal, see [Appendix F](#)**

189. For Level 1 and 2 changes, the change sponsor must structure its submission in accordance with a standard template, accepting the very varied nature of airspace change proposals. This makes it easier for anyone interested in airspace changes to see what is being proposed. The template will identify the main characteristics of the proposal (akin to an executive summary), which will be used for any Public Evidence Session (see Stage 5 below). The template helps the change sponsor to structure the proposal using standard headings including safety, operational, environmental and consultation assessments, drawing from the earlier outputs in the process. More detailed guidance on what is required of the change sponsor under each heading is set out in [Appendix F](#).

190. The proposal will need a realistic target implementation date (with a reserve date) that takes into account the implementation process set out at Stage 6 and in [Appendix F](#).

191. The proposal is submitted via the online portal where it can be viewed by anyone. It is important that all stakeholders can see the final submission, particularly for Level 1 changes, for which a Public Evidence Session may be convened.

Stage 4

Update and submit

192. If any material needs redacting for publication, then the change sponsor must prepare two copies of the submission, one complete and one redacted. However, change sponsors should note that information held by the CAA is subject to legislation that requires us to consider disclosing it on request (Freedom of Information Act 2000 and Environmental Information Regulations 2004) and the redacted material can only be withheld in certain circumstances. **Appendix F** sets out what these circumstances are, and what supporting justification the change sponsor needs to submit to the CAA in order for us to accept that certain material is redacted from the published version and that we would not disclose it if we were asked to release it.

193. Under normal circumstances, the formal proposal to the CAA should not contain material that has not been consulted upon.¹⁶ The exception is material that is confidential in the interests of national security, or material which the CAA has agreed with the change sponsor 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).

194. The default position is that all material in relation to a proposal is published. We do not anticipate routinely agreeing to withhold large amounts of information and we would only accept redaction of the minimum information necessary to comply with our obligations.

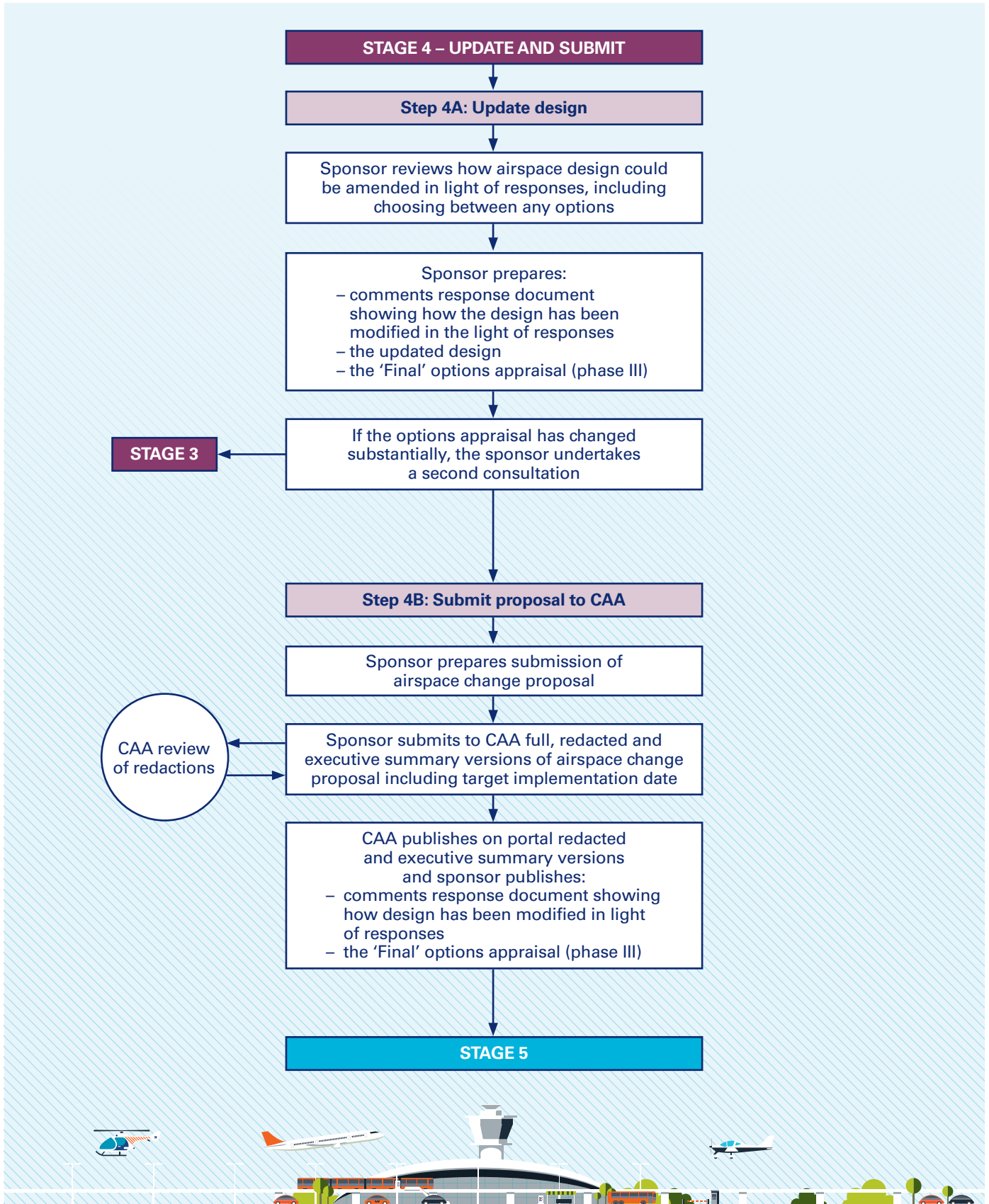
Outputs from Step 4B to be uploaded to the online portal

Output	Produced and uploaded by
Airspace change proposal (full, redacted and executive summary versions)	Sponsor

¹⁶ It is acceptable for the change sponsor to exclude unnecessary technical detail from consultation material that might compromise the clarity of the change sponsor's proposal. The CAA will accept technical material that has not been consulted upon provided that it makes no material change to the proposal or has any third-party impact.

Stage 4

Update and submit



Backgrd Info
Stage 7
Stage 6
Stage 5
Stage 4
Stage 3
Stage 2
Stage 1
Tier 1
Tier categories
Glossary
H: PIR
G: Decision
F: Submission
E: Options
D: Design
C: Consultation
B: Environment
A: S of Need
Tier 2/3

Stage 5

Decide

Process overview

Stage 5 DECIDE	Step 5A CAA assessment The CAA reviews and assesses the airspace change proposal, and for Level 1 changes offers a Public Evidence Session. The CAA may request minor changes to the proposal. The CAA prepares assessment papers to inform and provide guidance to the airspace change decision-maker.
	Step 5B CAA decision The CAA decides whether to grant or reject the airspace change proposal. For Level 1 changes, the CAA will normally seek views on a draft of the decision, or the Secretary of State may 'call-in' the proposal.
DECIDE Gateway	

Introduction

195. Stage 5 is where the CAA assesses the airspace change proposal and all the documentation and evidence accompanying it, holding a Public Evidence Session for Level 1 proposals (Step 5A), before making its decision (Step 5B). The CAA's overall aim is to arrive at a fair, evidence-based decision with the maximum of transparency to expose the decision-making process to proper scrutiny and thus highlight any omissions or misunderstandings. This is why our rationale and gateway sign-offs will be placed in the public domain.

Scaling of Stage 5

196. The timescales for the CAA's assessment will have been previously agreed with the change sponsor. The time needed for the assessment will vary depending on the nature of the change proposed (see below). For Level 1 proposals, the CAA will offer a Public Evidence Session and normally publish a draft decision. Neither of these will apply in the case of Level 2, Level M

or Level 0 proposals. Also, the Secretary of State may call-in a Level 1 or M1 proposal, but not a Level 2, Level M2 or Level 0 proposal.

Step 5A: CAA assessment

197. Once the formal proposal has been submitted, the first phase of Step 5A is for the CAA to carry out a document check and ensure that the necessary gateways have been passed and process followed. The CAA will confirm this using the online portal.
198. The CAA will then, for Level 1 proposals, offer to convene a Public Evidence Session (see overleaf).
199. To assist with time-keeping, we offer a key performance indicator (KPI) for the time period for the CAA decision at Stage 5, in the form of 'best endeavours to make the decision within 16 weeks (for Level 1 changes) or 10 weeks (for Level 2 changes), subject to the change sponsor also meeting its time commitments'.

Stage 5

Decide

200. This will be dependent on:

- the timeline provided by the change sponsor for the submission of the formal proposal at Step 4A, subject to our agreement
- the CAA and sponsor adhering to those deadlines
- whether the CAA holds a Public Evidence Session (see below), in which case a further two weeks will be needed for the CAA assessment
- whether the CAA publishes a draft decision (see Step 5B below), in which case a further eight weeks will be needed for the CAA decision.

201. After the Public Evidence Session (or, if one is not held, when Stage 5 commences) the CAA moves from an information-receiving role to one of analysis and decision-making. As a consequence, we cannot give any assurance that any written statements uploaded to the portal¹⁷ more than four weeks after the Public Evidence Session date is announced for a Level 1 change will be taken into account by the CAA.

202. The CAA will then begin its analysis of the technical merits of the proposal against the requirements set out in **Appendix F**. The CAA will initially determine whether any further information or technical corrections and clarifications are needed from the change sponsor. If so, the CAA will request them and the proposal will temporarily be put on hold until it has been updated on the portal by the change sponsor.

203. The CAA also reviews the material provided by the change sponsor relating to the consultation outcome, and considers:

- any design changes the change sponsor has made
- the Final options appraisal
- the change sponsor's categorisation of consultees' comments
- responses by the change sponsor to consultees' comments
- the decision timeline to which the CAA will commit.

204. If the options appraisal reveals that the potential impact of the design has changed fundamentally since the Full options appraisal contained in the consultation material, the CAA will in all likelihood require that the change sponsor repeats some stages of the process, including consultation.

Technical details or minor amendments to submissions

205. The CAA may need to request supplementary information, or technical corrections and clarifications, from sponsors where an initial assessment reveals an area of potential weakness. This may then lead to amendment of the airspace change proposal formally submitted by the change sponsor, but only to the extent that any such amendments do not substantially alter the proposal, with the purpose of rendering the proposal fit for assessment by the CAA decision-maker. This practice exists to mitigate a specific risk, which is that changes are not approved because of small errors or technical issues in the proposal rather than matters of substance. Rather than rejecting the proposal and referring the change sponsor back to an earlier point in the process, a more proportionate approach is to give the change sponsor the opportunity to provide more information or clarity.

¹⁷ The CAA will only take into account written statements received via the portal.

Stage 5

Decide

206. However, it is important that there is complete transparency by publishing the requests and amendments on the portal. The process is as follows:

- The CAA establishes that if certain identifiable clarifications were made to the proposal, it would be able to be progressed to the decision-making Step (5B). This only applies on the condition that clarifications identified by the CAA would not change the proposal enough to necessitate re-consulting (see guidance on Stage 4). The relevant CAA decision-maker, according to the Level of the change, as well as other CAA staff, will be part of the assessment.
- The CAA explains to the change sponsor the issues identified by this initial assessment and requests supplementary information or technical corrections or clarifications, stipulating the timescale for a response
- The change sponsor submits to the CAA any clarification or additional information. If this involves some redrafting of the proposal, it resubmits the airspace change proposal as 'version 2.0' (and so on, if further revisions are needed), taking into account the effect of the interruption in the process on timescales for potential implementation should the change be approved by the CAA
- Once resolved, the CAA's request and the change sponsor's resubmission or response (including any revised consultation and a log of correspondence leading to that revision) are published on the online portal together (preferably during or, if necessary, at the end of Step 5A)
- The CAA assessment continues.

Public Evidence Session (Level 1 only)

207. Assuming the proposal has proceeded past the initial CAA assessment towards a CAA decision, for Level 1 airspace change proposals

the CAA will offer to convene a Public Evidence Session (not for other Levels). Assuming there is sufficient interest to justify holding one, the CAA will organise and publicise it. The session will take place no sooner than four weeks after publication of the formal proposal on the online portal.

208. The Public Evidence Session gives the sole opportunity for stakeholders other than the change sponsor to provide the CAA decision-maker with their views on the airspace change proposal directly, in a public forum and in addition to the opportunities to provide their views at earlier stages in the process through the portal. The purpose of the Public Evidence Session is for the CAA to listen. We may ask questions, but only if we do not understand what a stakeholder or representative is saying. There will be no opportunity for opposing parties to challenge the submissions made by other groups. The Public Evidence Session is governed by the following principles:

- At least four weeks' notice of the session will be given on the online portal once the final airspace change proposal is published
- Prior to the session (in what could be a relatively short space of time after the formal proposal is published) the change sponsor:
 - must produce an executive summary of its proposals – in particular, how the proposals may differ from what was consulted on
 - may, where directed by the CAA, need to produce a layperson's guide and/or a graphic version of the explanation, so that stakeholders can more easily understand:
 - the potential impact of what is being proposed on them
 - what has changed between the consultation proposal and the formal proposal

Stage 5

Decide

- The session is chaired either by a CAA employee outside the Airspace Regulation team, or by a professional independent facilitator
- The session is attended by the CAA decision-maker and specialist colleagues who work on airspace matters. It is not a legal proceeding with formal rules of evidence. It is a facilitated evidence-giving session at which representatives will be expected to speak themselves without formality or legal representation, in order to reinforce that information-receiving nature of the session
- The change sponsor may be present – not to argue its case, but to offer any clarification that is needed
- Attendees must sign in
- A series of five-minute slots are available for booking by attendees wishing to speak; representative organisations are able to reserve ten-minute slots
- Those not attending in person will be given the opportunity to submit a written statement using a form on the online portal¹⁸, subject to the following conditions:
 - written statements must be limited to fewer than 1000 words
 - written statements are limited to one per individual (verified by email address)
 - written statements will be moderated by the CAA before publication to remove unacceptable material
- as noted above, we cannot give any assurance that we will take into account any written statement received more than four weeks after the Public Evidence Session date is announced
- A full transcript of the statements made by all parties will be published on the online portal; this evidence is reviewed and demonstrably taken into account by the CAA in its decision document
- Individual meetings forming part of the Public Evidence Session should be very much the exception. Under these proposals the CAA is unlikely to agree to give any stakeholders private sessions and stakeholders will be expected to give their views in public. Where the CAA identifies a situation that warrants a meeting, the change sponsor (if attending the session) and the CAA decision-maker need to be present, i.e. the same people present as in the full Public Evidence Session.

18. The CAA will also accept postal responses for the time being. We will reconsider in the light of experience whether the offline response mechanism is still necessary when we conduct a review of the airspace change process three years after implementation, to judge whether the administrative burden of uploading, monitoring and analysing postal responses remains proportionate. However, for practical reasons, bookings for the Public Evidence Session must be made using the online portal.

Stage 5

Decide

Safety review and operational, environmental and consultation assessments by the CAA for the CAA decision-maker

CAA safety review

209. The safety review considers the change sponsor's safety assessment that forms part of the Final options appraisal.
210. The CAA will review the air traffic safety risks associated with the airspace design and whether the level of air traffic control 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, such as whether the instrument flight procedures have been designed appropriately, or whether the route spacing is correct.
211. The level of review required depends on the nature of the proposal and the CAA may require the change sponsor to provide additional data and/or justification. Once the CAA is satisfied that the proposal maintains a high level of safety, the proposal can proceed, subject to the other assessments (operational and, where applicable, environmental and consultation), to the CAA's final decision.
212. As part of its decision, the CAA will prepare a Letter of Acceptance of the change sponsor's assessment. The Letter of Acceptance sets out the results of the CAA's review of the safety assessment it has received from the change sponsor. A plain English summary will be published on the portal.

213. For certain proposals, the CAA may consider that the proposal can only proceed subject to conditions that can only be satisfied the airspace change has been implemented. These will be reflected as conditions in the CAA decision document.

CAA operational assessment

214. The operational assessment is designed to brief the decision-maker as to whether the proposal is fit for purpose. This assessment contains:
- the CAA's assessment of the airspace change proposal justification and options considered
 - the CAA's assessment of the proposed airspace design and its associated operational arrangements; an assessment of the design proposal is produced to illustrate whether it meets CAA regulatory requirements regarding international and national airspace and procedure design requirements, and whether any mitigations were required to overcome design issues
 - the CAA's assessment of whether adequate resource exists to deliver the change and whether adequate communications, navigation and surveillance infrastructure exists to enable the change to take place
 - the CAA's assessment of whether maps and diagrams explain clearly the nature of the proposal
 - the CAA's assessment of the operational impacts to all airspace users, airfields and on traffic levels and whether potential impacts have been mitigated appropriately.

Stage 5

Decide

215. The CAA's conclusions are arrived at after a CAA internal case study. An operational assessment is completed for all airspace change proposals and forms a key part in the CAA's decision-making process as to whether a proposal is approved or rejected. The operational assessment will also include any recommendations for implementation such as conditions that should be attached to an approval, if given. The completed operational assessment will be published on the online portal at the 'Decision' gateway.

CAA environmental assessment and statement

216. The environmental assessment and statement reviews the environmental assessment provided by the change sponsor requesting the change. The review assesses whether the change sponsor has provided the data and information that had been agreed at the assessment meeting or in subsequent correspondence, and must be provided as part of the proposal. The requirements are based on the guidance in **Appendix B** – covering in particular noise, CO₂ emissions and local air quality. Those requirements have been designed to facilitate the assessments that the CAA must make when considering the environmental impact of the change.

217. The CAA reviews the assessments made by the change sponsor as part of the proposal to determine if they have been undertaken properly and the conclusions are reasonable. The CAA will check a sample of the change sponsor's results and may, in some cases, undertake its own analysis. The CAA then prepares a report summarising the environmental impacts of the proposal outlining the anticipated impacts of the change if it were to be implemented, for consideration along with all the other material by the CAA decision-maker.

218. The CAA will produce an environmental statement in accordance with the Government's requirement (in its Air Navigation Guidance) that the CAA does so for all airspace changes. The completed environmental assessment and statement will be published on the online portal at the 'Decision' gateway.

CAA consultation assessment

219. The consultation assessment is designed to brief the CAA decision-maker on whether the proposal has been adequately consulted upon in accordance with the CAA's regulatory requirements, the Government's guidance principles for consultation and the Secretary of State's Air Navigation Guidance. The assessment will confirm whether the change sponsor has categorised the responses appropriately, and whether it has correctly identified the issues arising from the consultation and has responded to those issues appropriately. The assessment will rely, in part, on a comparison of the change sponsor's consultation feedback report against the actual responses provided by consultees and any material provided through the Public Evidence Session, where one has taken place. The completed consultation assessment will be published on the online portal at the 'Decision' gateway.

Stage 5

Decide

Outputs from Step 5A to be uploaded to the online portal

Output	Produced and uploaded by
Confirmation that document check is complete and of decision timescales	CAA
Dates of expected decision and of any Public Evidence Session	CAA
Written submissions to any Public Evidence Session	Those responding to a proposal (moderated by the CAA prior to publication and uploaded by the CAA where submitted by post)
Transcript of any Public Evidence Session	CAA
Diary of any additional meetings between CAA and stakeholders	CAA
Request for any further technical details or amendments	CAA
Response or revised proposal as 'version 2.0' (if any)	Change sponsor

Step 5B: CAA decision

220. Having assessed the airspace change proposal and all the documentation and evidence accompanying it, in Step 5B the CAA makes its decision. For Level 1 proposals, the CAA will normally publish a draft decision for comments before making its decision final, or the Secretary of State may 'call-in' the proposal.
221. In making its decision, the CAA will state whether it approves or rejects the proposed airspace change, with clear assessments of individual factors and explanation about how we have reached our decision, including

weighing the different factors involved. Sometimes the needs of interested parties will conflict. It is therefore reasonable for those parties to understand not just how the airspace change process works but also how the CAA reaches its decision.

222. The CAA's decision is bound by a legal framework and government guidance which determines that a high standard of safety is the CAA's priority when it makes airspace change decisions. Beyond this, the legislation requires us to consider a number of factors.

Stage 5

Decide

223. **Appendix G** sets out in more detail the CAA's policy approach in carrying out its duties – including what we understand those duties to mean, how we evaluate and weigh competing priorities, whether these be strategic policy, environmental impacts such as noise, the needs of airspace users, and/or the interests (economic or otherwise) of airports or air navigation service providers, and what evidence from stakeholders we will take into account when reaching a decision. It also gives examples as guidance for airspace change sponsors to help them gauge whether or not any of the material factors that the CAA must consider are in conflict. All airspace change proposals are different. Where in a particular case a proposed change would contribute positively to some of the material factors, but negatively in respect of others, the relevant statute (section 70(3) of the Transport Act 2000) refers to this situation as a conflict. Section 70(3) then requires the CAA to apply those material factors in the manner it thinks is reasonable having regard to them as a whole.

224. The CAA may request actual changes to the change sponsor's formal proposal to reflect the weight that the CAA proposes to accord to the factors the CAA has to take into account when considering whether to agree to an airspace change (for example, amending the size or shape of controlled airspace). Giving the change sponsor this opportunity to modify its proposal is a more proportionate approach than the CAA simply rejecting the proposal and referring the change sponsor back to an earlier point in the process. However, it is only possible to the extent that such changes would not fundamentally affect the substance of the proposal and therefore require additional stakeholder consultation. Also, it is important that the CAA and change sponsor maintain complete transparency by publishing any request and amendments on the online portal.

CAA draft decision for Level 1 proposals

225. Before reaching a final decision on Level 1 proposals, the CAA will publish a draft decision for public review. The objective of doing this is to ensure that we have not missed, misunderstood or misinterpreted any relevant matters. The draft decision:

- is not designed for stakeholders to make new representations
- should not be considered as a further opportunity to go back over material that the CAA has already considered and addressed.

226. This part of the process aims to ensure that the final decision is as comprehensive, clear and robust as possible and can be demonstrated to have been reached fairly, with adequate opportunity for all interested parties to provide representations.

227. The CAA will publish the draft decision on the online portal. Responses should be made using the portal¹⁹, subject to the following conditions:

- responses are limited to one per individual (verified by email address)
- written statements will be moderated by the CAA before publication to remove unacceptable material
- we cannot give any assurance that we will take into account any response received more than four weeks after the draft decision is published.

19. The CAA will also accept postal responses for the time being. We will reconsider in the light of experience whether the offline response mechanism is still necessary when we conduct a review of the airspace change process three years after implementation, to judge whether the administrative burden of uploading, monitoring and analysing postal responses remains proportionate.

Stage 5

Decide

228. It will be our normal policy to publish a draft decision on Level 1 proposals. However, we recognise that this adds more time to the process, and in certain circumstances the delay may be disproportionate to the benefit of publishing a draft decision. In such circumstances, when the CAA publishes its final decision we will clearly explain our reason for not publishing a draft decision.

Timescales

229. A draft decision is likely to add another eight weeks to the process. The CAA will give stakeholders four weeks to respond. We give no assurance that we will take account of comments received after that time. We will then allow a further four weeks for us to assess stakeholder comments. These timescales will be clearly stated on the online portal.

Decisions by the Secretary of State

The text in this section refers to the policy proposals and draft guidance on which the Department for Transport is currently consulting (click here for details). Should Government Directions, policy and guidance change after the consultation, this section will be updated accordingly.

230. The Government has created a new call-in role for the Secretary of State for Tier 1 airspace changes. The criteria to trigger this are set such that call-in would be only for airspace changes deemed to be of national importance.

231. Any party can ask the Secretary of State to call-in a proposal, but even if an airspace change proposal meets the call-in criteria, there is no obligation on the Secretary of State to agree to call-in the proposal; it is at the Secretary of State's discretion.

232. The Secretary of State's Directions to the CAA and the Government's Air Navigation Guidance set out the criteria for the Secretary of State to call-in an airspace change proposal. These are set out below:

- the proposal is not linked to a planning decision which has already been determined by the Secretary of State, and either:
 - the proposal is considered to be of strategic national importance; or
 - the proposal could have a significant impact (positive or negative) on UK economic growth; or
 - the proposal could lead to a change in noise distribution resulting in a 10,000 net increase in the number of people subjected to a noise level of at least 54 dB $L_{Aeq\ 16hr}$ ²⁰ as well as having an identified adverse impact on health and quality of life.²¹

CAA role

233. The CAA may therefore be notified at Stage 5B that the Secretary of State has decided to call-in the proposal for the Secretary of State to make the decision rather than the CAA. This is not unlike the arrangements used in the planning system for managing the development of land and buildings.

20. 100% mode $L_{Aeq\ 16h}$ noise exposure.

21. The assessment of the numbers of people affected and the associated adverse impacts on health and quality of life of the airspace change proposal should be carried out by the change sponsor in accordance with the requirements set out in the Government's Air Navigation Guidance.

Stage 5

Decide

234. If a decision has been called-in by the Secretary of State, the CAA provides its own views on the proposal to the Secretary of State in a 'minded-to' decision, which contains the same information as a CAA decision with the objective of providing a CAA opinion on the proposal to the Secretary of State, who is now the decision-maker. The sequence would be:

- during Stage 5 (CAA assessment and decision), stakeholders are able to ask the Secretary of State to call-in a change
- in response to a request, the Department for Transport applies the above criteria to determine whether the proposal is eligible to be called-in
- the Secretary of State confirms whether the change is to be called-in
- before the CAA publishes its own decision or draft decision, the Department for Transport notifies the CAA as to whether, because of the call-in, the CAA must instead issue a 'minded-to' decision
- the Secretary of State makes a decision on the proposal
- the Secretary of State's decision is published on the online portal.

Post-implementation review

235. If the CAA decides to approve the airspace change proposal, our decision document will notify the change sponsor of any post-implementation analysis that it needs to carry out in order to provide data for the post-implementation review, and of the likely date for this review. More information on what is required can be found under Stage 7 and in [Appendix H](#).

Review of a CAA decision

236. There is no appeal to the CAA in respect of an airspace decision or its terms and conditions. All CAA decisions are subject to judicial review. Judicial review is a challenge to the High Court on the fairness and lawfulness of the process followed by the CAA in reaching our decision. The Judicial Review process can be accessed [here](#).

Timescales and scaling of Step 5B

237. The CAA scales the decision-making step of the process by aiming to make decisions about Level 2 and Level M2 changes faster, and by widening the pool of CAA decision-makers to make these decisions. Level 0 decisions will be made within four weeks of receiving a fully complete Statement of Need (Step 1A).
238. Table 3 below shows the timescales to which the CAA will commit depending on the Level of airspace change proposal. It also shows the post of the staff member in the CAA who is empowered to make the final decision for a given Level.

Stage 5

Decide

Table 3 CAA decision timescales

Level	CAA decision time taken from submission of airspace change proposal	CAA decision-maker
Level 1	At least 16 weeks	Group Director Safety and Airspace Regulation or Head of Airspace, ATM and Aerodromes
Level 2A	Typically 10 weeks	As per Level 1
Level 2B	Likely to be 10 weeks or shorter	As per Level 2A, and additionally Manager Airspace Regulation
Level 2C	Likely to be 10 weeks or shorter	As per Level 2B, and additionally Principal Airspace Regulator
Level M1	At least 16 weeks	Group Director Safety and Airspace Regulation or Head of Airspace, ATM and Aerodromes
Level M2	Likely to be 10 weeks or shorter	Dependent on similarity to Level 2 characteristics
Level 0	Four weeks from submission of Statement of Need	As per Level 2C, and additionally Airspace Regulator

Stage 5

Decide

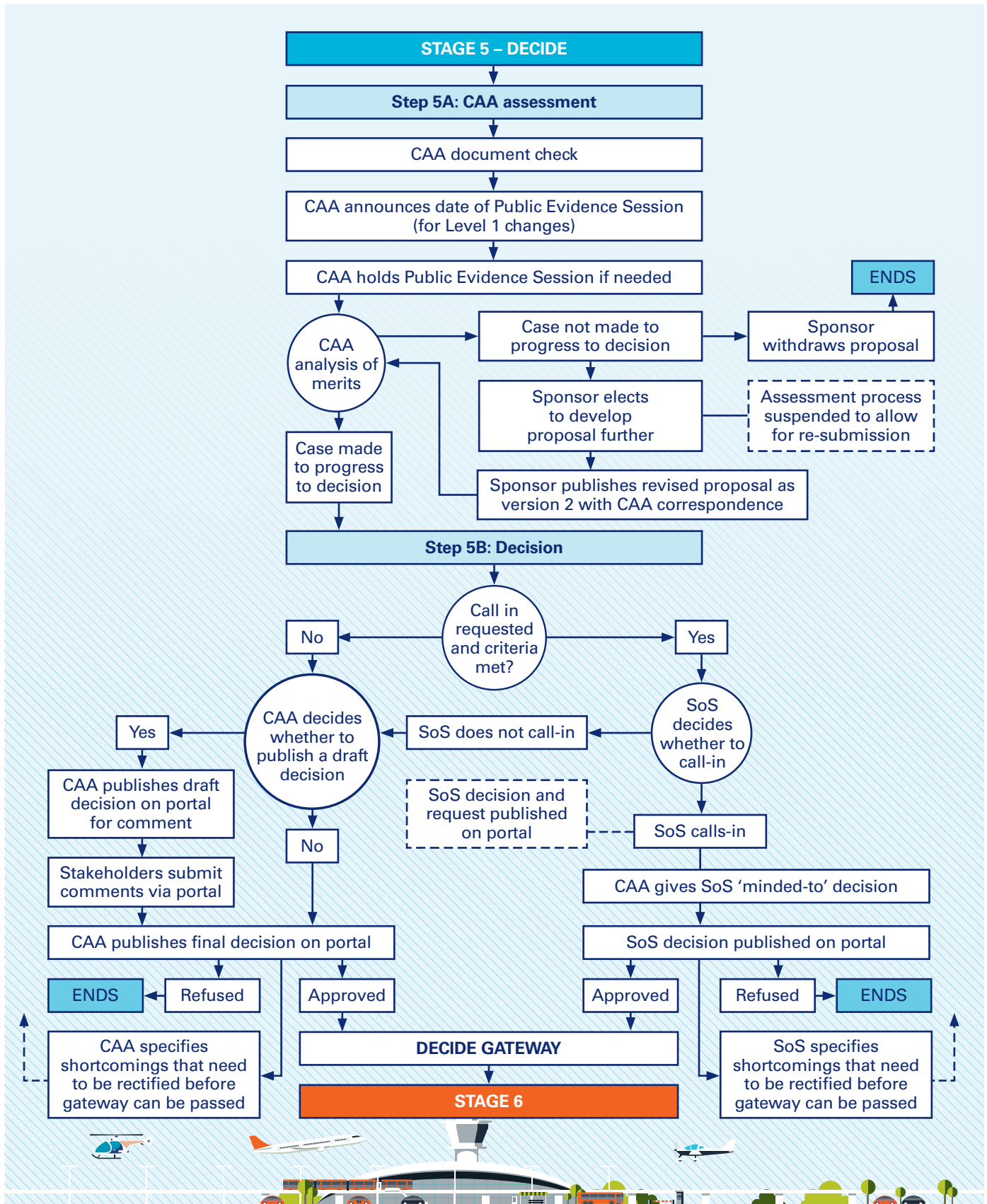
Outputs from Step 5B to be uploaded to the online portal

Output	Produced and uploaded by
Draft decision document (if any)	CAA
Feedback on any draft decision document	Affected stakeholders (moderated by the CAA prior to publication and uploaded by the CAA where submitted by post)
Secretary of State call-in requests	Affected stakeholder
Any notification that the proposal is eligible for call-in and has been called-in by the Secretary of State (if applicable)	Department for Transport
Decision document including: <ul style="list-style-type: none"> - options appraisal assessment (phase III – Final) - safety review (plain English summary) - operational assessment - consultation assessment - environmental assessment and statement 	CAA and/or Department for Transport

The flowchart [overleaf](#) refers to the policy proposals and draft guidance on which the Department for Transport is currently consulting ([click here for details](#)). Should Government Directions, policy and guidance change after the consultation, this flowchart will be updated accordingly.

Stage 5

Decide



Backgrd Info
Stage 7
Stage 6
Stage 5
Stage 4
Stage 3
Stage 2
Stage 1
Tier 1
Tier 2/3
Tier categories
Glossary

Stage 5

Decide

DECIDE GATEWAY

In order for the CAA to sign-off the 'Decide' gateway

- the change sponsor must have submitted a final proposal including an options appraisal revised in the light of consultation responses
- the change sponsor must have incorporated any technical changes to the proposal the CAA identifies
- an approval must have been given by the CAA or (where the proposal has been 'called-in') by the Secretary of State

Stage 6

Implement

Process overview

Stage 6 IMPLEMENT	Stage 6 Implement The change sponsor implements the approved change, working with air navigation service providers as necessary.
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- 239. Having passed the 'Decide' gateway, Stage 6 is where an approved change is implemented.
- 240. The effectiveness of the change will be reviewed during the post-implementation review at Stage 7, which normally commences at least 12 months after implementation. This does not, however, mean that implementation of the change is somehow provisional or temporary pending the post-implementation review.
- 241. The proposed implementation date of the airspace change will have formed part of the change sponsor's formal proposal, and thus been subject to the CAA's approval. In conjunction with the change sponsor, the CAA will instruct NATS to make the changes necessary in the UK Aeronautical Information Publication and other national regulatory documents.
- 242. The time taken to implement airspace changes is determined through established international aviation procedures. Implementation is time-sensitive, in order to allow for systems adaptation, testing and training. Modifications are required to both airborne and ground systems and these have to be co-ordinated on a series of internationally standardised implementation dates. These dates occur every 28 days and in some cases more than

one cycle of notification is necessary (the 'AIRAC' cycle²²). This depends on the type of change being proposed, or the Level of the change. Coding and design, whereby a coding house programmes the software used within aircraft flight computers to define routes, has to take place before this phase is reached. Co-ordination is often required at the UK's international borders and with other civil and military authorities. This can mean that major changes to airspace are only implemented in the quieter traffic periods that occur over winter, which again means implementation is time-sensitive.

- 243. The CAA will confirm the AIRAC cycle requirements following completion of Step 2B. In the case of most airspace changes, promulgation will be not less than one AIRAC cycle prior to the effective date of a change. For major changes, for example those involving extensive new procedures, cross-border airspace, etc, two AIRAC cycles will normally be necessary. Given sufficient notice, it may also be possible to adjust the publication cycles of the CAA's various maps and charts in order to incorporate airspace changes as close to their implementation date as possible.

22. Aeronautical Information Regulation and Control.

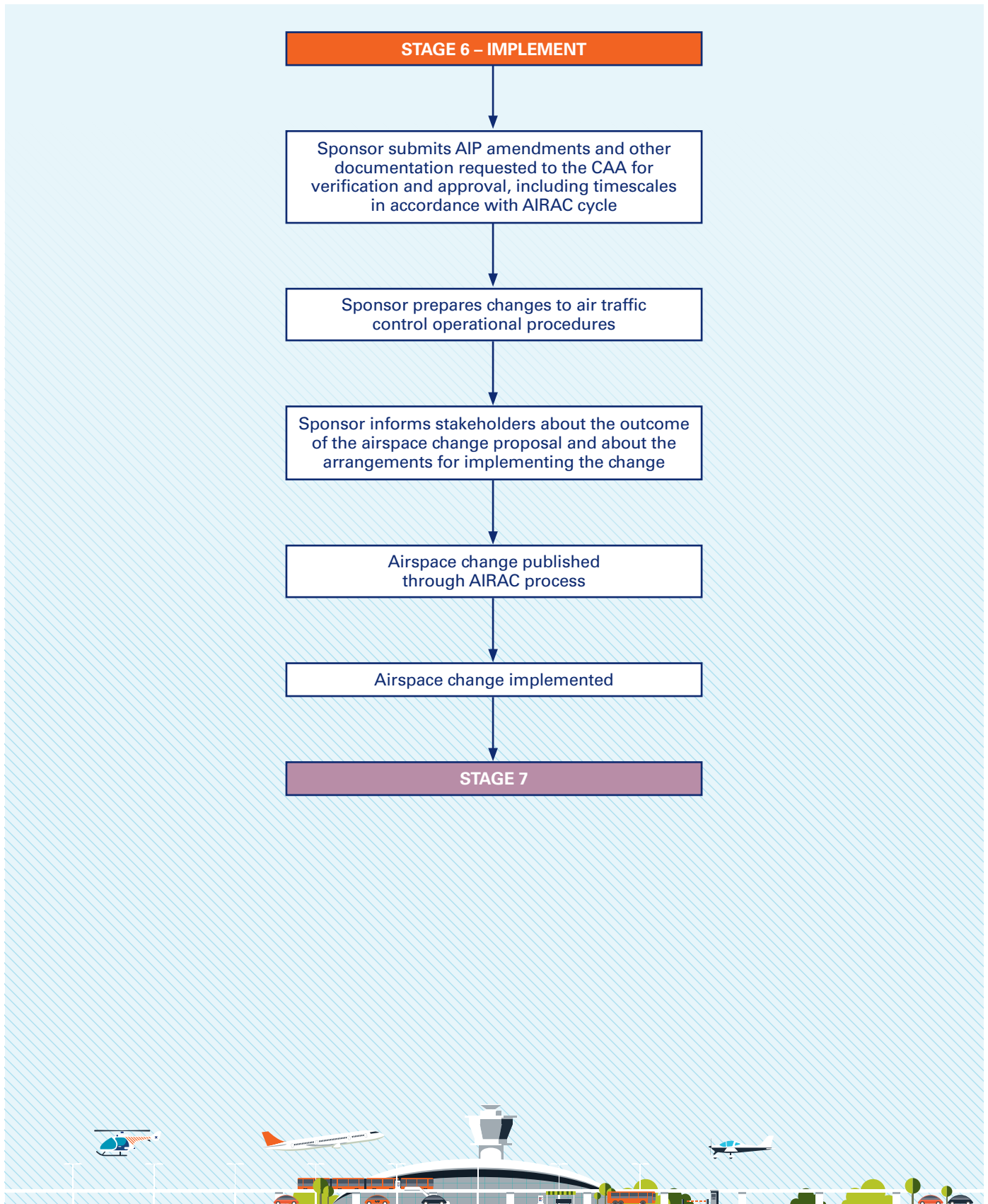
Tier categories	Tier 1	Tier 2/3	Tier 3	Tier 4	Tier 5	Tier 6	Tier 7	Tier 8	Tier 9	Tier 10	Tier 11	Tier 12	Tier 13	Tier 14	Tier 15	Tier 16	Tier 17	Tier 18	Tier 19	Tier 20	Tier 21	Tier 22	Tier 23	Tier 24	Tier 25	Tier 26	Tier 27	Tier 28	Tier 29	Tier 30	Tier 31	Tier 32	Tier 33	Tier 34	Tier 35	Tier 36	Tier 37	Tier 38	Tier 39	Tier 40	Tier 41	Tier 42	Tier 43	Tier 44	Tier 45	Tier 46	Tier 47	Tier 48	Tier 49	Tier 50	Tier 51	Tier 52	Tier 53	Tier 54	Tier 55	Tier 56	Tier 57	Tier 58	Tier 59	Tier 60	Tier 61	Tier 62	Tier 63	Tier 64	Tier 65	Tier 66	Tier 67	Tier 68	Tier 69	Tier 70	Tier 71	Tier 72	Tier 73	Tier 74	Tier 75	Tier 76	Tier 77	Tier 78	Tier 79	Tier 80	Tier 81	Tier 82	Tier 83	Tier 84	Tier 85	Tier 86	Tier 87	Tier 88	Tier 89	Tier 90	Tier 91	Tier 92	Tier 93	Tier 94	Tier 95	Tier 96	Tier 97	Tier 98	Tier 99	Tier 100
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Stage 6

Implement

- 244.** As part of the implementation process, the change sponsor needs to consider the extent of the Aeronautical Information Publication amendments that its airspace change will generate. Changes that result in flight planning arrangements must be co-ordinated with NATS. In the case of airspace changes in the vicinity of an airport, these may go beyond the change sponsor's entry in the Aerodrome (AD) section and require changes to the En-Route (ENR) and General (GEN) sections or the AD entries of adjacent aerodromes in the Aeronautical Information Publication. Similarly, en-route or off-route changes may impact upon SIDs, STARs, instrument flight procedure and terminal airspace structure charts within the AD section. En-route or off-route changes may also impact upon the airspace structures of adjoining States. The change sponsor must therefore consider the impact upon the Aeronautical Information Publication as a whole, and possibly the Aeronautical Information Publications of neighbouring states. The CAA can provide advice if requested.
- 245.** In addition to the formal promulgation of the change, the change sponsor will need to bring it to the attention of the aviation community. This will often initially take the form of an Aeronautical Information Circular (AIC) outlining the details of the change (including effective date and, where appropriate or feasible, a map of the revised airspace structure). Ideally, any such AIC should be published at least one month prior to the distribution of the Aeronautical Information Publication amendment containing the airspace change.
- 246.** The CAA's (or if applicable the Secretary of State's) decision will have been published on the online portal and is therefore visible to all. Change sponsors should also consider how to notify members of the local community and other stakeholder groups about the ultimate outcome of the consultation and the decision. In order to publicise a forthcoming change to as many airspace users (and perhaps service providers) as possible, the change sponsor should consider contacting the Ministry of Defence, the commercial General Aviation press, local General Aviation events, relevant community organisations and the local press. All that may be needed is a reference to the online portal where the decision has been published.
- 247.** During the first year of implementation, and prior to the CAA instigating the post-implementation review process (see [Stage 7](#)), the change sponsor may receive feedback on the impact of the change. (If the CAA also receives feedback during this period, then it will send this to the change sponsor.) The change sponsor is expected to continue to engage with its stakeholders during this first year of implementation. If problems arise, then the change sponsor is expected to consider what steps it can take to address those problems, within the constraints of the formal airspace design.

Stage 6 Implement



Tier categories	Tier 1	Stage 1	Stage 2	Stage 3	Stage 4	Stage 5	Stage 6	Stage 7	Backgrd Info
Glossary	Tier 2/3	A: S of Need	B: Environment	C: Consultation	D: Design	E: Options	F: Submission	G: Decision	H: PIR

Stage 7

Post-implementation review

Process overview

Stage 7 POST-IMPLEMENTATION REVIEW

Stage 7 Post-implementation review

The CAA reviews how the airspace change has performed, including whether anticipated impacts and benefits in the original proposal and decision have been delivered.

Purpose of the post-implementation review

248. In Stage 7 the CAA commences a post-implementation review, usually 12 months after implementation. The purpose of the review is for:

- the change sponsor to carry out a rigorous assessment, and
- the CAA to evaluate

whether the anticipated impacts and benefits in the original proposal and published decision are as expected, and where there are differences, what steps (if any) are required to be taken.

249. The review is necessary to identify any subsequent requirements to further modify flight procedures, or the airspace structure (as applicable) to give effect to the terms of the original CAA decision (Stage 5), the need for which can only be determined after a period of operational experience, post implementation.

250. The post-implementation review is not a review of the decision on the airspace change proposal, and neither is it a re-run of the original decision process.

For more information about:

- **Post-implementation review** see [Appendix H](#)

Evidence collection

251. As part of an approval decision (Step 5B), the CAA will make clear:

- the precise data, operational information and other evidence that the change sponsor must collect during the 12 months from implementation in preparation for the post-implementation review
- the format in which this information is required
- how the impacts are to be measured
- when the change sponsor should submit this information to the CAA (this will usually be 28 days after the end of the 12-month evidence collection period).

252. Although the review usually takes place 12 months after the change is implemented, the change sponsor must begin monitoring and gathering data on the impacts of the change as soon as the change is implemented, and must ensure that it has collected the data it will need for proper comparison covering the period before implementation. This includes the impact on airspace users and those on the ground affected by aviation noise or other environmental impacts. An indicative list of data requirements is given in [Appendix H](#).

253. Any comments or complaints received after implementation but before the review commences must be collated by the change sponsor in the CAA-agreed format. Any direct feedback that the CAA receives during this period will be forwarded to the change sponsor for inclusion in that feedback dataset.

Stage 7

Post-implementation review

254. The change sponsor must prepare a detailed analysis of how these impacts compare with what was set out in the airspace change proposal and accompanying options appraisal on which stakeholders were consulted. This is to demonstrate how the airspace change has performed in relation to the original Statement of Need, design principles and options appraisal.
255. The change sponsor publishes its submission on the online portal, and the CAA invites stakeholders to submit their own observations.

Stakeholder observations

256. Once the change sponsor's data submission is published on the portal, there will be a 28-day window during which any stakeholder may provide any feedback it wants the CAA to take into account when carrying out this review about whether the impacts of the change are those expected, 12 months on. This feedback is submitted using the online portal.²³ Submissions are limited to one per individual (verified by email address). The CAA's post-implementation review will not consider submissions made outside the 28-day window.
257. Before feedback is published on the portal, the CAA will moderate it to remove unacceptable material.²⁴ Guidelines on what we regard as unacceptable can be found [here](#), but broadly 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.

23. The CAA will also accept postal responses for the time being. We will reconsider in the light of experience whether this is still necessary when we conduct a review of the airspace change process three years after implementation, to judge whether the administrative burden of uploading, monitoring and analysing postal responses remains proportionate.

24. The CAA's review after three years will also reconsider in the light of experience whether it is practical for the CAA to carry out this moderation role. We may decide, instead, that the change sponsor should moderate the responses in accordance with CAA guidance, requiring change sponsors to seek our approval before any redactions are made.

258. The post-implementation review is not a second consultation on the original proposal, nor does the CAA hold a second Public Evidence Session. The review is inviting comments on whether implementation has had the impacts that were anticipated when the decision to agree the change was made by the CAA (or, if applicable, by the Secretary of State). Therefore the online portal will not accept stakeholder feedback until the complete set of data has been published by the change sponsor on the portal.

CAA assessment

259. If the impacts are not as predicted, the CAA will require the change sponsor to investigate why, so the CAA can determine whether further action is needed to change the airspace structure or to revise flight procedures to meet the terms of the original decision.
260. The nature of each review is determined by the scale and impact of the airspace change, and during the assessment phase the CAA may decide to revise the scope and objectives of the review or to request more information.
261. The CAA prepares a report identifying:
- any differences from those expected
 - what mitigations or modifications are required for impacts that vary from those which were anticipated at the time the CAA made its decision to approve the airspace change
 - any learning points where impacts vary from those which were anticipated.
262. The CAA publishes the report on the online portal.

Stage 7

Post-implementation review

Outcomes from the post-implementation review

263. The CAA will aim to produce a post-implementation review report within three months of the change sponsor's complete pre- and post-change dataset being published on the online portal. However, once this data has been published, the CAA may extend this period for two reasons:

- if we receive large quantities of stakeholder feedback during the 28-day period that such feedback can be given on the online portal, or
- the CAA's initial assessment of this data leads us to ask for additional data from the change sponsor.

264. The following outcomes could apply to Stage 7. The CAA may:

- confirm that the implemented design satisfactorily achieves – within acceptable tolerance limits – the objective and terms of the CAA's approval, and the change is confirmed; or
- require modifications to better achieve the objective and terms of the CAA's approval; 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, the CAA may conclude that the original design was satisfactory and the original change is confirmed; or
 - noting that the modifications did not better achieve the objective and terms of the CAA's approval, the CAA may conclude that the original design was not satisfactory and the original change is not confirmed. In this case, in order to pursue its change, the change sponsor will need to commence a fresh airspace change request from Stage 1; or

- the CAA may conclude that the modifications do better – within acceptable tolerance limits – achieve the objective and terms of the CAA's approval and so the modified design will be confirmed.

265. In the instances above where the outcome of post-implementation review is that a wholly new airspace change proposal is required, the question arises as to what happens in the meantime to the airspace design now in place. The change sponsor will have made clear to stakeholders at the consultation stage (Step 3C) to what extent an airspace change, once implemented, is reversible. Some changes that accommodate new technology may be mandatory. Some may have strong interdependencies and may be difficult to reverse. Therefore where an airspace change has not achieved its objectives, and the mitigation solution is a redesign rather than reversion to the pre-airspace-change position, the CAA will make a decision as part of its report as to what is a proportionate and reasonable response.

Timescales

266. The CAA initiates the post-implementation review usually 12 months after the change is implemented, to ensure that a full cycle of winter and summer operations has been observed in all weather and traffic conditions. However, if a change sponsor or another stakeholder makes a representation that a different period is needed to collect more representative data, the CAA will be prepared to consider an extension. This might be because, for example, the route that was the subject of the change has been used only infrequently and an extended period would allow a better data sample with a wider range of weather conditions. The CAA also reserves the right, exceptionally, to initiate a review at any other time if it considers this is warranted.

Stage 7

Post-implementation review

267. The change sponsor has 28 days from the end of the 12-month review period to collate, review and publish the required data.

268. Stakeholders have 28 days from publication of the complete set of data by the change sponsor on the portal to submit evidence about whether the impacts of the change are those expected, 12 months on.

269. The CAA will aim to review the evidence and publish our conclusions on the post-implementation review within three months of receipt of the change sponsor’s data, in other words four months from commencement of the review. However:

- in exceptional circumstances, most likely where there is an unprecedented volume of stakeholder feedback to the published data,

the CAA review may take longer, but we will give full reasons where this occurs

- where the outcome of the review is that design modifications are required, the timescales could be extended significantly depending on the extent of any redesign.

Scaling of Stage 7

270. There is no post-implementation review for Level 0 changes.

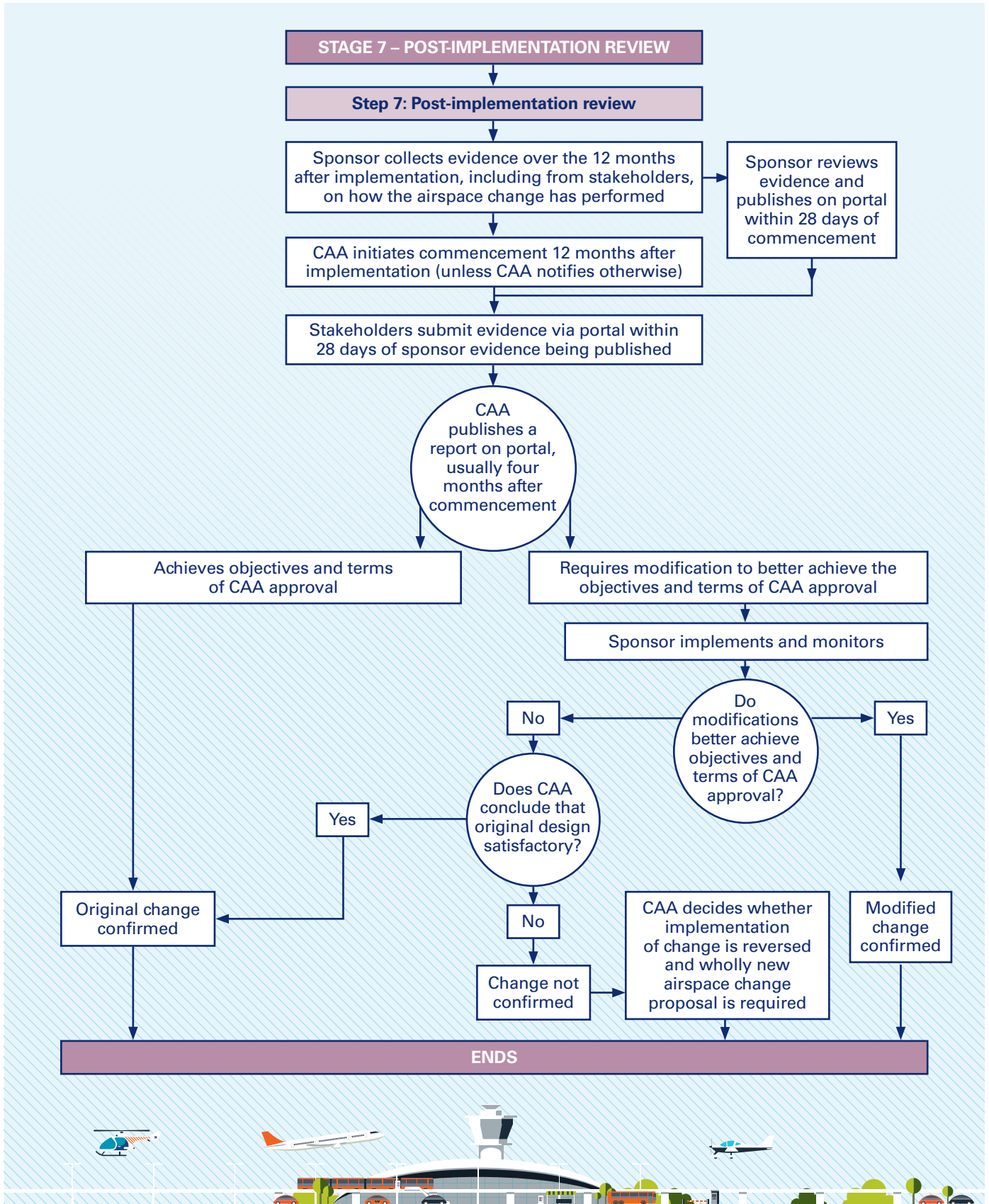
271. For some changes, the CAA may proportionately reduce the extent of evidence and data required from the change sponsor or allow more flexibility in the format of the data required. The CAA will set out the data it requires in its decision document.

Outputs from Step 5B to be uploaded to the online portal

Output	Produced and uploaded by
Notification of change sponsor data collection requirements (in CAA decision)	CAA
Post-implementation review evidence submission	Sponsor
Stakeholder feedback on change sponsor’s submission	Affected stakeholders (moderated by the CAA prior to publication and uploaded by the CAA where submitted by post)
Post-implementation review report	CAA
Review of modification requirements prepared by sponsor (if applicable)	CAA
Report on effect of modifications (if applicable)	Sponsor
Review of effect of modifications implemented by sponsor (if applicable)	CAA

Stage 7

Post-implementation review



Backgr Info	Stage 7	Stage 6	Stage 5	Stage 4	Stage 3	Stage 2	Stage 1	Tier 1	Tier categories
H: PIR	G: Decision	F: Submission	E: Options	D: Design	C: Consultation	B: Environment	A: S of Need	Tier 2/3	Glossary

Tier 1b: A temporary change to the 'notified' airspace design

The text in this section refers to the policy proposals and draft guidance on which the Department for Transport is currently consulting ([click here for details](#)). Should Government Directions, policy and guidance change after the consultation, this section will be updated accordingly.

Definition of Tier 1b

272. Specific events or operating conditions may sometimes require a temporary change to the 'notified' airspace design to introduce new controlled airspace arrangements or modifications to the existing structure or routes.²⁵ Because it is still a change to the 'notified' airspace design, a temporary change requires the CAA's approval before it is implemented.
273. The temporary airspace arrangement will usually apply for a period of no longer than 90 days, after which the airspace will revert back to its original form. In extraordinary circumstances, the CAA may consider approving an extension beyond 90 days.
274. The distinction from Tier 1c (operational trial) should be noted. Tier 1b is used for specific events or operating conditions that require a temporary change, whereas Tier 1c is used for an operational trial of innovative airspace design or of the use of new technologies.

25. The 2012 London Olympics is an example of when such a temporary arrangement has been used. Note the distinction between a temporary airspace change, which temporarily alters routes within controlled airspace or changes the classification or structure of airspace, and the Secretary of State's power to prohibit or restrict flying under Article 239 of the Air Navigation Order 2016, which restricts aircraft operations *without* altering the classification, structure or routes of the actual airspace. Article 239 is used where restrictions are needed because of, for example, an air display or some other planned event involving a large number of people.

Process to be followed

Before the temporary change

275. Given that such changes are only temporary, and in line with guidance from the Secretary of State, it would not be proportionate for the change sponsor to follow the full airspace change process set out in the earlier section on Tier 1a changes. Instead, the change sponsor will need to go through Stage 1 of the process, to prepare a Statement of Need (Step 1A) and to meet with the CAA to discuss precisely what is required. In particular the discussion would cover the level of information that must be provided to all stakeholders, including those that might be affected by noise.
276. Formal appraisal of different options (Stage 2) is not required. However, as with any airspace change proposal, the CAA will require the change sponsor to undertake an assessment of the stakeholders likely to be affected by the change and the extent of those effects. This assessment will inform the CAA's decision whether or not to agree to the temporary change.
277. In terms of Stages 3 and 4, the CAA will require the change sponsor to carry out a consultation with aviation stakeholders (specifically, that is airspace users, air navigation service providers and airports only) to investigate whether the temporary change will be safe and operationally viable. If technically feasible, the consultation duration should be the usual 12 weeks. In addition, the CAA will require the change sponsor to provide information to the full range of stakeholders on what change is taking place and why, and also on the likely impacts while it is in operation. More information on this is set out in [Appendix B](#). The CAA will then consider whether to agree to the temporary change to the airspace design (Stage 5). The CAA expects to make this decision within 28 days.

Tier 1b: A temporary change to the 'notified' airspace design

278. In this regard, it is important to note the Secretary of State's guidance to the CAA that, in circumstances where a temporary change to the airspace design would affect the distribution of traffic below 7,000 feet, it is vital that the communities that may be affected are informed prior to the change being implemented. The only exception is for situations where overriding safety reasons, or national security considerations, dictate that the change be implemented immediately, pending completion of the full Tier 1a airspace change process.

During the temporary change

279. While the temporary change is in operation, the CAA requires the change sponsor:

- to undertake continuous engagement with stakeholders, and
- to collate, monitor and report to the CAA on the level and contents of complaints associated with any temporary airspace arrangement once it has been implemented and throughout its period of operation.

280. If stakeholder feedback suggests that the operational use of the temporary airspace is not resulting in the anticipated outcomes, the CAA will investigate urgently.

Extraordinary circumstances where the temporary period may be extended

281. If an airspace change sponsor wishes to extend a temporary airspace arrangement beyond a period of 90 days, it will need to provide the CAA with a justification of extraordinary circumstances. Examples of such circumstances might be:

- where the temporary issue which led to the need for the temporary change is both outside the change sponsor's control and lasts longer than was anticipated when the temporary change was first requested

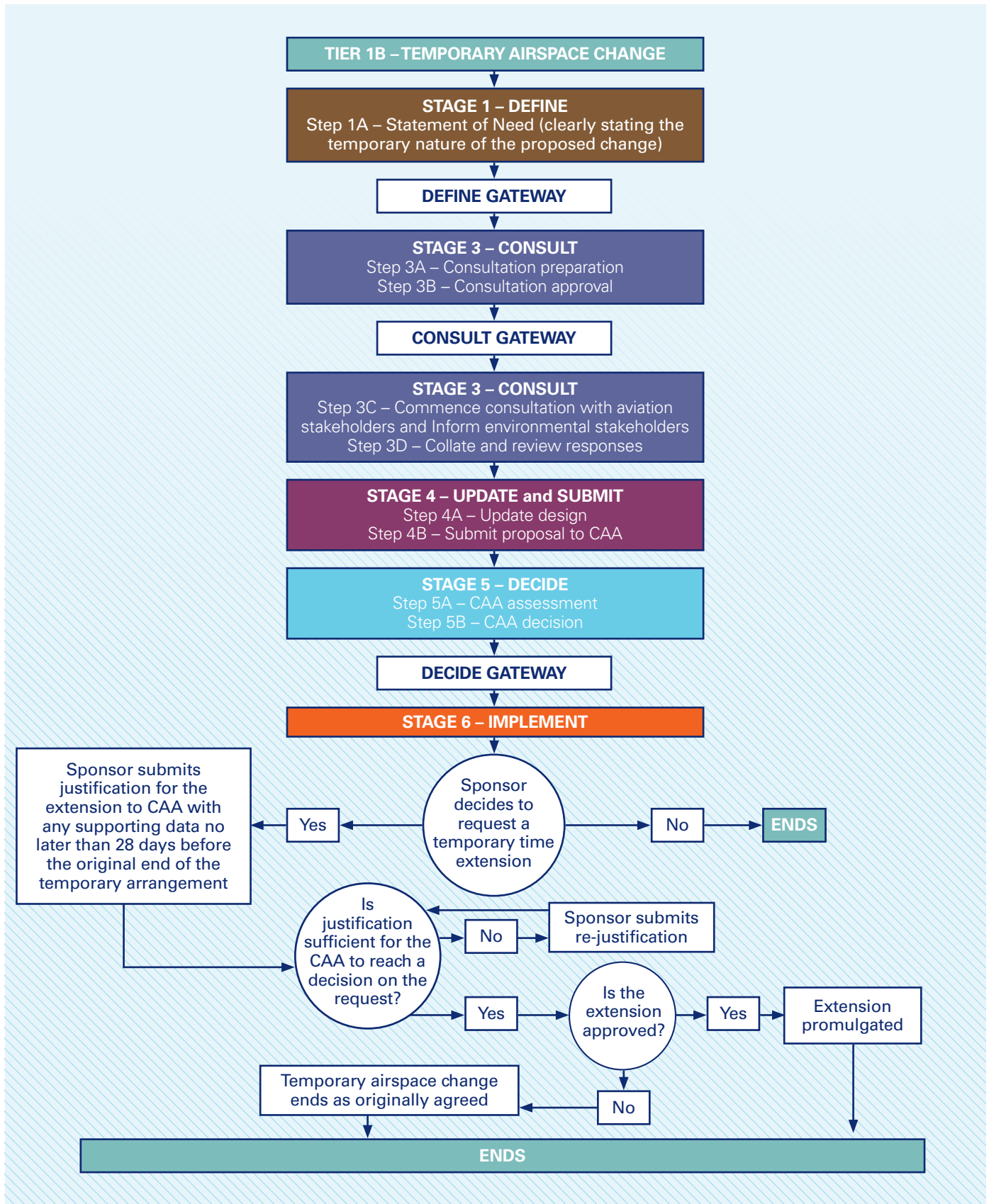
- where the urgent safety or security considerations referred to above require that a temporary change be extended pending completion of the full Tier 1a airspace change process.

282. As noted above, if the CAA accepts the justification, we will assess whether the consultation carried out by the change sponsor remains valid or whether it should be augmented. In all cases, an extension beyond the initial agreed period will not be granted simply to minimise the amount of effort required by the change sponsor when pursuing the full airspace change approval process. Any request to extend the temporary arrangement must be made at least 28 days before the previously agreed end of the temporary change.

Beyond the temporary change

283. If a permanent or long-term arrangement were subsequently to become necessary, the CAA will require the change sponsor to go through the full airspace change process. The CAA will consider whether the airspace should revert to its previous design in the meantime.

Tier 1b: A temporary change to the 'notified' airspace design



Backgr Info	Stage 7	G: Decision
H: PIR	Stage 6	F: Submission
	Stage 5	E: Options
	Stage 4	D: Design
	Stage 3	C: Consultation
	Stage 2	B: Environment
	Stage 1	A: S of Need
Tier categories	Tier 1	Tier 2/3
Glossary		

Tier 1c: A temporary operational trial of a change to the 'notified' airspace design

The text in this section refers to the policy proposals and draft guidance on which the Department for Transport is currently consulting ([click here for details](#)). Should Government Directions, policy and guidance change after the consultation, this section will be updated accordingly.

Definition of Tier 1c

284. Sometimes an operational trial²⁶ may be needed to investigate the feasibility of – or to validate proposals for – innovative airspace design or the use of new technologies. A trial can therefore make a valuable contribution to the effectiveness of the UK airspace network and form a key component of the successful implementation of the Future Airspace Strategy and the Single European Sky. A trial also allows the change sponsor to develop the evidence base for the impacts of the change being trialled when and if it is formally developed as a Tier 1a airspace change in due course. It can therefore inform future engagement and consultation with the stakeholders affected.

285. The distinction from Tier 1b (temporary airspace change) should be noted. Tier 1c is an operational trial of innovative airspace design or of the use of new technologies, whereas Tier 1b is used for specific events or operating conditions that require a temporary change to the 'notified' airspace design.

26. Where we refer to a Tier 1c operational trial we mean a trial of a new airspace design, such that while the trial is taking place, aircraft are using that design rather than the published, CAA approved airspace design. It is also possible for air navigation service providers to trial new operational procedures that do not alter the airspace design. These would be considered under Tier 2 in this guidance using a similar process.

Process to be followed

Decision by the CAA to permit the trial

286. Because it is a change to the 'notified' airspace design, a trial requires the CAAs approval before it can commence. The trial sponsor must specify a defined objective by submitting to the CAA a Statement of Need (Step 1A). This must include a trial plan, which is a clear explanation of:

- what the trial involves
- what the trial is aiming to investigate, prove or validate
- before and after descriptions, where relevant
- what data and outcomes the trial sponsor needs in order to prove or otherwise that the trial has been a success
- the confirmed start and end date.

287. Government guidance considers that operational trials are useful, but that specific care should be taken by trial sponsors and the CAA before they are approved. In all cases, the sponsor of the trial should assess whether a non-operational trial, for example the use of simulators, might be more appropriate and set out the rationale why this is not the case. The CAA will usually only agree to a live trial where it involves innovative airspace design or new technology. If it does not, the CAA will not normally permit a live trial prior to a change sponsor requesting a permanent airspace change through the Tier 1a airspace change process.

Tier 1c: A temporary operational trial of a change to the 'notified' airspace design

288. Before the CAA will agree to a trial, the sponsor must demonstrate to the CAA that it has consulted with aviation stakeholders (specifically, that is airspace users, air navigation service providers and airports only) to establish that the trial will be safe and operationally viable. In addition, the trial sponsor must carry out an assessment of the anticipated noise impact of the operation of the trial procedures (as explained at the end of **Appendix C**). The CAA will take all this information in account when weighing the Transport Act section 70 factors before agreeing or otherwise to the trial taking place.

Before the trial commences

289. If a live operational trial is permitted by the CAA (i.e. a Stage 5 decision), the trial sponsor must next identify and inform the full range of stakeholder groups that the trial will be taking place. The level of information about the trial which it must provide will be influenced by the noise assessment carried out when designing the trial. The scope of this exercise needs to be proportionate. The CAA will make an assessment and advise the trial sponsor what is needed. But in line with Government guidance, particular emphasis should be given to taking reasonable steps to inform communities and their representatives before any trial commences where the trial might affect the routes flown by aircraft below 7,000 feet.

During the trial

290. Once the trial has commenced, the CAA requires the trial sponsor:

- to undertake continuous engagement with stakeholders during the period of the trial, and
- to collate, monitor and report to the CAA on the level and contents of any complaints associated with the trial throughout its period of operation.

291. If the basis of the complaints, and not just how many have been made, suggests that the trial is not resulting in the anticipated outcomes, the CAA will investigate urgently.

292. If the trial sponsor wishes to make an operational airspace trial permanent, it will need to complete the full Tier 1a airspace change process. Normally, the airspace should revert back to its original state until such time as the full airspace change process can be completed. However, it is not always practical or prudent to disestablish a trial procedure. In such instances, the CAA may consider allowing a Tier 1b temporary airspace change (subject to satisfactory completion of the CAA process above) while the airspace change process is being progressed. Such temporary arrangements will continue to be closely monitored by the CAA.

293. The CAA's agreement to allow a Tier 1b temporary change to continue after a Tier 1c trial should not be taken as an indication that the CAA will approve the airspace change proposal to make the change permanent. Should the change sponsor decide not to progress the airspace change in accordance with the normal timescales set out in Tier 1a of this guidance, or should it become clear that the CAA is not going to approve the permanent change requested, then the change sponsor will be required to revert the airspace concerned to its original state as soon as possible.

294. An operational airspace trial should not be seen by an airspace change sponsor as a means of avoiding the full airspace change process. It is imperative that the trial sponsor provides stakeholders with sufficient information before implementation, that it carries out continuous engagement throughout the trial, and that it carefully monitors feedback, including noise complaints. The CAA will require the trial sponsor to provide a report on the content of that feedback. On the basis of that report the CAA may determine that the nature or duration of the trial needs to be altered from that originally proposed.

Tier 1c: A temporary operational trial of a change to the 'notified' airspace design

Extension of the trial period

295. A trial sponsor may request that the duration of the trial is changed. It must allow at least 28 days' notice for this request to be considered by the CAA. The CAA will consider extending the trial period where the sponsor provides justification that it has not been possible to collect the data that was identified in the original trial plan to fulfil the objective of the trial. An example of such a situation might be where the trial period has unexpectedly not provided a sufficient range of weather conditions to test the trial procedure sufficiently. The CAA will ensure that the trial sponsor informs affected stakeholders before any change to the period of the trial is made while the trial is underway.
296. If the trial sponsor wishes to alter the trial plan, the CAA will require the sponsor to consult only with aviation stakeholders (specifically, that is airspace users, air navigation service providers and airports only) to ascertain whether the revised trial is operationally viable. If the CAA is satisfied with the altered objective of the trial and the identification of the data needed to be collected in order to fulfil the purpose of the trial, we will require the sponsor to inform the full range of stakeholders prior to implementation of the revised trial (as before).
297. If the contents of noise complaints, and not just their number, suggests to the CAA that the trial sponsor has failed to engage properly throughout the trial or that the trial is proving unsuccessful, the CAA will take steps to end the trial as soon as it is safe and practicable to do so.

Tier 2: Permanent and planned redistribution of air traffic

The text in this section is dependent on completely new policy proposals on which the Department for Transport is currently consulting ([click here for details](#)). The CAA is therefore not consulting on a change process for Tier 2 at the present time. Instead, we are publishing a separate **Annex** about which we welcome observations to help us design any new process once the outcome of the Government consultation is known. We will consult on any new process.

Definition of Tier 2

298. Tier 2 is defined as a change to air traffic control procedures, without changing the 'notified' airspace design, which results in a permanent and planned redistribution of air traffic.

Process to be followed

See Annex 2

Tier 3: Other changes to air operations affecting noise impacts

The text in this section refers to the policy proposals and draft guidance on which the Department for Transport is currently consulting ([click here for details](#)). Should Government Directions, policy and guidance change after the consultation, this section will be updated accordingly.

Definition of Tier 3

299. Alongside changes to airspace design and planned permanent redistributions of traffic, there are a range of factors that might change the noise impact of aircraft. In its draft revised Air Navigation Guidance, the Department for Transport describes these as Tier 3 changes. These could include changing weather conditions, flight destinations changing, different aircraft being used, and different air traffic control practices being adopted. These factors are out of the CAAs control. At times, they are also out of government, air traffic control, airline and airport control.
300. These Tier 3 changes, by nature, are not subject to the formal processes that relate to airspace changes. The CAA has no direct regulatory role in respect of Tier 3 (that is, no decision-making and enforcement powers), although it does have environmental information duties under section 84 of the Civil Aviation Act 2012. Because such changes may impact on noise on the ground, there is a need for airports to ensure that their local communities have sufficient information to understand the nature and causes of these types of change. The CAA therefore acts in an advisory capacity, seeking to influence the industry's behaviour regarding such changes through the issuance of this guidance on best practice.
301. A summary of the sort of factors that might contribute to a Tier 3 change can be found in the environmental background information on our website.²⁷

27. www.caa.co.uk/Environment/Environmental-information/information-on-the-environmental-impacts-of-aviation/

Best practice to be followed

302. Given that the factors mentioned above could lead to changes to the noise effects experienced by communities around airports, it is important that airports and/or the air navigation service providers engaged by them are aware of the principal operational or other factors which could cause them. They should communicate this information transparently to communities, and in an accessible form which a layperson can understand, to help to provide context as to why the noise effects they are experiencing may be changing.
303. The CAA expects airports to have developed effective relationships with their local communities, and to understand their information requirements relating to changes that do not require formal airspace change proposals. This may consist of simply providing updates to community groups about operational and other changes as required; or may require a more regular and formal update process, depending on the significance and frequency of the changes.
304. Some airports currently offer flight-tracking information to provide communities with a degree of transparency and certainty over traffic patterns – where airports are not currently offering such services, and experience Tier 3 level changes, they should consider whether it is appropriate to adopt such technologies, and engage with their local communities to ensure their views are considered.

Tier 3: Other changes to air operations affecting noise impacts

- 305. The CAA does not expect to engage directly with communities relating to such changes, but where the CAA is made aware that issues have been raised that are not being effectively managed locally, the CAA may publicly challenge airports and air navigation service providers to ensure that clear, useful information is being provided to communities.
- 306. Engagement with communities should also include communicating and discussing the possibility of mitigating the adverse impacts of Tier 3 changes where appropriate. Potential mitigations may be complex and have impacts

that exceed the impact of the change itself, and reversing a change which has occurred over time may cause greater disturbance to communities. The focus here should therefore be on exploring the options for mitigating the change through two-way dialogue. Where adverse impacts are significant, and dialogue is not proving effective, it is possible that use of a third-party facilitator may help to develop mutually acceptable ways forward.

- 307. Table 4 below gives some guidance on the types of information the public may benefit from.

Table 4: Types of information the public may benefit from

Type	Rationale	Mechanisms
Clearer contact information	Many operational changes are beyond the control of airports, so to be able to express their views effectively, people need to be able to understand complex airport operations or isolate the source of issues. Information relating to how airlines operate, at what times, and to where, can help residents work out where to focus their attention to understand why Tier 3 changes may be occurring, and what if anything may be done to reduce their local impacts.	This could involve providing a list of the airlines who operate at an airport, but where the situation is more complex, or where issues already occur, airports should consider going further and setting out how each airline uses the airport, as detailed further below.
Route networks by airline	Building on simply providing contact information by showing people where airlines operate to, alongside route information and timetable data, local people can begin to develop a more complete picture of what is causing noise, and where they should direct more detailed enquiries or engagement to try to change operational practices.	Static information about routes and operators is often already available from many airports – albeit rarely with a focus on noise impact on residents. However, where information is available, simply ensuring communities are aware of it is helpful. The more data that is provided, the more complex the web application that is likely to need to be developed to support it. As such, airports may only consider this necessary if their operations are complex, or controversial. Local people may provide feedback to help operators understand their desires.

Tier 3: Other changes to air operations affecting noise impacts

Table 4: Types of information the public may benefit from (Continued)

Type	Rationale	Mechanisms
Historic comparisons of route networks flown	Where route networks are changing, for instance as a result of new airlines operating, or a shift in an airline’s business model at an airport, it can have a noise impact. For instance, if an airport principally serving southern European destinations begins to operate a number of services to north America, new areas are likely to be overflown. This can be explained with information about how route networks have changed over time.	Given route networks develop organically, and often change little and often, certainly during summer and winter seasons, airports should consider how often it is appropriate to provide comparative data. One option would be to provide static pictorial representations on a seasonal or annual basis to allow comparison. Data tables of flight numbers to certain areas could also allow comparison. In more complex situations, evolving route networks could be shown as videos to allow comparison between past and present.
Historic comparisons of flight paths	Over time, as technology has improved, aircraft have become more able to operate along the centrelines of published departure routes. This can mean that swathes of departing aircraft become more concentrated over time along a centreline. Providing this data about centrelines and distribution of traffic around them in conjunction with the information suggested above can help people to understand whether it is new aircraft causing noise or existing aircraft flying existing routes more precisely.	In order to be useful, this information is likely to need to be fluid and displayed visually, providing viewers with the ability to review routes over time. Track-keeping systems may offer this ability.
League tables of airline operational performance	How airlines operate can play a large part in the noise impact of flights. For instance, track-keeping, aircraft utilisation, and operational procedures like continuous descent can all have significant impacts on noise. Some airports make such information available already, and it can serve as an incentive for airlines to improve their operational performance, provide communities with information to engage airlines directly, or trigger airlines to explain their performance proactively.	Some airports already make available aggregated results or league tables to rate operational performance. The amount of detail provided is a trade-off between simplicity for non-expert audiences, and providing communities and their representatives with enough information to effectively engage airlines and third parties to enhance performance.

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Tier 1	Tier 2/3
Tier categories	Glossary

Tier 3: Other changes to air operations affecting noise impacts

Table 4: Types of information the public may benefit from (Continued)

Type	Rationale	Mechanisms
Historic data on weather conditions (such as prevalent wind percentage by year; hours of weather related disruptions)	Weather can have major impacts on noise experienced on the ground, directly and indirectly. For instance, a change in prevalent winds over the summer months when people tend to be more exposed to aircraft noise, can lead to people feeling as though an airport has significantly changed its operations as it is using the runway in the opposite direction to usual. Weather-related disruption can lead to more aircraft flying outside of usual operating hours. As our climate changes, these impacts may become greater – at a minimum it seems certain that they will change over time. Providing comparative annual data can help residents see how events outside of all parties’ control can impact on noise. However, airports should also be mindful of the necessity to consider the impact of weather-related disruption on communities, and not assume that simply because they cannot control the weather, they are always unable to control its impact on their operations.	This information can be made available relatively simply by providing comparative annual data in the form of tables or charts. What data is most appropriate will depend on the airports’ situation (for instance, airports in low-lying or coastal areas may find providing information about fog-related closures helpful; airports with significant population disparity between the two sides of their runway may find that prevalent wind information is useful to help locals understand why one end of the runway is used for take-offs or landings more frequently).
Data on operations outside of normal operating hours	Many airports already make available information on operations outside of usual hours. Given that night and unexpected noise can have a greater impact on communities, providing them with information on when it occurs, and ideally, what caused it, can help them to understand why they have been disturbed, and what, if anything, may be done about it.	There are a variety of ways this could be made available. As well as providing static information online for people to review, social media and mobile phone communication could be used to provide registered users with live information as conditions impact on operations.

308. Forecast and live operational data can also help people to plan, so airports should consider whether letting people know how weather and operational decisions may impact on future noise. Once again, modern communication technology could allow interested parties

to ‘subscribe’ to services that provide them with information about forecast weather and operational approaches that may impact on noise (for the avoidance of doubt, the CAA would not expect to see airports charging residents for this type of information).

Appendix A

Statement of Need for an airspace change

When to undertake this activity		
Stage 1: Define	1A: Assess requirement	✓
	1B: Design principles	✗
Define gateway		
Stage 2: Develop and assess	2A: Options development	✗
	2B: Options appraisal	✗
Develop and Assess gateway		
Stage 3: Consult	3A: Consultation preparation	✗
	3B: Consultation approval	✗
Consult gateway		
	3C: Commence consultation	✗
	3D: Collate and review responses	✗
Stage 4: Update and submit	4A: Update design	✗
	4B: Submit proposal to CAA	✗
Stage 5: Decide	5A: CAA assessment	✗
	5B: CAA decision	✗
Decide gateway		
Stage 6: Implement		✗
Stage 7: Post-implementation review		✗

What does this activity entail?

The change sponsor prepares a Statement of Need setting out what airspace issue it is seeking to address, which is published on the online portal.

Having reviewed the Statement of Need, the CAA meets with the change sponsor to determine whether an airspace change is a relevant option to consider, and to have a first discussion about the appropriate scale of the airspace change process.

If the Statement of Need is updated following the meeting or for any other reason, the change sponsor publishes a new version on the online portal for all to see as 'Version 2' etc.

When the CAA determines whether an airspace change is a relevant option to investigate, it publishes this determination on the portal and is clear which version is being referred to.

The text in this Appendix refers to the policy proposals and draft guidance on which the Department for Transport is currently consulting ([click here for details](#)). Should Government Directions, policy and guidance change after the consultation, this Appendix will be updated accordingly.

Appendix A

Statement of Need for an airspace change

Why is this activity included in the process?

A1. A Tier 1 airspace change is a change to the design of airspace over the UK, that is the airspace structure and aircraft flight procedures within it. Where a prospective change sponsor identifies an airspace issue that may involve such a change, it is important to establish whether the airspace change process is the correct mechanism for resolving that issue and, second, how the relevant process requirements apply if it is.

- A2.** Consequently, it is vital that a Statement of Need is produced that clearly articulates the issue to be resolved. The Statement of Need also serves to provide transparency over the perceived need for an airspace change, the issues to be addressed and the benefits being sought.
- A3.** Where a Statement of Need raises an issue for which the airspace change process is not initiated, this will still be captured on the portal and therefore be in the public domain.

Key terms to check in our glossary

Aeronautical Information Publication	Airspace design	Airspace structure
Area navigation routes	Air traffic service (ATS)	Danger Area
En-route holding	Flight information region (FIR)	Flight procedures
Helicopter routes	Instrument approach procedure (IAP)	Lower ATS route
Name-code designator	Prohibited area	Restricted area
Standard Arrival Route (STAR)	Standard Instrument Departure (SID)	Terminal control area
Upper ATS route	Upper information region (UIR)	Visual reference point (VRP)

How to undertake this activity

A4. The change sponsor should complete the online template for the Statement of Need. In the free text box the change sponsor should clearly set out the nature of the of the airspace issue that requires resolution. Table A1 gives some guidance on the information that the change sponsor should consider including.

Appendix A

Statement of Need for an airspace change

Table A1: Information for the Statement of Need

<p>The current/existing situation</p>	<ul style="list-style-type: none"> • A description of the current airspace design (i.e. the airspace structure and flight procedures) relevant to the proposal • The current prevailing air traffic situation • Frequency/number of movements • Forecast growth (where applicable) • Local geography (for example, local physical geography, urban features etc)
<p>The issue to be addressed</p>	<ul style="list-style-type: none"> • A summary statement of the issue to be addressed and the objective of the proposed change
<p>The cause of the issue and any associated factors or requirements (safety, operational, technical, and environmental)</p>	<ul style="list-style-type: none"> • How has the issue arisen? • Why is action required? • What safety, operational, technical, environmental or economic factors are relevant to the issue?
<p>Applicable to Level 0 changes only (see scaling of the process below)</p>	
<p>Is the proposed change to (a) the nomenclature, or (b) qualifying remarks of the characteristics of the airspace design published in the AIP?</p>	<ul style="list-style-type: none"> • If yes, insert, from the list in Table A2 below, the type of characteristic(s) (i.e. either a specific or a common characteristic) of the category of airspace design that you propose to change • State the exact change proposed

Assessment meeting

A5. The change sponsor should arrange a meeting with the assigned CAA case officer in order to present the Statement of Need together with any supporting material. The project manager will ensure that the appropriate CAA subject matter experts (safety, operational, consultation and environmental) are available to participate in any meeting. The meeting will consider the Statement of Need and assess:

- whether the sponsor has identified an issue that could reasonably be resolved by a change to the existing airspace design
- where the airspace change process is not the appropriate mechanism for resolving the underlying airspace issue, what should be an alternative method of resolution
- if the airspace change process is to be initiated, the provisional indication of the scaling 'Level' (see overleaf).

Backgrd Info	H: PIR
Stage 7	G: Decision
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Appendix A

Statement of Need for an airspace change

A6. If the airspace change process is considered the most appropriate method of resolution, the change sponsor is advised to consult the following guidance alongside this document:

- CAP 1378 Airspace Design Guidance: Noise Mitigation Considerations when Designing PBN Departure and Arrival Procedures
- Air Navigation Guidance from the Secretary of State on the CAA's environmental objective.

A7. The change sponsor will produce minutes of the assessment meeting and publish these on the online portal as soon as they are agreed with the CAA (no later than two weeks after the meeting).

Redaction of commercially (or national security) sensitive material

A8. The CAA will allow the change sponsor to redact certain information from the published versions of the assessment meeting minutes and the Statement of Need:

- material that is confidential in the interests of national security
- material which the CAA has agreed with the change sponsor 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).

A9. If the proposal contains any such sensitive information, then two versions are submitted – one full version for the CAA and one redacted version for publication. More information on this appears in **Appendix F**.

A10. The default position is that all material in relation to a proposal is published. We do not anticipate routinely agreeing to withhold large amounts of information and would only accept redaction of the minimum information necessary to comply with our obligations.

Scaling the process

A11. A summary of the scaling Levels is set out in the Tier 1a section of this guidance (Table 2).

A12. This includes Level 0 which is used where the change is only to:

- nomenclature or
- qualifying remarks in the Aeronautical Information Publication

A13. A full list of changes which would be categorised as Level 0 is set out in Table A2 overleaf.

Appendix A

Statement of Need for an airspace change

Table A2: Airspace changes categorised as Level 0 – changes to Aeronautical Information Publication nomenclature or qualifying remarks

Category	Specific characteristics	Common characteristics
Chart symbols	- Location indicators	<ul style="list-style-type: none"> - Route designator - Route magnetic tracks - Name of significant points - Coordinates - Distances - Direction of cruising levels - Remarks - Identification of Very High Frequency Omni-Directional Range (VOR)/ Distance Measuring Equipment (DME) - Waypoints - Bearing/distance - Elevation DME antenna - Geodesic distance
Flight Information Region (FIR), Upper Flight Information Region (UIR), Terminal Manoeuvring Area (TMA)	<ul style="list-style-type: none"> - Languages - Area and conditions of use - Change to Remarks Col 5 (Descriptive table FIR/TMA/ Control Zone (CTR)/Control Area (CTA)) 	
Lower Air Traffic Services (ATS) route details	<ul style="list-style-type: none"> - Controlling units - Frequencies 	
Upper ATS route details		
Area Navigation route details		
Helicopter route details		
Other routes	- RNP type	
En-route holding	<ul style="list-style-type: none"> - Hold identification, fix or waypoint - Inbound track - Direction of pattern - Maximum indicated airspeed - Time - Distance outbound 	
Name code designators for significant points	<ul style="list-style-type: none"> - Name code designator - ATS route - Other name 	
Aerial sporting and recreational activities	<ul style="list-style-type: none"> - Lateral limits - Vertical limits - Operator - Users - Telephone number - Time of activity 	

Appendix A

Statement of Need for an airspace change

Table A2: Airspace changes categorised as Level 0 – changes to Aeronautical Information Publication nomenclature or qualifying remarks (Continued)

Category	Specific characteristics	Common characteristics
Bird migration and areas with sensitive fauna		
Aerodrome/ heliport details	<ul style="list-style-type: none"> - Location indicator - Other aerodrome specific data - Terminal arrival/departure route segments - Final approach fixes other essential fix points on instrument approach - Speed limit point - Obstacle clearance altitude/height - Terminal and instrument approach procedure fix and formation distance 	
Flight procedures	<ul style="list-style-type: none"> - Visual reference points - Special visual flight rules (VFR) flight 	

Appendix A

Statement of Need for an airspace change

Changes to the published Aeronautical Information Publication by the Ministry of Defence that are not changes to the airspace design

A14. The Ministry of Defence can make certain changes to the published Aeronautical Information Publication without approval from the CAA where these are not changes to the

airspace design. These are listed in Table A3 below. Because these are not categorised as Tier 1 airspace changes, the Ministry of Defence does not need to go through any part of the airspace change process and therefore does not need to send the CAA a Statement of Need. The Ministry of Defence does need to give the CAA sufficient information to enable the change to the Aeronautical Information Publication to be made. These changes are not published on the online portal.

Table A3: Changes to the published Aeronautical Information Publication that are not changes to the airspace design

Category	Specific characteristics	Common characteristics
Changes to Military Air Traffic Zone (MATZ)		- Remarks
Changes to prohibited, restricted and danger areas	- Identification - Name	
Changes to military and training areas and Air Defence Zones	- System - Means of activation - Information for civilian flights - Risk of interception (ADIZ)	
Other activities of a dangerous nature and other potential hazards	- Advisory measures - Authority responsible for information	
Air navigation obstacles en-route	- Designation - Type of obstacle - Obstacle lighting, type, colour onshore and offshore	

Appendix A

Statement of Need for an airspace change

Standardised format for this activity

Intended Change to Notified Airspace Arrangements

Please complete and submit this form online.

Please read the attached Guidance Notes before completing this form.



1. CHANGE TITLE (please specify an appropriate title for the intended change)
Change Title:

2. CHANGE SPONSOR DETAILS (please complete one of a, b or c)
a) A Company
Registered Company Name (in full):
Registered Company Number:
Country of Company Registration:
Registered Office Address:
..... Postcode:
Telephone: E-mail:
Trading Name: (if applicable)
Trading Address (primary site):
Country Postcode:
Website address:
Primary Point of Contact Name:
Telephone: E-mail:
Secondary Point of Contact Name:
Telephone: E-mail:

b) An Unincorporated Association or other body
Name of Unincorporated Association or other body:
Address:
Country: Postcode:
Telephone: Email:
Website address:
Primary Point of Contact Name:
Telephone: E-mail:
Secondary Point of Contact Name:
Telephone: E-mail:

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Appendix A

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Standardised format for this activity

c) Individual (including sole traders and partnerships)

Title: Forename: Surname:

Address:

Country Postcode:

Telephone: Email:

Trading Name: (if applicable)

Website address:

3. SUMMARY OF INTENDED CHANGE

Please use the check boxes below to indicate the nature of the intended change(s):

- | | | |
|--|---|--|
| <input type="checkbox"/> Flight Information Region | <input type="checkbox"/> Other Routes | <input type="checkbox"/> Aerial Sporting/Recreational Activities |
| <input type="checkbox"/> Upper Information Region | <input type="checkbox"/> Standard Instrument Departure | <input type="checkbox"/> Bird Migration/Sensitive Fauna |
| <input type="checkbox"/> Terminal Control Area | <input type="checkbox"/> Standard Arrival Route | <input type="checkbox"/> Flight Procedures |
| <input type="checkbox"/> Other Regulated Airspace | <input type="checkbox"/> Instrument Approach Procedure | <input type="checkbox"/> ATS Airspace |
| <input type="checkbox"/> Lower ATS Routes | <input type="checkbox"/> En-Route Holding | <input type="checkbox"/> Name-Code Designators (5LNC) |
| <input type="checkbox"/> Upper ATS Routes | <input type="checkbox"/> Prohibited/Restricted/Danger Areas | <input type="checkbox"/> Visual Reference Point |
| <input type="checkbox"/> Area Navigation Routes | <input type="checkbox"/> Other Danger/Hazard | <input type="checkbox"/> Release of Controlled Airspace |
| <input type="checkbox"/> Helicopter Routes | <input type="checkbox"/> Military Exercise/Training Areas | <input type="checkbox"/> ATCSMAC |

Please provide a Statement of Need expressing explicitly what airspace issue you are seeking to address (2940 characters):

.....

Backgrd Info	Stage 7	Stage 6	Stage 5	Stage 4	Stage 3	Stage 2	Stage 1	Tier 1	Tier categories
H: PIR	G: Decision	F: Submission	E: Options	D: Design	C: Consultation	B: Environment	A: S of Need	Tier 2/3	Glossary

Appendix A

Statement of Need for an airspace change

Standardised format for this activity

Intended Change to Notified Airspace Arrangements

GUIDANCE NOTES

Please read these guidance notes before you complete the form.



- Once you have provided all of the information required, please click the Submit Form button at the end of this form. Submitting this form via the website will generate a unique reference number on your screen and a copy of your submission will be emailed to the address provided in Section 2 above.
- Please ensure that the unique reference number detailed above is included within the email subject heading for any subsequent, related correspondence that you have with the CAA.
- Despite our best efforts to ensure that our pdf forms work on all operating systems and platforms, submission issues do arise; whilst we are working to resolve these, the following guidance may be of use to individuals that are not using Internet Explorer:
 - Chrome Users:** The Google Chrome NPAPI plugin was withdrawn by Google in 2015 therefore, you will find that the functionality on this form does not work well. [Further information from Adobe.](#)
 - Firefox:** Adobe have provided a [useful information page](#) to help you configure your PC to fill in this form.
 - MAC and iPad:** users must download and open the form in the full version of Adobe Acrobat Reader. when complete, share it from your iPad (or the PDF email button on your Mac) and send an unflattened copy of the form to airspace.policy@caa.co.uk.
- If you have any problems completing this specific form, please contact airspace.policy@caa.co.uk.

Send to the CAA

Appendix B

Environmental metrics and assessment requirements

When to undertake this activity		
Stage 1: Define	1A: Assess requirement	X
	1B: Design principles	X
Define gateway		
Stage 2: Develop and assess	2A: Options development	X
	2B: Options appraisal	✓
Develop and Assess gateway		
Stage 3: Consult	3A: Consultation preparation	✓
	3B: Consultation approval	X
Consult gateway		
	3C: Commence consultation	X
	3D: Collate and review responses	X
Stage 4: Update and submit	4A: Update design	✓
	4B: Submit proposal to CAA	X
Stage 5: Decide	5A: CAA assessment	✓
	5B: CAA decision	X
Decide gateway		
Stage 6: Implement		X
Stage 7: Post-implementation review		✓

What does this activity entail?

The consideration and assessment (qualitative and where possible quantitative) of environmental impacts that can arise from airspace change proposals, notably noise, CO₂ emissions and local air quality.

The presentation and explanation of those impacts to stakeholders.

The inclusion of environmental impacts as part of the CAA's decision-making process for airspace change proposals.

The CAA's review of the change sponsor's environmental assessment and preparation of a report that is considered as part of the CAA's decision-making.

The text in this Appendix refers to the policy proposals and draft guidance on which the Department for Transport is currently consulting ([click here for details](#)). Should Government Directions, policy and guidance change after the consultation, this Appendix will be updated accordingly.

Appendix B

Environmental metrics and assessment requirements

Why is this activity included in the process?

- B1.** Section 70 (2)(d) of the Transport Act 2000 states that the CAA must “take account of any guidance on environmental objectives given to the CAA by the Secretary of State after the coming into force of this section” when making decisions on airspace change proposals.
- B2.** The guidance from the Secretary of State on environmental objectives is the Guidance to the Civil Aviation Authority on Environmental Objectives Relating to the Exercise of its Air Navigation Functions, which is more often referred to as the Air Navigation Guidance. It applies to the whole of the UK.

- B3.** Consideration and assessment of the potential environmental impacts resulting from proposed airspace changes is necessary as part of the CAA’s decision-making process, and it also enables those who are affected by the proposed change to better understand the impacts of the different options being considered.
- B4.** Government guidance identifies airspace change proposals as Tier 1a. This guidance reflects the environmental assessment requirements for such changes. Separately, Government policy classifies temporary airspace changes as Tier 1b and operational trials as Tier 1c. Recognising that neither of these two types of change are permanent, we outline the proportionate environmental requirements for these types of changes under the respective sections earlier in this guidance.

Key terms to check in our glossary

Acute Myocardial Infarction (AMI)	Area of Outstanding Natural Beauty	Biodiversity
CO ₂ emissions	Consultation	Elected representatives
Engagement	Feedback	Inform
L _{max} values	Local air quality	Local authorities
N70 contours	Non-governmental organisation	Nx contours
Overflight	Overflight contours	Permanent and planned redistribution of air traffic (PPR)
Primary metrics	Public Evidence Session	Representative group
Secondary metrics	Sound exposure level (SEL)	Stakeholder
Tranquillity	WebTAG	

Appendix B

Environmental metrics and assessment requirements

How to undertake this activity

Requirements for environmental assessments – stage by stage

Step 1A – Assess requirement

B5. The CAA will provide an early indication to sponsors of the likely requirements for environmental assessment based upon the anticipated Level of the airspace change proposal that will be required to resolve the change sponsor's airspace issue. The requirements will be based upon the characteristics of the likely solution and how it compares against the definitions for Level 0, Level 1, Level 2 or Level M.

Step 1B – Design principles

B6. There is no requirement on sponsors to undertake environmental assessment as part of this stage; however, desired environmental outcomes for the airspace change are very likely to form some of the design principles.

B7. As well as consideration of single and multiple routes, other local factors to consider might include whether there are specific Areas of Outstanding Natural Beauty (AONB), National Parks, nominated quiet areas, or noise-sensitive buildings that it is practical to avoid overflying.

Step 2B – Options appraisal

B8. The change sponsor will undertake environmental assessments (quantitative and/or qualitative, according to the scale of the change options and the nature of the potential environmental impacts) as part of this stage. This forms part of the Initial options appraisal whereby a longlist of potential options are compared; further guidance on this can be found in [Appendix E](#). The CAA will review the options appraisal, including the assessment of any environmental impacts for the options under consideration.

B9. The options appraisal (and therefore any environmental assessments undertaken as part of that appraisal) is to be included in the change sponsor's subsequent consultation material.

B10. The Government's Transport Analysis Guidance (WebTAG)²⁸ will be used at this stage for a number of factors including the potential environmental impacts.

B11. Depending on the Level of the airspace change proposal, the following elements must be assessed. Further detail on the elements and the metrics is set out later in this Appendix.

Level 0

- No requirement for options appraisal and therefore no consideration of environmental impacts. This is on the basis that Level 0 proposals have no environmental impacts.

Level 1 or M1*

- noise
- CO₂ emissions
- local air quality (for any option that includes changes below 1,000 feet)
- tranquillity
- biodiversity.

Level 2 or M2*

- CO₂ emissions.²⁹

* For Level M changes, all environmental impacts refer to civil operations only.

28. For more information see <https://www.gov.uk/guidance/transport-analysis-guidance-webtag>

29. For Level M all assessments exclude military aircraft and operations but include assessments of civil aircraft where the military-proposed change has a consequential affect on civil operations.

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Environmental metrics and assessment requirements

Step 3A – Consultation preparation

B12. The change sponsor undertakes all required environmental assessments, for inclusion in its consultation material. This forms part of the Full options appraisal whereby a shortlist of potential options are compared. The metrics set out in the [environmental requirements technical annex](#) to this guidance explain the requirements further.

B13. Depending on the Level of the airspace change proposal, the following elements must be assessed:

Level 0

- No requirement for consultation and therefore no consideration of environmental impacts. This is on the basis that Level 0 proposals have no environmental impacts.

Level 1 or M1*

- noise
- CO₂ emissions
- local air quality (for any option that includes changes below 1,000 feet)
- tranquillity
- biodiversity.

Level 2 or M2*

- CO₂ emissions.

* For Level M changes, all environmental impacts refer to civil operations only.

Step 3C – Commence consultation

B14. Any responses from the change sponsor to consultees that relate to environmental impacts must be consistent with the requirements in the CAA's guidance.

Step 4A – Update design

B15. This stage will include the Final options appraisal – a re-assessment of the Full options appraisal, dependent upon consultation feedback and any modifications made to the design as a result. If any of the options are modified, the change sponsor must explicitly consider whether any of the environmental impacts have changed, and if so, to what extent. Depending on the scale of any such change to the previously consulted impacts, a qualitative or quantitative assessment may be required.

Step 4B – Submit proposal to CAA

B16. The change sponsor's submission must meet the structure and format of environmental assessment set out in the CAA's guidance and contain all the necessary requirements.

Step 5A – CAA assessment

B17. The CAA will review the submission to ensure that all necessary environmental assessment requirements have been provided, based upon the Level of the airspace change proposal and its expected impacts. Clarifications or corrections may be sought by the CAA from the change sponsor with regard to the analysis of the anticipated environmental impacts.

B18. When reviewing any update to the design and/or options appraisal, the CAA reviews the environmental assessment to ensure it continues to meet the requirements of this guidance plus any other request placed upon the change sponsor by the CAA or the Secretary of State.

B19. If a Public Evidence Session is to be held, a summary of environmental impacts must be included in the layperson's guide explaining the change sponsor's proposals.

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Stage 5B – Decision

B20. The CAA will produce an environmental statement when deciding upon an airspace change proposal. This will consider and report on whether or not all environmental factors have been considered in line with relevant Government policy, whether they have been assessed and portrayed adequately, and whether or not we believe they have been balanced appropriately.

Step 7 – Post-implementation review

B21. Some degree of environmental assessment will be required as part of a post-implementation review for most airspace change proposals that are approved and implemented. Detailed requirements that are specific to implemented change will be outlined to the change sponsor in advance of the post-implementation review instigation. In general, sponsors will be required to re-assess all environmental factors that were considered as part of the proposal and to demonstrate whether the anticipated impacts have been realised. All assumptions and estimates used in order to perform the initial assessment will have to be reviewed by the change sponsor in the light of actual data since implementation. The change sponsor will need to be able to compare it with pre-change data.

B22. The change sponsor will have to either:

- confirm that the impacts are as anticipated and presented in the approved proposal (together with any necessary supporting evidence), or
- present a re-assessment of the impacts presented in the proposal using actual data to update the results.

B23. In addition to the above analysis, operational diagrams (for example, radar track diagrams, track density diagrams) are likely to be required as part of the evidence for the impact of the change and as a means of portraying the

nature of the change in comparison with the expectations set out in the airspace change proposal. This will be particularly true for Level 1 airspace change proposals. Any organisational diagrams must be consistent with those presented in the consultation and submission to the CAA, in order to enable a direct comparison. In this respect, sponsors are expected to monitor and record data from the point of implementation that will enable them to provide any such comparative diagrams for the post-implementation review. The implementation period after implementation must be compared with a comparable period before the change.

B24. The CAA will review the re-assessed impacts and determine whether or not the anticipated environmental impacts have been achieved.

General principles for environmental assessments

B25. The requirements for environmental assessment include a number of specific metrics that should be used in order to derive a quantitative output, as set out in this guidance. If a change sponsor believes that a quantitative assessment using the metrics identified by the CAA will result in no difference in the outputs for a metric (i.e. neither the pre- and post-implementation scenario, nor the forecast scenarios are affected by the change proposal for that metric), then a qualitative assessment of that impact may be considered. In such circumstances, the change sponsor must present its rationale to justify that a quantitative assessment is unnecessary plus any supporting evidence to the CAA for us to consider. After consideration, the CAA will confirm whether or not we have accepted the case made by the change sponsor. In all instances, if the CAA agrees and accepts the change sponsor's rationale, that same rationale plus any supporting evidence needs to be clearly explained in any consultation material and in the final proposal submitted to the CAA.

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Environmental metrics and assessment requirements

B26. A baseline will be required for all environmental assessments. This will be the 'do nothing/minimum' option and will largely reflect the current-day scenario, although taking due consideration of known or anticipated factors that might affect that baseline, for example a planned housing development close to an airport. Therefore, all environmental assessments must illustrate the difference between a pre-implementation ('do nothing') scenario and a post-implementation scenario, ensuring that the periods are comparable.

B27. In addition to the requirements set out in this guidance, sponsors can choose to present additional analysis on any of the environmental impacts if they feel it would aid stakeholders' understanding of those impacts.

Altitude-based priorities for environmental impacts

B28. The Government's priorities for consideration of the environmental impacts arising from airspace change proposals are set out in its Air Navigation Guidance. For the purposes of assessing environmental impacts of airspace change proposals, they are set out below:

"...the CAA should keep in mind all of the following altitude-based priorities of the Government:

- in the airspace from the ground to 4,000 feet, the Government's environmental priority is to minimise the noise impact of aircraft and the number of people on the ground affected by it, particularly with regard to noise disturbance above 51dB $L_{Aeq\ 16hr}$ or 45dB L_{night}
- where options for route design below 4,000 feet are similar in terms of impact on populated areas, consideration should be given as to whether it continues to be appropriate to maintain long-standing airspace arrangements

- in the airspace from 4,000 feet to 7,000 feet, the focus should continue to be minimising the impact of aviation noise on populated areas – particularly with regard to noise disturbance above 51 dB $L_{Aeq\ 16hr}$; but the CAA may also balance this requirement by taking into account the need for an efficient use of airspace and expeditious flow of traffic that minimises emissions
- in the airspace at or above 7,000 feet, the CAA should promote the most efficient use of airspace with a view to minimising overall aircraft emissions meaning that mitigating the impact of noise is no longer a priority
- where practicable, it is desirable that airspace routes below 7,000 feet should seek to avoid flying over Areas of Outstanding Natural Beauty (AONB) and National Parks
- all changes below 7,000 feet should take into account local circumstances in the development of airspace structures, including the actual height of the ground level being overflown, and should not be agreed to by the CAA before an appropriate community consultation/engagement has been conducted by the airspace change sponsor."

B29. Throughout this Appendix, altitude is expressed in feet above mean sea level (amsl) in order to provide a common datum. However, as noted in the final bullet above, we require that sponsors take account of the elevation (height) of the specific surface level involved when developing their airspace change proposals. This is particularly relevant when a proposal may affect airspace at an altitude higher than 7,000 feet (amsl) yet the height of the terrain directly beneath may be higher than mean sea level, thereby resulting in aircraft being less than 7,000 feet above that particular geographic area.

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Environmental metrics and assessment requirements

Traffic forecasts

B30. Traffic forecasts for a period of at least 10 years from the intended year of implementation are required for all airspace change proposals.

B31. If the proposed airspace change is expected to have an effect on the number of flights or the types of aircraft utilising the airspace (i.e. the fleet mix) then two sets of traffic forecasts will be required – one that is based on the ‘do nothing’ scenario (i.e. assumes the proposal is not implemented) and one that is based on the change option being implemented.

B32. For example, if one of the aims and expectations of an airspace change proposal is to enable an increase in aircraft movements, over and above what would be expected to occur if the proposal were not implemented, then the traffic forecast must reflect two scenarios:

- the anticipated growth if the proposal was not implemented, and
- the anticipated growth if the proposal is implemented.

B33. These two sets of traffic forecasts must then be used if forecast environmental impacts are required as part of the assessment, for example for noise contours or CO₂ emissions.

Scalability

B34. The requirements for environmental assessment will be scalable and proportionate, and are primarily determined by the Level of the airspace change proposal. The Levels are categories that are defined on the basis of the potential for a proposal to have a noise impact, based upon the Government’s altitude-based priorities as set out in its Air Navigation Guidance.

Level 0 airspace change proposal

B35. A Level 0 airspace change is predicated on the assumption that it has no environmental impacts. Once a proposal is confirmed as Level 0 by the CAA, there will be no need to undertake any environmental assessment; none of the environmental requirements in this guidance will apply.

Level 1 airspace change proposal

B36. This is a change that will alter traffic patterns below 7,000 feet (i.e. the maximum height at which the Government’s Air Navigation Guidance determines that noise is an impact for consideration).

B37. The key difference for any Level 1 airspace change proposals is that sponsors must demonstrate a clear consideration of noise impacts. This will necessitate noise modelling and noise metrics to measure and portray the noise impacts. However, in some cases the change sponsor may believe that its proposed change will not result in a change to noise impacts that will result in a demonstrable change in metric output (in other words, that the impact is not quantifiable using noise metrics). If the change sponsor can provide a robust justification for that assertion for the CAA’s consideration and the CAA accepts that justification, then quantitative noise assessment may not be required.

B38. Consideration of all other key environmental impacts will also be required.

B39. Level 1 airspace change proposals that have the potential to change traffic patterns (including vertical or lateral profiles), operational practices or traffic volumes below 1,000 feet will also have to demonstrate consideration of the possible impact upon local air quality.

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Environmental metrics and assessment requirements

Summary of environmental assessment requirements for Level 1 proposals

Noise

Changes that affect routes and/or traffic patterns below 4,000 feet (above mean sea level):

- L_{eq} contours
- N_x contours
- operational diagrams that portray existing traffic patterns and proposed traffic patterns
- an assessment and portrayal of noise impacts up to 4,000 feet (above mean sea level) for geographic areas not contained by either the L_{eq} contours or N_x contours.

Changes that affect routes and/or traffic patterns between 4,000 feet and 7,000 feet (above mean sea level):

- L_{eq} contours – only in those instances where they are affected by aircraft within this altitude band. For most airspace change proposals it is anticipated that noise impacts from traffic above 4,000 feet will have no effect on the L_{eq} contours;
- N_x contours
- operational diagrams that portray existing traffic patterns and proposed traffic patterns;
- an assessment and portrayal of noise impacts up from 4,000 feet to 7,000 feet (above mean sea level) for geographic areas not contained by either the L_{eq} contours or N_x contours.

Longer-term noise impacts (a 10-year forecast scenario) will also be required.

Additional noise metrics may also be used by sponsors (for example, L_{max} values at selected locations) if these aid the portrayal and understanding of noise impacts for consultees.

Overflight

Overflight contours or swathes. These are a means of defining and portraying the pattern and dispersion of aircraft up to 7,000 feet, and the frequency that they occur. They are based upon a perception of overflight – they do not illustrate noise impacts.

CO₂ emissions

An assessment of fuel and CO₂ impacts of the proposed change. This will include annual totals for each and the changes on a per flight basis.

Longer-term CO₂ emissions (a 10-year forecast scenario) will also be required.

Local air quality

Explicit consideration of, and assessment where necessary.

A full local air quality assessment is required if there are any changes to traffic dispersion or total aircraft emissions below 1,000 feet.

AONBs and National Parks – impacts upon tranquillity

Explicit consideration of any changes to routes and/or traffic patterns that may affect either an Area of Outstanding Natural Beauty (AONB) or a National Park, with specific regard to impacts upon tranquillity.

Biodiversity

Explicit consideration of, and assessment where necessary. This requirement will typically to be captured and considered as a specific factor in the design principles for each proposal. Most airspace change proposals are unlikely to have an effect upon biodiversity and therefore the inclusion within the design principles is expected to be the full extent of any consideration in most instances.

For more information about:

- environmental metrics and related technical terms [click here](#)

Appendix B

Environmental metrics and assessment requirements

Level 2 airspace change proposal

B40. A Level 2 change will not alter traffic patterns below 7,000 feet (i.e. the Government's Air Navigation Guidance determines that there will be no noise impacts for consideration).

Summary of environmental assessment requirements for Level 2 proposals

CO₂ emissions

For Level 2A changes, an assessment of fuel and CO₂ impacts of the proposed change. This will include annual totals for each and the changes on a per flight basis. Longer-term CO₂ emissions (a 10-year forecast) will also be required.

For Level 2B and 2C changes, an assessment of fuel and CO₂ impacts of the proposed change if the anticipated impact is negative (i.e. an increase in fuel and emissions). This will include annual totals for each and on a per flight basis. If the anticipated impact is positive, a qualitative assessment and explanation is adequate.

Longer-term CO₂ emissions (based on a 10-year traffic forecast) will also be required.

Level M airspace change proposal

B41. Proposals sponsored by the Ministry of Defence will be classified as Level M, with a further distinction between M1 and M2 proposals. Environmental impacts that are a direct result of military aircraft or military operations (including civil aircraft carrying out military function under contract) are not required to be considered or assessed.

However, consequential environmental impacts from other airspace users (i.e. civil aviation) that are a result of the proposed change must be assessed in accordance with Level 1 or Level 2 requirements. For example, if the proposed change is likely to have an effect upon General Aviation activity and/or traffic patterns, then environmental impacts from that effect (such as noise) need to be appropriately considered and assessed and reflected in consultation material.

B42. A Level M proposal that has consequential impacts upon civil aviation below 7,000 feet will be classified as M1, and will follow the environmental assessment requirements set out in this guidance for a Level 1 proposal. All other Level M proposals will be classified as M2; if the proposal has consequential impacts upon civil aviation above 7,000 feet it will follow the environmental assessment requirements set out in this guidance for Level 2 proposals (which are further broken down into 2a, 2b and 2c). If there are no consequential impacts on civil aircraft then no environmental assessment is needed.

Linked airspace change proposals

B43. If an airspace change proposal is linked in any way with another airspace change proposal (for example, it is either contingent upon or an enabler for, or is part of a 'phased' implementation programme of changes) this link must be clearly identified through the engagement and consultation processes, and in the final proposal submitted to the CAA.

B44. Such links may mean that the environmental impacts of the connected proposals need to be considered as on a combined basis in order to fully and properly reflect the impacts. The approach to be taken in such circumstances must be agreed with the CAA at the outset of the process.

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Environmental metrics and assessment requirements

Environmental impact – noise

Noise policy

B45. The Government's noise policy is "to limit, and where possible, reduce the number of people significantly affected by aircraft noise. To be consistent with this, priority should be given to reducing significant impacts rather than the number of people who will experience some aircraft noise. Therefore from a noise perspective, it may on occasions be better to have multiple concentrated routes that share noise among more people, than a single concentrated route which affects fewer people to a greater extent, providing large numbers of people are not exposed to aircraft noise for the first time".³⁰ Rather than a 'one size fits all' approach to whether single or multiple routes are better, sponsors must consider the impacts of different options and decide what will work better in a given situation. These decisions should be informed by considering the anticipated noise impacts, and through engagement with communities.

Assessment of noise impacts

B46. Sponsors must demonstrate that they have considered the impacts that any changes in noise will have on those significantly affected by noise, including impacts on communities' health and quality of life as a result of noise. This will be done by using the Department for Transport's WebTAG which will enable a *relative comparison* to be made between the noise impacts of change options. By monetising the impacts (annoyance and health impacts), a comparison can be made between the noise impacts of a range of options, by making a comparison to the baseline for each of those options.

B47. Given that annoyance due to noise will be far more common than any of the other health factors (sleep disturbance, acute myocardial infarction (AMI, commonly referred to as a heart attack), stroke and dementia) it can often be the most dominant impact when health and quality of life are assessed. Therefore, in accordance with Department for Transport guidance, sponsors can propose options that reduce the impacts of sleep disturbance, AMI, stroke or dementia *even if this leads to increased annoyance*. There may also be options which perform comparatively better in terms of day noise than night noise, or vice versa. In any of these instances, sponsors must demonstrate that they have considered the relative trade-offs and taken into account community views on which element to prioritise. Design principles could also inform how the change sponsor develops options that alleviate or move noise in some areas rather than others.

B48. In addition to clear portrayals of any noise metrics used in consultation material, there must also be a clear explanation of the metrics, what they mean in the context of the airspace change proposal and how they have been used by the change sponsor to decide upon a preferred option.

B49. For the purpose of noise metrics, day time will be the 16 hour period from 0700 to 2300, and night time will be the period from 2300 to 0700.

³⁰ See paragraph 5.13 of the Department for Transport's consultation document ([click here for details](#)).

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Environmental metrics and assessment requirements

Noise metrics

B50. Further technical information about noise modelling, noise metrics and the portrayal of outputs is contained in the [environmental requirements technical annex](#) to this guidance.

B51. When producing noise contours or footprints, sponsors must take account of planned property developments when determining impacts and those affected.

B52. When considering noise impacts CAA will weight the outcomes from 'primary' metrics over 'secondary' metrics. Primary metrics will be those that are used to quantify significant noise impacts, such as L_{eq} contours and WebTAG outputs. Secondary metrics will be those that are not being used to determine significant impacts but which are still able to convey noise effects, such as N65 contours and L_{max} levels. While not a noise metric, overflight contours will be a secondary metric for the purposes of decision-making.

For more information about:

- [environmental metrics and related technical terms click here](#)

Noise from day flights

- L_{eq} contours portrayed – to 51 dBA L_{eq} 16 hour
- L_{eq} contours – population counts for each contour to 51 dBA L_{eq} 16 hour. Population counts must include area counts, and noise-sensitive buildings (for example, hospitals, places of worship, schools)
- L_{eq} contours will not be required for any airfield or aerodrome with fewer than 30 movements per day
- N65 contours
- WebTAG for inclusion in options appraisal (annoyance and health impacts).

Noise from night flights (only relevant if the proposal is likely to have an effect upon flights between 2300 and 0700)

- L_{eq} contours portrayed to 45 dBA L_{eq} 8 hour
- L_{eq} contours – population counts for each contour to 45 dBA L_{eq} 8 hour. Population counts must include area counts, and noise-sensitive buildings (for example, hospitals, places of worship, schools)
- N60 contours
- WebTAG for inclusion in options appraisal (sleep disturbance and health impacts).

Additional optional noise metrics

B53. The metrics above should help to demonstrate to communities how noise will be distributed. In addition, the change sponsor may wish to use additional noise metrics for explaining and portraying noise impacts to affected communities. Some examples are:

- L_{max} noise levels – if used it is recommended that typical and noisiest aircraft types are portrayed, at typical and 'worst case' altitudes. Noise values can be portrayed at key locations (as identified via engagement or consultation) and also at regular altitude increments (for example, for every 1,000 feet increase in height). Information about the frequency of flights on a route by route basis (both currently and forecast) is also recommended to aid understanding of the anticipated impacts
- 100 per cent L_{eq} contours – these contours portray averaged noise impacts based on single direction runway usage rather than the standard method of reflected actual or forecast runway usage
- difference contours – these contours illustrate relative changes in noise impacts, both increases and decreases, by geographic area.

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Environmental metrics and assessment requirements

Noise from flights above 7,000 feet

B54. In most cases, we would expect no assessment or portrayal of noise from aircraft above 7,000 feet, in line with Government policy that the prioritised environmental impact at these altitudes is CO₂ emissions. However, aircraft can sometimes be audible when above 7,000 feet, even though the effects from noise at these altitudes are not defined as significant. That is not to say that noise may not still be annoying for some people. Therefore in instances where design options are no different (or very closely matched) in terms of all other environmental impacts, then the overflight metric could be used as a means to determine if traffic patterns from aircraft above 7,000 feet could be used by a change sponsor as a differentiating impact.

Operational diagrams

B55. These diagrams are used to illustrate the patterns of current or anticipated aircraft movements on geographical maps and are often based upon radar track data. They do not portray noise impacts but they can assist in people's understanding of the change, especially when viewed in conjunction with noise metrics.

B56. They are also useful for making a comparison of:

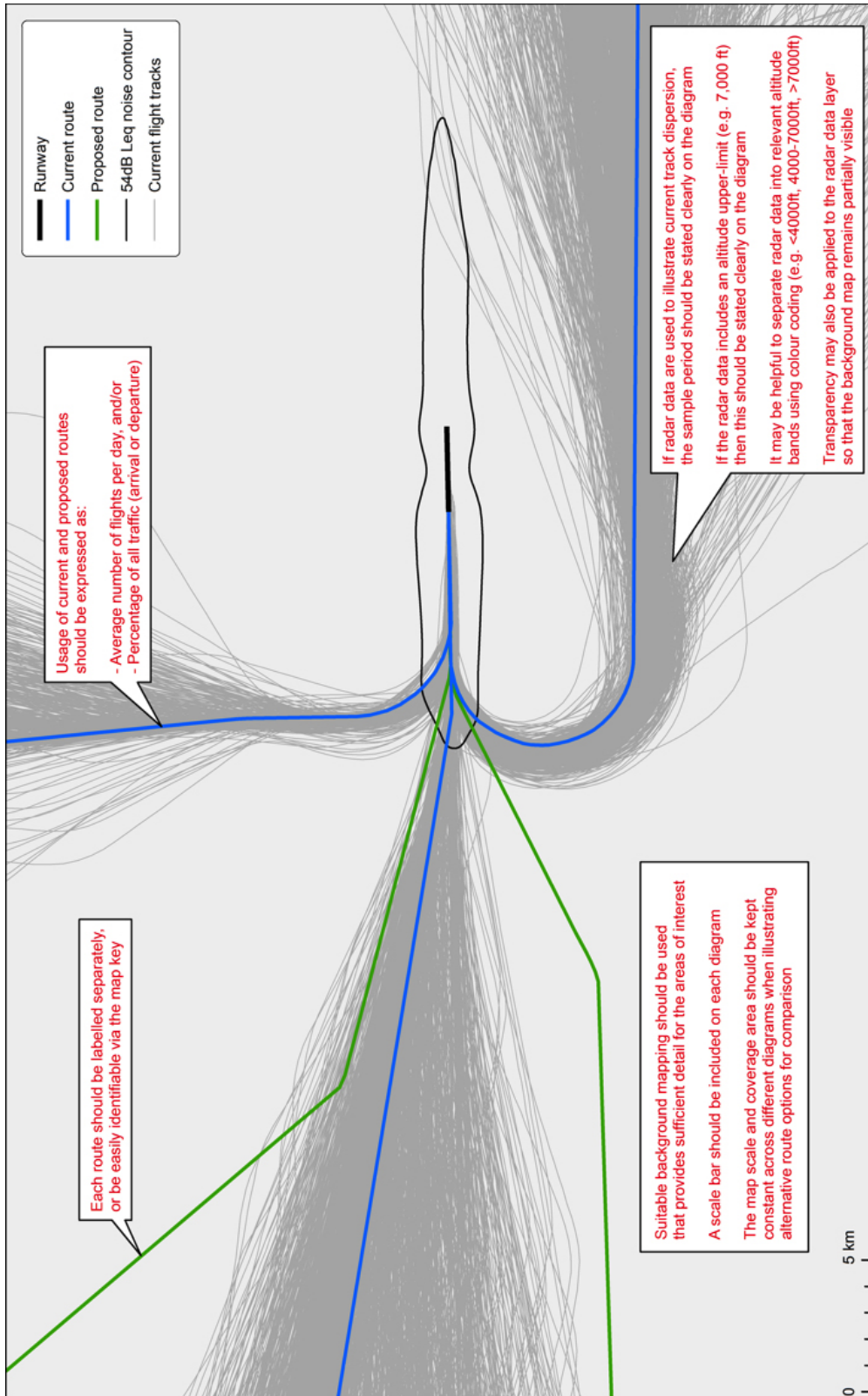
- proposed routes and existing routes, in relation to current traffic patterns (see the example in Figure B1)
- usage of proposed routes and usage of existing routes (percentage of traffic and/or absolute numbers of flights – see the example in Figure B1)
- the current dispersion of traffic and the anticipated dispersion of traffic (see the examples in Figures B2 and B3)
- baseline Leq contours with proposed routes, as an illustration where proposed changes to routes occur beyond the outer noise contour. (see the examples in Figures B1, B2 and B3).

B57. Note that these diagrams are examples of options for operational diagrams. Any operational diagrams used as a means of portraying airspace proposals must be overlaid on clearly legible maps that enable affected communities to identify their location in relation to the changes in traffic patterns. Airspace charts or satellite images are not normally suitable for this purpose, as they do not provide the clarity necessary to identify locations.

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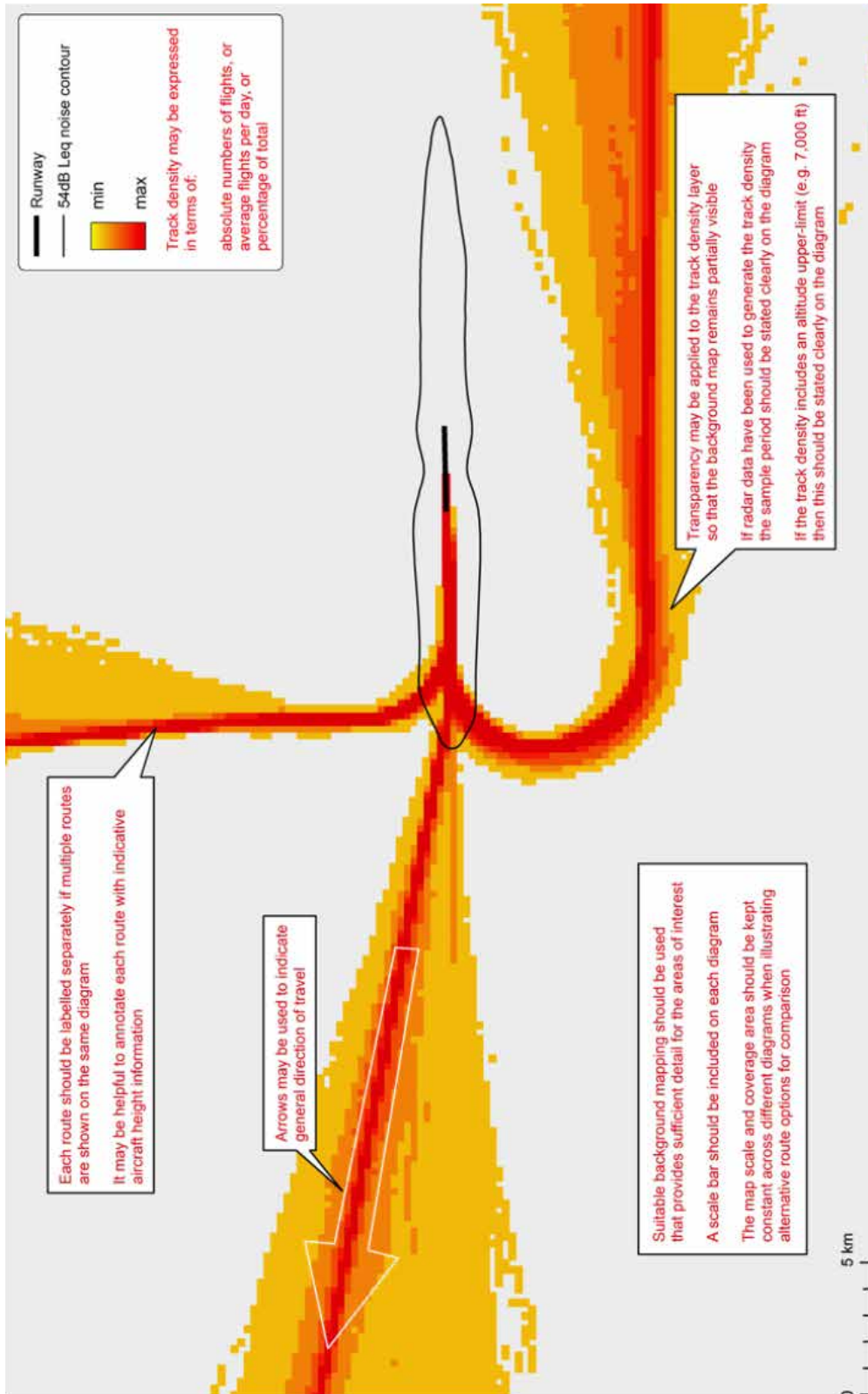
Figure B1: Example diagram showing layout of current and proposed routes



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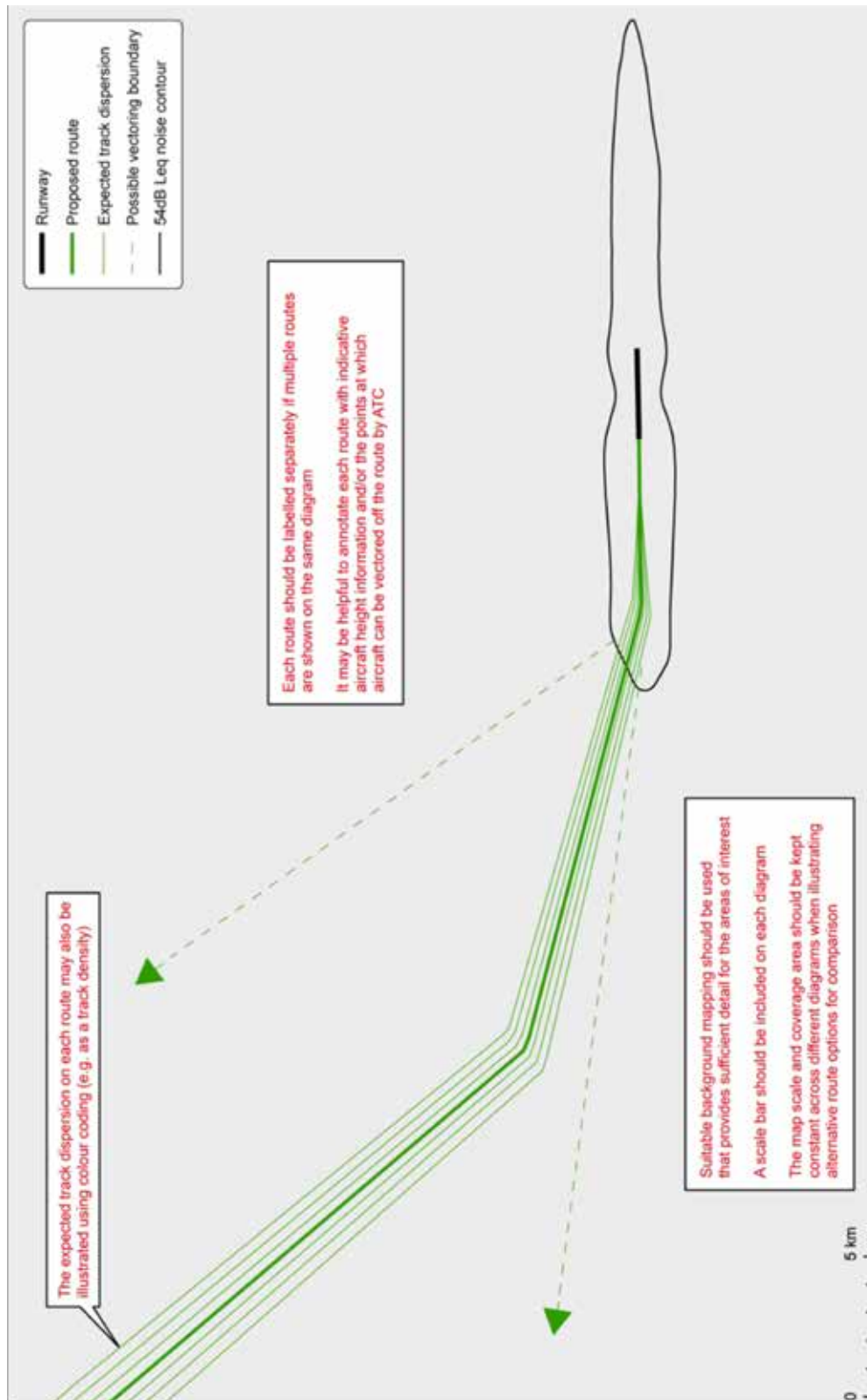
Figure B2: Example of dispersion of track data in the form of a track density diagram



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Figure B3: Example diagram of track dispersion along proposed routes



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Concentration resulting from more accurate navigational technology

B58. When airspace change proposals are developed for the introduction of improved navigational technologies (such as performance-based navigation) that are likely to result in more accurate adherence to flightpaths and therefore result in a greater concentration of traffic patterns, this must be explained and portrayed by sponsors in their consultation material. Concentration is likely to change the distribution of aircraft noise over communities close to airports, with some communities experiencing a reduction in noise while others experience an increase. While the significant impacts of concentration will be captured via the use of WebTAG as part of the options appraisal, the use of operational diagrams can be useful for sponsors to explain and illustrate the anticipated effect of concentration on traffic patterns.

Overflight assessment

B59. The measurement of 'overflight' is a secondary metric that can be useful for explaining the operational impacts of proposed airspace changes. The CAA has developed an approach to calculating and portraying traffic patterns³¹ so that stakeholders, especially communities close to airports, can better understand existing aircraft movements and how this might be expected to change as a result of an airspace change proposal. It is important to stress that the overflight metric does not reflect noise impacts; it contains no noise information but has been developed to recognise both that Government policy on airspace refers to overflights and that communities can find the information useful.

B60. When using the overflight metric sponsors must assess and portray the population numbers affected. Because it does not reflect noise impacts, there is no need to produce an area count or to identify noise-sensitive buildings.

Call-in by Secretary of State

B61. While the majority of airspace change proposals will be decided upon by the CAA, a few may be called-in by the Secretary of State for a decision. The Government has set out criteria for a proposal (that is not linked to a planning decision) to be considered for call-in, and these are:

- it is considered to be of strategic national importance, or
- it could have a significant impact (positive or negative) on UK economic growth, or
- it could lead to a change in noise distribution resulting in a 10,000 net increase in the number of people subjected to a noise level of at least 54 dB³² *as well as* having an identified adverse impact on health and quality of life.³³

B62. Even if these criteria are met, the Secretary of State has discretion whether or not a proposal is called-in.

B63. The third of these criteria relates to the noise impact of the proposal, and the metric identified (100% L_{eq} contours) is not a standard metric for the purposes of assessing airspace change proposals. On submission of the final proposal to the CAA, we will advise if these contours are required in order to determine if the call-in criteria has been met. This does not preclude the change sponsor preparing and providing these contours at an earlier stage in the process if it chooses.

32. 100% mode L_{Aeq 16h} noise exposure.

33. The assessment of the numbers of people affected and the associated adverse impacts on health and quality of life of the airspace change proposal should be carried out by the change sponsor in accordance with the requirements set out in the Government's Guidance.

31. CAP1498 – Definition of overflight, www.caa.co.uk/cap1498

Appendix B

Environmental metrics and assessment requirements

Assessment of CO₂ emissions

B64. Changes to CO₂ impacts are included in the options appraisal process (via use of WebTAG) and must also be conveyed in consultation material.

B65. Introducing operational procedures that enable aircraft either to climb more efficiently, allow more direct routings, reduce holding times or facilitate the consistent use of continuous descent operations can be a means of reducing CO₂ emissions on a per flight basis. While such procedures may not be feasible for some proposals (due to the nature or scale of the airspace change), the CAA expects sponsors to consider the possibility of introducing such procedures when developing their airspace change proposals. Sponsors should also explicitly state what consideration was given to the introduction of such operational procedures when developing options.

B66. As noted in the altitude-based priorities, the potential to optimise CO₂ efficiency is primarily above 7,000 feet (amsl) where local community impacts are not a priority. However CO₂ efficiency is also a consideration below 7,000 feet (amsl), although at these altitudes it must be balanced with other local impacts.

B67. Sponsors must calculate the change to CO₂ emissions on a per flight basis and as an annual total – results to be shown as absolute values (in tonnes) rather than as percentages.

B68. When calculating changes to CO₂ emissions, sponsors must aim to show the estimated actual change in emissions rather than the theoretical change. Specifically this means that the assessment must be based on anticipated actual changes to aircraft behaviour (for example, reduced miles flown, improved climb profile flown, improved descent profile flown) rather than simply comparing the differences in published flight procedures

(for example, changes to flight-planned routes that do not reflect current or expected actual routings). Further information on methodology is contained in the [environmental requirements technical annex](#) to this guidance.

Assessment of local air quality

B69. Changes to local air quality impacts are included in the options appraisal process (via use of WebTAG) and must also be conveyed in consultation material.

B70. Normally this assessment is only required to be undertaken when the proposed change has the potential to have an impact on emissions (either their volume or distribution) below 1,000 feet and in the vicinity of a location that has been designated as an air quality management area. Examples that may result in such a change are:

- changes to departure or arrival procedures – both laterally or vertically
- changes to operating procedures that effect thrust and therefore emissions
- changes to the number of aircraft movements.

B71. In all instances, the change in emissions is only relevant to this process when it is a result of the airspace change itself, and not when it results from, for example, changes in the aircraft fleet mix where no airspace change is involved.

B72. Due to the effects of mixing and dispersion, emissions from aircraft above 1,000 feet (amsl) are unlikely to have a significant impact on local air quality. Therefore the impact of airspace design on local air quality is generally negligible compared with other factors such as changes in the volume of air traffic, and local transport infrastructures feeding the airport. However, sponsors must still show explicit consideration of whether local air quality could be impacted when developing airspace change proposals.

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B73. While sponsors should prioritise noise impacts below 4,000 feet (amsl), consistent with the altitude-based priorities and the Government's policy to give particular weight to the management and mitigation of noise in the immediate vicinity of airports³⁴, there could be circumstances where local air quality is a consideration because emissions from aircraft taking off, landing or while they are on the ground have the potential to contribute to overall pollution levels in the area. Where these activities are directly affected by the airspace change proposal, this could lead to a situation where prioritising noise creates unacceptable impacts in terms of local air quality or might risk breaching legal limits for air quality. Sponsors must therefore take such issues into account when they consider if are relevant, for example, when determining airspace changes affecting the initial departure or the final arrival stage of a flight.

Assessment of the impact upon tranquillity

B74. For the purposes of airspace change proposals, the impact upon tranquillity need only be considered with specific reference to Areas of Outstanding Natural Beauty (AONB) and National Parks unless other areas for consideration are identified through community engagement. Qualitative assessment of tranquillity impacts will be undertaken as part of the options appraisal via WebTAG under 'Landscape' (TAG Unit A3 – Section 6).

B75. National Parks and AONBs are designated areas with specific statutory purposes to ensure their continued protection in relation to landscape and scenic beauty.³⁵ The statutory purpose of National Parks is to conserve and

enhance their natural beauty, wildlife, and cultural heritage and to promote opportunities for the understanding and enjoyment of their special qualities by the public. The statutory purpose of AONBs is to conserve and enhance the natural beauty of their area. Change sponsors are required to have regard to these statutory purposes when developing airspace change proposals.³⁶

B76. Given the finite amount of airspace available in the UK and the fixed location of airports and National Parks or AONBs, it will not always be practical to completely avoid overflying National Parks or AONBs – and there are no legislative requirements to do so, as this would be impractical. Government policy in terms of noise impacts is to focus on minimising the number of people significantly affected by aircraft noise. As a consequence, this is likely to mean that one of the key principles involved in airspace design will be avoiding overflight of populated areas below 7,000 feet (amsl) where possible. However, when airspace changes are being considered, it is important that local circumstances, including community feedback on specific areas that should be avoided, are taken into account where possible. Therefore, in line with the altitude-based priorities, when sponsors are developing airspace change proposals that have the potential to change overflights of National Parks or AONBs below 7,000 feet (amsl) sponsors must show how they have considered and taken account of this impact as part of their option development and final design.

34. Aviation Policy Framework, section 3.25, page 60, Department for Transport, March 2013.

35. A list of designated National Parks in the UK can be found at www.nationalparks.gov.uk. A list of designated AONB can be found at www.landscapesforlife.org.uk.

36. DEFRA, Duties on relevant authorities to have regard to the purposes of National Parks, Areas of Outstanding Natural Beauty (AONB) and the Norfolk and Suffolk Broads Guidance Note, 2005.

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Environmental metrics and assessment requirements

Biodiversity

B77. Biological diversity or ‘biodiversity’ can be taken to mean: “The variability among living organisms from all sources including, inter alia, terrestrial, marine and other aquatic ecosystems and the ecological complexes of which they are part; this includes diversity within species, between species and of ecosystems”³⁷

B78. The Government’s guidance recommends that the CAA keep abreast of policy and guidance issued by the Government, and while no direct reference is made to impacts upon biodiversity, the CAA is required to be familiar with the Wildlife and Countryside Act 1981³⁸ and the Conservation of Habitats and Species Regulations 2010.³⁹ The CAA’s environmental statement will aim to verify that all environmental factors have been considered in line with relevant Government policy and explain why the CAA agrees that these have been balanced appropriately. In general, airspace change proposals are unlikely to have an impact upon biodiversity because they do not involve ground based infrastructure. As such they are unlikely to have a direct impact that would engage the Birds or Habitats legislation. However, given that all changes below 7,000 feet should take into account local circumstances in the development of airspace structures, the change sponsor should include in its consultations and engagement potential biodiversity implications associated with design options under consideration, and should be mindful of such potential impacts as are identified by stakeholders. The CAA will, in its environmental statement, verify that any biodiversity factors have been considered proportionately.

37. Convention on Biological Diversity (1992), Art. 2
<https://www.cbd.int/convention/articles/default.shtml?a=cbd-02>
 38. <http://www.legislation.gov.uk/ukpga/1981/69>
 39. <http://www.legislation.gov.uk/uksi/2010/490/made>

Temporary airspace changes

B79. These changes are classified as Tier 1b in the Government’s guidance. They should exist for no longer than 90 days.

B80. In line with Government guidance, in respect of a change that would affect the distribution of traffic below 7,000 feet, the CAA requires that any communities affected are informed of the change before a decision is taken by the CAA about its implementation. The nature and impact of the change will influence what level of information is considered acceptable by the CAA. For large-scale changes impacting on densely populated areas, widespread notification via local media, social media, advertising and owned media may be appropriate, and may reduce community concerns and complaints about the change – in particular if clear information about the scope and duration of changes is provided. Less impactful changes may require less extensive information approaches for the CAA to approve implementation, for example reaching out via third parties and representative organisations, social media channels and website information. The online airspace change portal will also offer another mechanism to communicate with impacted parties.

B81. There are no specific environmental requirements for temporary changes identified in Government guidance. The CAA is mindful of the need for proportionality, given the temporary nature of the change. We therefore require that the following information should be assessed (which we will take into account before agreeing to the trial taking place) and conveyed to those affected:

- justification for the change, and confirmation of its effective period

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- a qualitative description of changes to traffic patterns, illustrated using operational diagrams overlaid on Ordnance Survey maps or similar; diagrams should be of sufficient detail for those affected to identify the where they live in relation of the changes in traffic pattern
- details of the frequency of flights and typical altitudes
- typical noise levels at key locations.

B82. There is no requirement to assess any other environmental impacts (i.e. CO₂, local air quality, tranquillity), because these are likely to be negligible for such a short-term change.

B83. These assessment requirements would need to be re-assessed and possibly expanded if the temporary change extended beyond 90 days.

Airspace trials

B84. These changes are classified as Tier 1c in Government guidance. In line with Government guidance, the CAA requires a trial sponsor to undertake an assessment of the noise impacts of a trial (which the CAA will take into account when deciding whether to agree to the trial). If the CAA agrees to the trial, we require the trial sponsor to use the scale of those impacts to guide the level of information about the trial which the change sponsor must provide to stakeholders before the trial commences.

B85. Most trials do not extend beyond 12 months and so annualised metrics that portray average noise levels are not appropriate for determining and conveying the noise impact. If a trial is 90 days or less, the requirements for noise assessment are the same as those for temporary airspace changes (outlined above). If a trial extends beyond 12 months, then the need to use such annualised metrics will need to be considered and sponsors are likely to be required to portray impacts on that basis, using the metrics set out in this guidance for Level 1 airspace change proposals.

B86. Therefore, for trials longer than 90 days yet shorter than 12 months, that affect traffic distribution below 7,000 feet, the following information must be prepared by the change sponsor and used to engage with those affected:

- 65 dBA L_{max} footprints that illustrate the loudest and most frequent types of aircraft that will be participating in the trial
- equivalent footprints that illustrate where the trial traffic would otherwise have flown (this assumes that any aircraft that partakes in a trial would have flown on an alternate route that reflects its current operations)
- information on the expected frequency (both absolute and as a percentage of total traffic) and timing of flights participating in the trial
- operational diagrams that illustrate the estimated overflight swathe of trial traffic, up to 7,000 feet.

B87. The CAA anticipates that there will be no requirement to assess any other environmental impacts (i.e. CO₂, local air quality, tranquillity), because these are expected to be negligible for such a short-term change that will affect only a small proportion of current traffic.

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When to undertake this activity		
Stage 1: Define	1A: Assess requirement	✓
	1B: Design principles	✓
Define gateway		
Stage 2: Develop and assess	2A: Options development	✓
	2B: Options appraisal	~
Develop and Assess gateway		
Stage 3: Consult	3A: Consultation preparation	✓
	3B: Consultation approval	✓
Consult gateway		
	3C: Commence consultation	✓
	3D: Collate and review responses	✓
Stage 4: Update and submit	4A: Update design	~
	4B: Submit proposal to CAA	~
Stage 5: Decide	5A: CAA assessment	✗
	5B: CAA decision	✗
Decide gateway		
Stage 6: Implement		✓
Stage 7: Post-implementation review		✓

What does this activity entail?

Consultation is a formal process seeking input into a decision, undertaken in line with the Gunning principles and government guidance.

Engagement is a 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.

Communication with all affected stakeholders throughout the formal airspace change process.

Formal consultation activities at key points during the process, including around developing design principles, and undertaking consultation and post-implementation review.

Best practice ongoing engagement to ensure that airspace change proposals are received by an informed, engaged audience able to effectively feed-in their views.

Using the CAA's airspace change portal effectively as a communication tool.

The CAA's own stakeholder engagement, undertaken during the stages of the process that it leads.

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The text in this Appendix refers to the policy proposals and draft guidance on which the Department for Transport is currently consulting ([click here for details](#)). Should Government Directions, policy and guidance change after the consultation, this Appendix will be updated accordingly.

Why is this activity included in the process?

- C1. Over the past five years, all parties involved in airspace changes have developed greater desire for transparency and tailored engagement to meet their unique needs. As such, effective stakeholder engagement is a vital underpinning of the airspace change process.
- C2. For consultation to be effective, those who are consulted by sponsors should be able to base their views on a reasonable understanding of the situation, clear information about what is proposed and the potential impact of the changes on them, and be able to express their views and have confidence that their views will inform the final proposal. This is why engagement should not begin with the start of the process, but should be built on existing relationships.
- C3. There are three clear points in the process where sponsors will be explicitly seeking stakeholder input to their proposals, but for that input to be informed and meaningful, engagement will be required throughout the process by sponsors.
- C4. The CAA will seek input on the most impactful changes while making its decision, and will undertake engagement activity for some airspace changes at key decision-making points. For Level 1 airspace changes the CAA will offer a Public Evidence Session and will normally publish a draft decision for feedback.

Key terms to check in our glossary

Airline customers	Bilateral meeting	Consultation
Elected representatives	Engagement	Facilitation
Feedback	Focus group	Gunning principles
Information provision	Local authorities	Non-governmental organisation
Representative group	Stakeholder	

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How to undertake this activity

- C5.** In particular for the largest, most impactful and most complex airspace changes, stakeholder engagement should not begin and end with the formal process, but will be most effective if stakeholders already have a reasonable understanding of how airports, airlines, air navigation service providers and related airspace operate. While direct stakeholder engagement is likely to be greatest during the stages of a formal airspace change, ongoing engagement and information can help stakeholders understand the context for proposed changes and provide constructive feedback and comments.
- C6.** The CAA does not intend to set out how engagement must be undertaken in a prescriptive way. For the most important aspect of stakeholder engagement, the consultation undertaken in Stage 3, sponsors will be required to submit a consultation strategy to the CAA for approval prior to the consultation beginning. This will give the CAA the opportunity to consider the change sponsor's approach to their unique local circumstances and assess how they intend to manage them proportionately.
- C7.** As a change sponsor starts to consider the need for an airspace change, beginning to understand how it will potentially impact stakeholders, whether these are other airspace users; impacted communities; representative groups and non-governmental organisations is important. A change sponsor should also consider other industry bodies – such as airports using neighbouring airspace or air navigation service providers – that might experience consequential impacts as a result of its proposed change.

- C8.** The core principle underpinning the CAA's assessment of whether a change sponsor is engaging stakeholders effectively will be evidence that the change sponsor is engaging in a two-way conversation. Building blocks to develop an effective dialogue are likely to include:

Identifying the right audience

- Who might be impacted? Are they impacted directly or indirectly? How has the audience been identified?

Understanding their situation

- What is the nature of the relationship? What is the relationship history? What is their level of knowledge? Which elements of the proposal will impact them?

Defining their unique requirements

- How will they be engaged? Do they have any different or special requirements? Are there any seldom heard groups impacted? How will material be targeted for different groups and situations identified?

Providing relevant, authoritative, clear information at the appropriate time

- C9.** Based on these building blocks, the CAA will expect to see detail of what sponsors have been told by their audiences; how they responded to this feedback; and how it has affected the proposals they are bringing forward.

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- C10.** Earlier in the process, as there will not be clarity on the precise impacts of a proposed change, it will be more challenging to identify potential audiences with whom to engage on this process. It is therefore likely that contact will primarily be with stakeholders' representatives: community leaders; elected representatives; representative bodies; governmental organisations; and industry groups. These will likely be a more informed audience, and will often be people with whom the proposer has an ongoing relationship, helping to contextualise the engagement.
- C11.** Bilateral meetings, participatory sessions and consultative workshops are likely to be the most effective method of seeking meaningful contributions from stakeholders during Stages 1 and 2. Focussed opinion surveys of small numbers of stakeholders may provide some quantitative data on which to base design principles and options appraisals.
- C12.** As the audience is more precisely identified through developing the options appraisal documentation, engagement may become more generic in order to reach larger audiences. Sponsors should however remain mindful that each stakeholder is likely to have different needs, and sponsors should take care to ensure they are reaching different audiences in a way which suits those audiences.
- C13.** It is important sponsors understand that throughout the process, the change sponsor owns the requirement for stakeholder engagement. Where the CAA is publishing documents or updates, and while the CAA may communicate this with stakeholders, the onus is on the change sponsor to ensure that all parties are kept updated and informed during the process.
- C14.** The CAA's intention is that the airspace change process is undertaken publicly. Documents will be published on the airspace change portal rather than submitted privately, with the sole exception being the points in the process where the CAA will review a document prior to publication (set out below). However, some material is not published:
- material that is confidential in the interests of national security
 - material which the CAA has agreed with the change sponsor should not be made public, in order to protect the legitimate commercial interests of a person or business (in the same way that that we are obliged to apply the Freedom of Information Act to any information held by the CAA).
- C15.** If the proposal contains any such sensitive information, then two versions are submitted – one full version for the CAA and one redacted version for publication. More information on this appears in **Appendix F**. The default position is that all material in relation to a proposal is published. We do not anticipate routinely agreeing to withhold large amounts of information and would only accept redaction of the minimum information necessary to comply with our obligations.
- C16.** Sponsors should maintain clear records of engagement activity with all stakeholders throughout the process, to help inform future interactions with stakeholders and to develop the consultation strategy. These records may help the CAA judge the validity of engagement activity at relevant gateways.
- C17.** Expected engagement activity, evidence and publications are detailed for each Stage and Step of the process in the following pages:

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Consultation and engagement

Stage 1: DEFINE

Step 1A: Assess requirement (published outputs: Statement of Need; assessment meeting minutes, proposed timescales)

Step 1B: Design principles (published outputs: airspace change proposal design principles, explanation of how these were influenced through engagement)

C18. Initial contact with stakeholders is likely to be crucial in all change proposals, as transparently communicating what need is being met through the considered change will set the tone for ongoing engagement and will also help sponsors to develop the materials required in subsequent stages.

C19. The CAA recommends, particularly for complex or higher impact changes, that an engagement strategy is developed during Stage 1 and enhanced during Stage 2 following initial contact with stakeholders so as to be ready for submission as a consultation strategy at Stage 3. This strategy will not be reviewed by the CAA until the 'Consult' gateway, but will help sponsors to structure engagement during earlier Stages.

C20. Design principles must be shown to have been set through a two-way process and involve effective engagement. Engagement here is important to both parties – for the change sponsor to clearly communicate the need for change and their priorities, and for those affected (particularly impacted communities) to have the opportunity to explain what design considerations are important to them as the change sponsor considers possibilities to meet their needs.

C21. The CAA understands that it may not always be possible to achieve agreement across all stakeholders on design principles. Sponsors should set out clearly the competing priorities and explain their choice of options based on this.

C22. This is one stage of the process where neutral facilitation may be helpful. Facilitation is not a requirement, as it may not be appropriate in all circumstances, but where agreement on principles is not reached and facilitation has not been tried, the CAA may be unable to pass a proposal through the 'Define' gateway.

DEFINE gateway

At the 'Define' gateway, for all changes the CAA will require evidence from the change sponsor that demonstrates that design principles were arrived at following two-way conversations. This must set out what engagement activity was undertaken (i), and what has happened as a result of that activity (ii).

- (i) This is likely to include records and minutes of workshops and meetings, with identification of those present and the context and nature of the discussion. This will need to cover the range of stakeholders who may be impacted by the potential change. As stakeholders will often require information and to develop understanding of airspace design to play a part in development, evidence of how sponsors achieved this should be provided.
- (ii) Sponsors should also make clear where stakeholders have agreed the principles applied (and which have not if universal agreement is not achieved). Where design principles have not been agreed, objections should be clearly set out and attributed to relevant parties, as well as a clear rationale for the change sponsor's decision in light of this feedback.

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Stage 2: DEVELOP and ASSESS

Step 2A: Option development (published outputs: design options, design principle evaluation)

Step 2B: Options appraisal (published outputs: Initial options appraisal and related CAA assessment)

C23. As the change sponsor is required to design options that meet the principles developed during Stage 1b, it is expected that they will seek feedback from key stakeholders to test their hypotheses. Bilateral meetings and smaller challenge groups are likely to be sufficient to ensure that stakeholder concerns have been properly understood and accounted for in designing options.

C24. In judging the efficacy of engagement the CAA will not look for discussion on the pluses and minuses of each option – that should come during consultation – but will seek evidence stakeholders are content that their views have been captured and taken into account by the change sponsor. Formal record keeping may not be necessary (though may be helpful for sponsors anyway), but sponsors should set out how decisions they have taken relate to stakeholder feedback.

C25. Within the development of the options appraisal during Step 2B, the key impacted audiences will be far more clearly identified. This insight should be used to inform the development of the consultation strategy in Stage 3.

DEVELOP and ASSESS gateway

At the 'Develop and assess' gateway, the Initial options appraisal should set out impacted audiences, as this information will be a key feature in developing the consultation strategy required during Step 3A and at the 'Consult' gateway.

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Stage 3: CONSULT

Step 3A: Consultation preparation (outputs: draft consultation strategy submitted to CAA; draft consultation documents submitted to CAA, draft Full options appraisal – none published at this stage prior to CAA approval)

C26. Stage 3 is the key stage of the process for the proposer in terms of engagement activity – at this stage, understanding of audiences, channels and messages must be such that an effective and comprehensive consultation strategy can be developed and submitted to the CAA.

C27. This consultation guidance was developed with consideration of the **Government's consultation principles**, applied to the unique circumstances surrounding an airspace change proposal. The Government's short guidance document may be helpful for a change sponsor to consider alongside this one. In addition, the change sponsor should be aware of the Gunning principles⁴⁰ when developing its consultation strategy:

- consultation should occur when proposals are at a formative stage
- the consultation should give sufficient reasons for any proposal to permit intelligent consideration
- the consultation should allow adequate time for consideration and response
- the product of consultation must be conscientiously taken into account.

C28. The fundamental principles of effective consultation are targeting the right audience, communicating in a way that suits them, and giving them the tools to make informative, valuable contributions to the proposals development. The change sponsor's consultation strategy will be judged as to whether it meets these aims. Table C1 **overleaf** sets out what types of information the CAA will review when considering whether to approve the strategy.

40. The Gunning principles set out legal expectations for what constitutes an appropriate consultation, and are named for a court case in the 1980s involving the London Borough of Brent.

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Consultation and engagement

Table C1: Best practice consultation principles

<p>Audience</p>	<p>Many audiences will have been identified at Stage 1 to work with in developing design principles; further granularity and detail on impacted communities should be identified in the Initial options appraisal during Step 2b.</p> <p>These should be developed and detailed here. Particular consideration should be given to seldom-heard groups; those who are not regularly in contact with the change sponsor; and those who do not have existing knowledge of aviation.</p>
<p>Approach</p>	<p>It is expected that sponsors consult stakeholders in a way that suits them –the formal consultation will be undertaken through the portal, and all information must be available there. However, this will not suit all consultees, so based on the audience detailed above, sponsors should set out how they intend to ensure all audiences are able to respond effectively.</p> <p>Engagement exercises with large numbers of people are challenging to manage in practice, and consultation strategies should set out how sponsors intend to respond to unexpected events and challenges, including escalation and extension plans where appropriate.</p>
<p>Materials</p>	<p>As a matter of course, materials should be short and simple. Respondents should not be expected to understand operational technicalities, still less detailed aviation terminology and practice. While some more complex and detailed materials may be necessary to support feedback from technical audiences, these must be supported by information provided in materials which are accessible to an everyday audience. Materials must provide respondents with enough information to ensure that they understand the issues and the potential impact of the proposals on them, and can give informed responses – failure here will lead to an ineffective consultation, which will be of little use to the change sponsor and will be unacceptable to the CAA. Sponsors may consider guidance published by the Plain English Campaign and the Consultation Institute useful.</p>
<p>Length</p>	<p>The usually accepted standard is that consultations should last for 12 weeks. Any major holidays should also be considered, allowing extra time where appropriate. However, the 12-week period is not set in stone. The CAA is prepared to exercise some flexibility and will consider a shorter period where the change sponsor presents a case based on:</p> <ul style="list-style-type: none"> • The impact of the change • The audience map and impacted groups (especially seldom-heard people) • Factors outside the change sponsor’s control, such as legal constraints • Technical or operational constraints.

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Step 3B: Consultation approval (published outputs: CAA statement on approval of consultation strategy; and, subject to the outcome, publication of consultation strategy, Full options appraisal and related CAA assessment)

C29. The change sponsor may decide whether to publish the consultation strategy prior to commencing consultation or publish it alongside the other consultation material.

In either case, publication is likely to be the first point that the full potential audience of impacted stakeholders is made clear, and the change sponsor should prepare for this to be the first time many people are aware that they may be impacted by proposals.

CONSULT gateway

Passing the 'Consult' gateway will require CAA acceptance of the change sponsor's consultation strategy, and signifies that the full suite of consultation materials are now ready to be made available, as set out above.

Step 3C: Commence consultation (published outputs: all consultation documents, including Full options appraisal, queries on the proposal and related responses, consultation responses)

C30. At this stage the consultation will begin, and engagement activity will be undertaken in line with the strategy developed in Step 3A. During consultation, deviations from the strategy should be minimal, and only in line with previously approved escalation and extension plans detailed in the consultation strategy to deal with unforeseen issues.

During the consultation

C31. The consultation period is another point in the process where sponsors should consider whether any public events they run would be enhanced by using a neutral third-party facilitator. In the case of seldom-heard audiences, or for those not currently engaged with the aviation industry, facilitation may be especially useful in achieving effective outputs from consultation events.

Record keeping

C32. It is expected that the majority of responses to consultations will come via the portal. However, there are several scenarios where additional material may be gathered and should be published on the portal by the change sponsor. In the first place, some respondents may not be able to respond via the portal and may wish to respond with a hard copy. In this situation, the change sponsor must add the response to the portal so that it can be moderated (by the CAA, as with all other responses), published and analysed with the other responses. In addition, if the change sponsor runs public events during the consultation, feedback may be gathered formally or informally. The change sponsor should capture and publish this feedback either by way of minutes, a meeting report, or placing feedback materials such as comment cards on to the portal.

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FAQs

C33. As the consultation is undertaken, it may be that a variety of different stakeholders request the same information that was not foreseen when the consultation strategy was developed. Ideally, the consultation development steps should minimise this, but where there are common questions and requests, the change sponsor should develop frequently asked questions (FAQ) material for publication on the portal.

Step 3D: Collate & review responses (published outputs: sponsor's categorisation of responses)

C34. Categorisation of consultation results is a methodological and careful process that must be undertaken rigorously, and its complexity and importance should not be underestimated. Sponsors should split responses into those which may have an impact on their final proposal and those which will not do.

C35. Responses which have been categorised as having the potential to impact on the proposal will break into two types, those which do lead to changes and those which don't. For the latter group, it is important that sponsors set out the rationale for not acting on proposed changes. This may be because changes wouldn't allow the change sponsor to achieve the design principles, because they would be operationally or commercially unviable or because they would have a negative impact on other stakeholders.

C36. Responses that may not impact on the final proposals may still contain valuable information, and it is important that sponsors capture and understand feedback from the consultation even where it does not impact on the final proposals.

C37. Table C2 **overleaf** sets out how these categories break down and affect proposals:

C38. When the categorisation and subsequent consultation report are published, the change sponsor must set out clearly what its approach to categorisation has been, where challenging issues have been tackled and how they have been resolved. The most important principle to adopt is transparency – being clear why responses have been categorised as they have and how all feedback will be acted upon.

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Table C2: Categorisation of consultation responses

Type	Responses which may impact final proposals		Responses which do not impact final proposals
Description	Responses which have been categorised as having the potential to impact on the proposal will include new information or ideas that the change sponsor believes could lead to an adaptation in a lead design option or a new design option.		The content of this response will include not include new information or ideas that could lead to an adaptation in a lead design option or a new design option but may include other information that should be logged and considered. For example responses which criticise the consultation format should give sponsors insight to improve future engagement; sentiments identified around trust will help to identify areas where additional future engagement may improve relationships; and criticism of historic activity may help to avoid similar situations in future.
Sub type	Responses which have impacted the final proposal	Responses which have not impacted the final proposal	
Description	The change sponsor must show how the response has been acted on and what changes have occurred to their proposal.	The change sponsor must show why the response has not been acted on and explain why the proposal cannot be modified to meet the recommendation.	

Appendix C

Consultation and engagement

Stage 4: UPDATE and SUBMIT

Step 4A: Update design (published outputs: consultation response document including change log, Final options appraisal, revised design)

Step 4B: Submit proposal to CAA outputs: full and redacted airspace change proposal, executive summary and layperson's guide)

C39. It is important to be clear to stakeholders how proposed airspace changes evolve through the stages of the process and how their feedback has informed these evolutions. At this stage, setting out clearly what has changed between the initial consultation and the final submission, and why those changes have happened, is crucial. This will build on the consultation response categorisation created in Step 3D.

C40. Stakeholders (and the CAA) will also expect to see clearly how the design principles initially developed in Stage 2, and expanded upon at Stage 3 are being met by the final design.

C41. It is important to keep this process simple – one effective mechanism is to adopt the 'We asked, you said, we did' model. This briefly sets out what the initial proposal was, how consultees responded, and what has therefore changed. Any categorisation and analysis that fed into this structure should be set out as an appendix.

C42. Stakeholder engagement during this stage will be even more important if there has been a groundswell of opinion in relation to an issue that the change sponsor does not feel able to address. In this case, alongside written material, further face-to-face engagement may be necessary to clearly and simply contextualise the rationale for stakeholders.

C43. It is possible that following Step 4A, the CAA requires the change sponsor to re-consult if the Final options appraisal shows that the impact of the design has changed substantially. In this circumstance, the CAA will also require a further consultation strategy to ensure that the second round of consultation is managed effectively.⁴¹

41. There is relevant case law which influences when there is a requirement to re-consult, for example on whether there is "a fundamental difference between the proposals consulted on and those which the consulting party subsequently wishes to adopt". 'Fundamental' was defined as "a change of such a kind that it would be conspicuously unfair for the decision-maker to proceed without having given consultees a further opportunity to make representations about the proposal as so changed." *Kenneth Parker QC (then sitting as a Deputy High Court judge) R (Elphinstone) v Westminster City Council, [2008] EWHC 1287 (Admin)*.

Appendix C

Consultation and engagement

Stage 5: DECIDE

Step 5A: CAA assessment (published outputs: confirmation that document check complete and of decision timescales, dates of expected decision and of any Public Evidence Session, written submissions to and transcript of any Public Evidence Session, diary of any additional meetings between CAA and stakeholders, request for any further technical details or amendments, response or revised proposal as 'version 2.0' (if any).)

C44. This stage is unlikely to require stakeholder engagement from the change sponsor, beyond responding to queries, and being aware that the online portal will be updating key groups on the progress. This will include making transparent (using the online portal) any technical or clarification questions raised by the CAA and the change sponsor's response (see [Appendix G](#)).

Public Evidence Session

C45. From the CAA's perspective, the Public Evidence Session (for Level 1 airspace changes) may be a significant point of stakeholder engagement. When the final proposal is published by the change sponsor, the CAA will also notify stakeholders of the date of the Public Evidence Session – there will be at least four weeks' notice. The session will be a facilitated evidence-giving session at which representatives will be expected to speak themselves without formality or legal representation, in order to reinforce that information-receiving nature of the session.

C46. Using the portal, interested parties will be able to book five-minute speaking slots on a first-come, first-served basis, to present their views on the airspace change proposal to the CAA decision-maker directly. Representative groups will be able to book 10-minute slots. Attendees will not have the opportunity to challenge what other speakers say. Following the Public Evidence Session, the CAA will publish a transcript.

C47. The CAA will not require sponsors to attend the session, as they are designed to offer third parties the opportunity to speak directly to the decision-maker, but it would usually be appropriate for the change sponsor to attend – not to argue their case, but to offer any clarification that is needed.

Step 5B: CAA decision (published outputs: draft decision document (if any) and related feedback, Secretary of State call-in requests, any notification that the proposal is eligible for call in and has been 'called-in' by the Secretary of State (if applicable), decision document including Final options appraisal assessment, safety review (plain English version), operational and environmental assessments, and consultation assessment and statement)

Appendix C

Consultation and engagement

C48. The final decision document is a CAA publication, and the CAA may choose to engage stakeholders directly at this point (as it may wish to at various other stages of the process). However, it is the change sponsor's role to enact the airspace change and the change sponsor is likely to be the most relevant source of information and recipient of challenge from stakeholders. The CAA will therefore always coordinate with the change

sponsor at this stage to ensure that the change sponsor is clear on our approach to publicising our decision and are aware of intentions with regard to engaging stakeholders. However, the principle is that airspace change and associated stakeholder engagement is owned by the change sponsor, and they have responsibility for maintaining a positive and effective relationship with stakeholders.

DECIDE gateway

At the 'Decide' gateway, the CAA will be assessing the full proposal, and final options appraisal, both of which may have been changed as a result of consultation during Stage 3. Part of the suite of documents that will inform the CAA's decision is the sponsor's categorisation of consultation comments, and the consultation response document setting out how the change sponsor has acted on the feedback provided during consultation. During the Step 5A assessment period, the CAA will produce a consultation assessment, designed to allow the CAA decision-maker to assess whether the proposal was adequately consulted on, in accordance with this guidance and other sources of best practice, and in line with the consultation strategy approved at the 'Consult' gateway. To be approved, a change sponsor must show that it has appropriately categorised consultation responses, and correctly identified the issues arising from the consultation and responded to them appropriately. In developing the assessment, the CAA will compare the change sponsor's consultation feedback report against actual consultation responses and any material provided through the Public Evidence Session, where one has taken place.

Appendix C

Consultation and engagement

Stage 6: IMPLEMENT

(No published outputs)

C49. At this point sponsors must be prepared to give stakeholders a clear understanding of the next steps for the proposal. The CAAs (or if applicable the Secretary of State's) decision will have been published on the online portal and therefore visible to all.

C50. Change sponsors should also consider how to notify members of the local community and other stakeholder groups about the ultimate outcome of the consultation and the decision. In order to publicise a forthcoming change to as many airspace users (and perhaps service providers) as possible, the change sponsor should consider contacting the Ministry of Defence, the commercial General Aviation press, local General Aviation events, relevant community organisations and the local press. All that may be needed is a reference to the online portal where the decision has been published.

C51. Most importantly, this means letting those impacted know when they may begin to experience changes, how the change sponsor intends to manage the transition from the change process to business as usual, and that there will be a post-implementation review. For those changes where it is appropriate, this may be the point at which compensation is made available and mitigations are put in place by sponsors.

Stage 7: POST-IMPLEMENTATION REVIEW

(published outputs: notification of change sponsor data collection requirements (in CAA decision), post-implementation review evidence submission, stakeholder feedback on change sponsor's submission, post-implementation review report, review of modification requirements prepared by sponsor (if applicable), report on effect of modifications (if applicable), review of effect of modifications implemented by sponsor (if applicable))

C52. In Stage 7 the CAA commences a post-implementation review, usually 12 months after implementation (see [Appendix H](#)). The purpose of the review is for:

- the change sponsor to carry out a rigorous assessment of, and
- the CAA to evaluate

whether the anticipated impacts and benefits in the original proposal and published decision are as expected, and where there are differences, what steps (if any) are required to be taken.

C53. The change must be considered in relation to the original Statement of Need, design principles and options appraisal. As stakeholder feedback and engagement is a crucial element in each of these stages, it is expected that stakeholders will play a role in the post-implementation review, but this is not a formal consultation process.

C54. Any comments or complaints received after implementation but before the review commences must be collated by the change sponsor in the CAA-agreed format. Any direct feedback that the CAA receives during this period will be forwarded to the change sponsor for inclusion in that feedback dataset.

Appendix C

Consultation and engagement

C55. Once the change sponsor's data submission is published on the portal (as described in [Appendix H](#)), there will be a 28-day window during which any stakeholder may provide any feedback it wants the CAA to take into account when carrying out this review about whether the impacts of the change are those expected, 12 months on. This allows stakeholders to be confident that their feedback is visible to the CAA. This process should be openly and widely communicated to stakeholders. This feedback is submitted using the online portal.⁴² Submissions are limited to one per individual (verified by email address). The CAA's post-implementation review will not consider submissions made outside the 28-day window.

C56. All original audiences should be informed that the post-implementation review feedback window is approaching, with a reminder close to the time. The portal will be used to facilitate this and wider feedback. As implementation may have drawn interest from new stakeholders, this exercise should be open to all.

C57. Before feedback is published on the portal, the CAA will moderate it to remove unacceptable material.⁴³ Guidelines on what we regard as unacceptable can be found [here](#), but broadly 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.

⁴² The CAA will also accept postal responses for the time being. We will reconsider in the light of experience whether this is still necessary when we conduct a review of the airspace change process three years after implementation, to judge whether the administrative burden of uploading, monitoring and analysing postal responses remains proportionate.

⁴³ The CAA's review after three years will also reconsider in the light of experience whether it is practical for the CAA to carry out this moderation role. We may decide, instead, that the change sponsor should moderate the responses in accordance with CAA guidance, requiring change sponsors to seek our approval before any redactions are made.

C58. The post-implementation review will result in a CAA report which will detail whether the anticipated impacts and benefits in the original proposal and decision have been delivered, any differences from what was expected and what steps (if any) we require to be taken where there are differences. This may result in requirements for modifications or a requirement for a new airspace change proposal. These outcomes will be clearly signposted on the portal. Where the outcome is that the change sponsor will need to propose a new airspace change in order to achieve the original proposal's objective, the change sponsor will be expected to communicate its intentions clearly and quickly to stakeholders.

Appendix D

Airspace design principles

When to undertake this activity		
Stage 1: Define	1A: Assess requirement	X
	1B: Design principles	✓
Define gateway		
Stage 2: Develop and assess	2A: Options development	X
	2B: Options appraisal	X
Develop and Assess gateway		
Stage 3: Consult	3A: Consultation preparation	X
	3B: Consultation approval	X
Consult gateway		
	3C: Commence consultation	X
	3D: Collate and review responses	X
Stage 4: Update and submit	4A: Update design	X
	4B: Submit proposal to CAA	X
Stage 5: Decide	5A: CAA assessment	X
	5B: CAA decision	X
Decide gateway		
Stage 6: Implement		X
Stage 7: Post-implementation review		X

What does this activity entail?

The development of principles that describe the qualities a change should seek to achieve, such as (but not limited to) local priorities and tradeoffs regarding the distribution of noise.

Engagement with local community, operational and environmental stakeholders to establish those design principles.

Creation of a rationale for accepting or rejecting design principles put forward by stakeholders for assessment by the CAA.

The text in this Appendix refers to the policy proposals and draft guidance on which the Department for Transport is currently consulting ([click here for details](#)). Should Government Directions, policy and guidance change after the consultation, this Appendix will be updated accordingly.

Appendix D

Airspace design principles

Why is this activity included in the process?

D1. Different local areas will have different geographies, population distribution, environmental considerations, economic considerations, and so on. To apply a local context to changes, including the preferences and expectations of different stakeholders, a local conversation is needed to establish a qualitative framework for the design of the change.

Key terms to check in our glossary

Consultation	Design principles	Engagement
Elected representatives	Feedback	Inform
Local authorities	Non-governmental organisation	Representative group
Respite	Sponsor	Stakeholder

How to undertake this activity

D2. The design principles are an opportunity to combine local context with technical considerations. There are contextual tradeoffs that the change sponsor will need to consider upfront with stakeholders, in particular with the communities that could be impacted by the change.

D3. The questions a change sponsor might ask stakeholders to inform the development of the principles could include the following (these are offered as an example and this is by no means an exhaustive list):

- given that the Government's environmental guidance states that noise and carbon emissions must both be considered between 4,000 and 7,000 feet, should one of these be prioritised within that height of airspace for this particular change?

- are there noise-sensitive buildings that should be avoided, and if so what and where (i.e. hospitals, care homes, schools, higher education establishments, and so on)?
- how should the minimisation of overflight, or of night noise, or the difference between multiple respite routes and concentrated routes be traded off against one another?
- if multiple routes are considered in order to provide respite, what might constitute a sufficient period of respite?
- how should the needs of passengers be considered alongside the needs of communities at different times of day?
- are there areas in which efficiency from a whole airspace perspective or expeditious routing (shorter or faster routes) take precedence and areas in which other factors should take precedence?

Appendix D

Airspace design principles

D4. In having this two-way conversation with relevant stakeholders, the change sponsor should be clear about the technical considerations that will inform the development of the designs, including:

- the operational aim of the proposal
- safety constraints or opportunities
- operational constraints or opportunities
- technical constraints or opportunities
- economic constraints or opportunities
- the policy and regulatory framework with which the proposal must comply.

D5. These factors are in no way immutable and, as a part of the process for the establishment of the airspace design principles, should be challenged as part of the ongoing dialogue with stakeholders.

Outcome

D6. The outcome of this work will be a shortlist of principles to inform the development of airspace design options and against which they can be qualitatively evaluated. Some of the principles may contradict one another and some may be prioritised over others: this will be an iterative process and a qualitative one rather than a purely numerical exercise with binary answers.

D7. The outcome will also record other design principles that were suggested by stakeholders but not shortlisted for the final set of principles, with reasoning as to why this was the case.

D8. The CAA would therefore expect to receive the following output from this activity:

- a list of those stakeholders engaged
- an explanation of the engagement methods employed

- a chronology of the engagement activity
- the issues raised during the engagement process and evidence of a two-way conversation, i.e. evidence that sponsors considered the principles proposed by stakeholders, that these informed the change sponsor's final set of principles, and that when principles were not included in the final shortlist this was explained to the stakeholder proposing them
- the design principles chosen
- the rationale behind the decision to adopt those principles including evidence as to why any stakeholder group's view has been discounted for these purposes.

Technical design principles

D9. The design of airspace structures and instrument flight procedures that falls subject to the airspace change process must conform to various national and international standards and recommended practices. That said, within that framework, there are many design techniques available to airspace designers. A change sponsor should therefore be able to justify the techniques being applied, especially where those techniques have a direct impact on local communities.

Environmental design principles

D10. The CAA is required to follow the Secretary of State's Guidance to the CAA on Environmental Objectives Relating to the Exercise of its Air Navigation Functions. Within that guidance, there is a strong emphasis on taking into consideration local circumstances, especially when considering such matters as the concentration or dispersion of air traffic. It is vital that the change sponsor takes into consideration the views of local communities when establishing airspace design principles, as set out above.

Appendix E

Options appraisal

When to undertake this activity		
Stage 1: Define	1A: Assess requirement	X
	1B: Design principles	X
Define gateway		
Stage 2: Develop and assess	2A: Options development	✓
	2B: Options appraisal	✓
Develop and Assess gateway		
Stage 3: Consult	3A: Consultation preparation	✓
	3B: Consultation approval	X
Consult gateway		
	3C: Commence consultation	✓
	3D: Collate and review responses	X
Stage 4: Update and submit	4A: Update design	✓
	4B: Submit proposal to CAA	✓
Stage 5: Decide	5A: CAA assessment	X
	5B: CAA decision	X
Decide gateway		
Stage 6: Implement		X
Stage 7: Post-implementation review		X

What does this activity entail?

Options appraisal is a means of assessing the possible different approaches for delivering a desired outcome.

As a high-level objective, a longlist of potential 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 text in this Appendix refers to the policy proposals and draft guidance on which the Department for Transport is currently consulting ([click here for details](#)). Should Government Directions, policy and guidance change after the consultation, this Appendix will be updated accordingly.

Appendix E

Options appraisal

Why is this activity included in the process?

- E1.** The options appraisal essentially delivers clear and, where possible, comparable evidence about a range of factors, so that different airspace design options can be compared and assessed on the basis of those factors.
- E2.** In any airspace change there is the potential for conflicts between the interests of the change sponsor, those affected by noise, or airspace users, such as airlines, General Aviation or the military. For example, growth in traffic at airports, in particular in the London area, could result in competing bids for a given volume of airspace – or proposals to change the same volume of airspace in different ways. The options appraisal should therefore be used to ensure that the proposed change is appropriate and effective in achieving the overall objective. In many cases, it will encourage sponsors to take a step back and to consider a wider range of solutions to the airspace design. For example, from a change sponsor's perspective, the most optimal route may cause a significant increase in noise, whereas as part of the options appraisal process an alternative may be uncovered that both achieves the change sponsor's objective and has a lower noise impact.

- E3.** The CAA acknowledges that airspace change decisions cannot be reduced to an entirely numerically driven exercise. Numerical values are not a substitute for policy direction on which outcomes are important in the design of airspace. For example, a determination as to whether a negative noise or carbon impact should prevent a change that would have a positive economic impact is something that should be set in policy objectives. However, a systematic process that includes quantification of as many of the costs and benefits of a particular airspace change proposal as possible helps to provide consistency in options appraisal for all concerned. It also provides additional data helping the CAA to make the optimal decision against a background of increasing scarcity of airspace capacity.
- E4.** The options appraisal should be used flexibly as a tool to help refine the options and develop the proposal. It should also support those potentially affected by airspace change in providing a greater degree of challenge to sponsors' plans and encourage a more open discourse.

Key terms to check in our glossary

Air navigation service provider	Base case	Discount
Discount factor	Discount rate	Gross domestic product deflator
General Aviation	Green Book	Hedonic pricing
Inflation	One-off costs	Ongoing costs
Real prices	Revealed preference	Stated preference
Willingness to accept		

Appendix E

Options appraisal

How to undertake this activity

Introduction

- E5. This guidance is produced to aid airspace change sponsors and those involved with the airspace change process in undertaking or understanding an options appraisal.
- E6. It is recommended that this guidance is read in conjunction with The Green Book: Appraisal and Evaluation in Central Government (the Green Book)⁴⁴, and relevant sections of the Department for Transport's Transport analysis guidance: WebTAG (WebTAG).⁴⁵ The Green Book and WebTAG are considered to be best practice in appraisal. We do not seek to replicate that guidance here, but we do provide signposts to the relevant sections and draw out detail appropriate to the airspace change process. It should be noted that where the Secretary of State calls-in a proposed airspace change, the Green Book and WebTAG set out the methodologies that the Secretary of State's evaluation will use.

Phases of options appraisal

- E7. The options appraisal should be an iterative process that is developed as the change sponsor refines its proposals in response to the engagement and consultation. It should consist of a number of elements:
- high-level objective and assessment criteria
 - base case
 - options longlist
 - shortlist of options
 - preferred option.

- E8. The options appraisal evolves through three phased iterations, with the CAA reviewing the appraisal at each phase. Those phases are:
- 'Initial' appraisal (at Step 2B with the CAA review at the 'Develop and assess' gateway)
 - 'Full' appraisal (at Step 3A with the CAA review at Step 3B and the subsequent 'Consult' gateway)
 - 'Final' appraisal (at Step 4A, with the CAA review after the formal submission of the airspace change proposal at the end of Stage 4).
- E9. This builds the evidence base as the proposal matures, so for example the Final options appraisal contains the Initial and Full appraisals. It is therefore a proportionate approach because it avoids the need for expensive detail on every potential design option. It is also more informative, by ensuring that the detail matures in line with the proposal, and that a reasonable evidence base is made available to all stakeholders early on and increasingly throughout the process.

Initial appraisal

- E10. The Initial appraisal is based around a qualitative assessment. The Initial appraisal sets out how the change sponsor moves from its Statement of Need to a shortlist of options. The Initial appraisal should contain the following, as a minimum:
- a longlist of options. This should include the 'do nothing/minimum' option which will act as the base case for the analysis. The base case should be fully described to set the baseline for the analysis. The longlist of options should also include:
 - a description of the change proposal
 - an indicator of the likely noise impacts
 - a high-level assessment of other costs and benefits involved

44. https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/220541/green_book_complete.pdf

45. <https://www.gov.uk/guidance/transport-analysis-guidance-webtag>

Appendix E

Options appraisal

- criteria for assessing the longlist of options, and the application of those criteria to the longlist to develop the shortlist of options
 - shortlist options described qualitatively and an indication of the preferred option
 - what evidence the change sponsor will collect, and how, to fill in its evidence gaps and to develop the Full appraisal.
- E11.** The list above forms a minimum requirement. The change sponsor is encouraged to develop its shortlist options using as much analysis as reasonably possible, prior to submitting the appraisal to the CAA and prior to engaging with stakeholders. The fuller the assessment at the Initial stage, the greater the benefit to be gained from engagement.
- each shortlist option fully developed, including the 'do nothing/minimum' option, in particular:
 - all reasonable costs and benefits quantified
 - all other costs and benefits described qualitatively
 - reasons why costs and benefits have not been quantified
 - detail on the preferred option, setting out reasons for the preference.

Final appraisal

E13. The Final appraisal will consist of the Full appraisal with any refinements or changes made as a result of the Stage 3 formal consultation with stakeholders.

Summary

E14. Table E1 below summarises what should be included in each phase of the options appraisal.

Full appraisal

E12. For the Full appraisal, we expect the Initial appraisal to be developed into a more detailed quantitative assessment, moving from qualitatively defined shortlist options to the selection of the preferred option. The Full appraisal should include:

Table E1: What to include in each phase of the options appraisal

	Initial	Full	Final
High-level objective and design principles	✓	✓	✓
Longlist of options	✓	✓	✓
Qualitative assessment of longlist	✓	✓	✓
Shortlist options	✓	✓	✓
Qualitative assessment of shortlist	✓	✓	✓
Full analysis of shortlist options		✓	✓
Preferred option		✓	✓
Modifications following consultation			✓
Proposed option			✓

Appendix E

Options appraisal

A longlist of options

E15. Step 2A requires the change sponsor to develop a first longlist of options for delivering the high-level objective set out in the Statement of Need (see [Appendix A](#)). This may include solutions that are not about changing the airspace. The change sponsor should test the range of options with the stakeholders it engaged with in Stage 1.

E16. [Appendix C](#) discusses the level of engagement needed at this point. The change sponsor may consider engaging aviation stakeholders and groups representing local communities to ensure that the feedback that they provided during the development of the design principles has been accurately captured and taken account of.

E17. As part of developing options, the change sponsor should try to:

- look at other examples where a similar issue has been addressed
- identify the full range of interventions available
- develop and consider radical options – these options may not become part of the formal appraisal, but may help to test the parameters for feasible solutions.

Refining options to shortlist

E18. Having developed a longlist of options, these then need to be narrowed down.

E19. The change sponsor should develop a clear list of criteria from its design principles in Stage 1 (see [Appendix D](#)) and apply these to the longlist. The criteria should not be made overly restrictive, as to do so may remove a potentially suitable solution at too early a stage.

E20. The refining of options using the criteria is likely to be a high-level exercise without the need for significant detail. But it should still set out clearly why options have been discounted. The change sponsor then produces a design principle evaluation that sets out how its design options have responded to the design principles.

Setting the base case: doing nothing is not always an option

E21. It is important that a change sponsor sets out the base case for the appraisal. This should be the 'do nothing' option unless doing nothing is not an option, in which case removal of the 'do nothing' option should be justified. For example, airspace may need to be changed to reflect the UK's international obligations. In this case, the change sponsor should set out its informed view of the future and the minimum changes required to address the issues identified – a 'do minimum' case.

E22. The base case should be considered in relation to its context, which may be changing. For example, if the change sponsor is aware that a housing development or other such project has been given the go-ahead, this should be factored into the base case as a potential increase in households affected by noise and pollution.

Appendix E

Options appraisal

Proportionality

E23. As noted earlier, it is not always possible or proportionate to quantify costs and benefits. The frameworks set out in this guidance, the Green Book and WebTAG are designed to be applied flexibly to match the circumstances of the proposal. We expect sponsors to carry out a comprehensive appraisal of the options. However, a Full appraisal for an airspace change that affects all movements in a dense area of airspace with multiple routes and airports is likely to require significantly more detailed analysis than, for example, moving an approach at an airport further away from densely populated areas. In some cases, a qualitative assessment may be all that is required, for example a proposed change to airspace over the sea with no consequential impacts on populated areas.

E24. We cannot provide precise detail on the level of analysis required as this will depend on local factors and the specifics of the particular airspace change. However, when considering the level of detail required, sponsors should include the following:

- the history of airspace change in the area
- whether the change is likely to involve a wide range of stakeholders with conflicting requirements
- the extent of the change in terms of both airspace users affected and those likely to be affected on the ground
- whether the proposal affects more than one airport
- whether there may be other forthcoming changes in the same area.

E25. We consider that, as a rule of thumb, more detailed analysis should be provided where the proposal is likely to affect more stakeholders and/or affect more than one airport. We will be able to provide more guidance when the change sponsor is carrying out the Initial appraisal.

E26. Proportionality should not be used as an excuse to avoid undertaking reasonably achievable quantitative analysis, for example where quantitative estimates are readily available such as from the WebTAG data book or other published sources. We expect the change sponsor to set out why it has not undertaken specific quantitative analysis as part of its assessment. The CAA may ask the change sponsor to carry out quantitative analysis if we decide that its rationale is not sufficiently compelling.

E27. In the absence of quantitative analysis, sponsors should make a qualitative assessment of the specific cost or benefit.

E28. In addition to general proportionality considerations, there are hard thresholds that determine cases where we would not expect to see certain types of analysis. In particular, for changes to airspace at 7,000 feet or above we change the requirement for noise assessment.

Valuing costs and benefits

E29. The change sponsor will need to value all relevant costs and benefits of the airspace change. The net benefit or cost can then be calculated and compared across the varying options. If necessary, change sponsors should take a pragmatic approach to valuing the various costs and benefits. In some cases this may mean the use of ranges rather than precise figures.

Appendix E

Options appraisal

E30. At the Initial appraisal a detailed qualitative description of the particular costs and benefits should be provided. As the change sponsor progresses through the consultation, a greater degree of quantification will be required.

E31. Market prices provide the best estimate of the cost or benefit (for example, the cost of jet fuel can be observed on petroleum markets). However, a number of the costs or benefits in an options appraisal will be wider social and environmental costs, for which there may not be market prices. In such cases, the change sponsor should look for another means to quantify them. There are a number of approaches that can be taken. A key source of values of costs and benefits is published studies, but there may be a need to carry out specific analysis or at least to understand the approach taken in studies used to ensure that they are robust and reliable. Approaches to evaluation are discussed in paragraphs 5.14 to 5.31 of the Green Book.

E32. When evaluating costs and benefits, a change sponsor should assess them incrementally. In other words, a change sponsor should assess the additional benefit or cost of the change, not the absolute benefit or cost of the change. For example, if an airspace change were to reduce the noise over 20 per cent of homes in a particular area with no effect on the remaining 80 per cent, the change sponsor should value the benefit to the 20 per cent not the cost to the 80 per cent of pre-existing noise. A worked assessment is set out at the end of this Appendix.

E33. Table E2 contains a list of potential costs/benefits that may arise in the assessment of airspace change. This list is by no means exhaustive and sponsors should endeavour to understand all of the potential cost and benefits that may be relevant for their specific change proposal. Safety assessments are received as part of the options appraisal process, but these are not included in the table below; more information as to how the CAA reviews safety appears at the end of this Appendix.

Appendix E

Options appraisal

Table E2: Guide to expected approach to key analysis for a typical airspace change

Group	Impact	Level of analysis	Description
Communities	Noise impact on health and quality of life	Monetise and quantify	<p>Appendix B sets out detailed guidance on the assessment of noise, carbon, air quality and other environmental impacts. The costs and benefits derived from this analysis should be imported into the options appraisal</p> <p>Additionally WebTAG A.3 can be utilised for the WebTAG noise tool and reporting non-monetised noise metrics i.e. overflights, as well as guiding the qualitative assessment. Greater detail is set out in Appendix B</p> <p>Change sponsors should also be mindful of the Government's guidance on compensation for increased noise exposure as a result of changes (to both airspace and infrastructure). When assessing the impacts of different options, the requirement for financial assistance towards insulation where residents are newly exposed to noise at the 63dB L_{Aeq} level or above, and compensation to be considered where they experience significantly increased overflight, should be factored into assessments, as this may influence which option sponsors choose to develop</p>
Communities	Air quality	Qualitative	We recognise that air quality can be difficult to monetise without extensive modelling. It is possible to assess qualitatively whether change occurs in air quality. However, we may expect more quantification for larger proposals where air quality is a key concern. Additional guidance can be found in WebTAG A3
Wider society	Greenhouse gas impact	Monetise and quantify	Assessment of greenhouse gas is set out in WebTAG A3. There is also a WebTAG greenhouse gas tool which can be used to quantify CO ₂ emissions and obtain a monetised value

Appendix E

Options appraisal

Table E2: Guide to expected approach to key analysis for a typical airspace change (continued)

Group	Impact	Level of analysis	Description
Wider society	Capacity / resilience	Qualitative	Sponsors should qualitatively assess the effect of the proposal on the overall UK airspace infrastructure Sponsors are encouraged to discuss potential quantitative methodologies with the CAA
General Aviation	Access	Qualitative	Sponsors should qualitatively assess the effect of the proposal on the access to airspace for General Aviation Sponsors are encouraged to discuss potential quantitative methodologies with the CAA
General Aviation / commercial airlines	Economic impact from increased effective capacity	Quantify	Forecast increase in air transport movements and estimated passenger numbers or cargo tonnage carried Discuss methodology with the CAA
General Aviation / commercial airlines	Fuel burn	Monetise and quantify	Fuel costs and the relative efficiency of aircraft are readily obtainable from market data. The change sponsor should seek to quantify and monetise these costs based on its assumptions of the fleets in operation Discuss methodology with the CAA
Commercial airlines	Training costs	Monetise and quantify	Where a proposal would lead to a need for retraining, this should be quantified and where possible monetised Discuss methodology with the CAA
Commercial airlines	Other costs	Qualitative	Where there are likely to be other costs imposed on commercial aviation, these should be described. Where these costs are quantifiable, an assessment should be made

Appendix E

Options appraisal

Table E2: Guide to expected approach to key analysis for a typical airspace change (continued)

Group	Impact	Level of analysis	Description
Airport / Air navigation service provider	Infrastructure costs	Monetise and quantify	Where the proposal requires a change in the infrastructure, this should be monetised Discuss methodology with the CAA
Airport / Air navigation service provider	Operational costs	Monetise and quantify	Where a proposal will lead to changes in operational costs, these should be monetised Discuss methodology with the CAA
Airport / Air navigation service provider	Deployment costs	Monetise and quantify	Where a proposal would lead to a need for retraining and other deployment, this should be quantified and where possible monetised Discuss methodology with the CAA

Note: The table excludes safety assessments received as part of the options appraisal process

E34. The change sponsor should discuss its approach to valuing costs and benefits with the CAA. In particular, in considering proportionality, the change sponsor should discuss what it does not plan to quantify as part of its assessment.

Timescales

E35. Airspace change is generally concerned with procedures and practices rather than significant investment in assets. Airspace changes are therefore expected to happen on a more regular basis than investment decisions. It is important therefore that the timeframe over which the assessment is made is appropriate. We consider that proposals should be assessed over a 10-year period, unless there is justification for an assessment over a longer time period.

Real prices and discounting

E36. The values derived for the costs and benefits set out above should be expressed in 'real' rather than 'nominal' terms. When we state 'real' terms we mean prices for which the effect of inflation has been stripped out.

E37. We therefore expect the change sponsor to put all values into real prices. Values will then be reported in the 'base' year for the assessment. The 'base' year for the assessment is the year in which the general price level has been chosen. Generally speaking this will either be the year in which the appraisal is taking place or the prior year.

E38. A detailed discussion on real prices can be found in paragraphs 5.42 to 5.47 of the Green Book and section 2.6 of WebTAG A1.1.

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Options appraisal

E39. As well as taking account of inflation in real prices, the change sponsor needs to be aware of people's time preference and discount the values appropriately. In a private transaction, such as an airline leasing or purchasing aircraft, the discount rate would be equal to the organisation's own time-preference rate. Generally speaking, this is an organisation's cost of capital, or it may be some other hurdle rate that the organisation sets for investment. However, an airspace change is not a wholly private transaction; although it does entail private investment, there are significant externalities (i.e. noise and health impacts) associated with the change that impact on those who do not necessarily benefit from it. The change decision is also a public authority decision by the CAA, and the CAA is required to have regard to wider issues than those that a private organisation would take into account. Therefore for the purposes of the airspace change process it is appropriate to use a **social time preference rate**⁴⁶, a rate which is reflective of the time preference of society at large and not any individual or enterprise.

E40. The Government currently calculates the social time preference rate for the UK at 3.5 per cent. It is this rate that should be used for discounting for an airspace change proposal. Further discussion can be found in paragraphs 5.48 to 5.53 of the Green Book and section 2.7 of WebTAG A1.1.

A worked cost-benefit example

E41. In the example below (see Table E3), an airport is considering an airspace change to allow for a more flexible runway approach service. Its current approach goes over a village, and it faces planning restrictions on movements as a result, because of ongoing noise impacts. The airport is aware that the village is due to expand, with a large new development opening in three to four years' time. This is likely to increase the number of people exposed to noise, but both the airport and airlines could benefit from more air traffic.

- **Base case:** It is estimated that net impact on noise in the village equates to £500,000. Given the size of the new village development, this is likely to increase by a further £250,000 in negative effects to the population. The airport and airline will benefit by £150,000 because of increases in air traffic, but are limited by the airport's capacity.
- **Alternative:** The airport has shortlisted one alternative approach. This will require investment from the airport of £1m in upgrading its systems and retraining of staff. But it will increase capacity and within a couple of years significantly reduce the noise impact on the local community, even bringing benefits of around £200,000 in later years. The change will also allow significant expansion of the airport and airline services.

46. Social Time Preference Rate is discussed in more detail in Annex 6 of the Green Book.

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Options appraisal

Table E3: A worked cost-benefit example

Year	0	1	2	3	4	5	NPV
Discount factor	1	0.966	0.934	0.902	0.871	0.842	
Base case							
Net community benefit	-0.5	-0.5	-0.5	-0.75	-0.75	-0.75	
Net airspace users benefit	0	0	0	0.1	0.1	0.1	
Net sponsor benefit	0	0	0	0.05	0.05	0.05	
Present value	-0.50	-0.48	-0.47	-0.54	-0.52	-0.51	-3.02
Alternative							
Net community benefit	-0.5	-0.2	0	0.2	0.2	0.2	
Net airspace users benefit	0	0.1	0.1	0.2	0.3	0.4	
Net sponsor benefit	-1	0.05	0.05	0.1	0.15	0.2	
Present value	-1.50	-0.05	0.14	0.45	0.57	0.67	0.28

Safety assessment in the airspace change process

E42. Each airspace change proposal will need a safety assessment, completed by the change sponsor and reviewed by the CAA at each stage in the airspace change process that an options appraisal takes place. This safety assessment will:

- describe the scope of the proposed airspace change
- identify new and changing hazards
- identify and quantify risks arising from those hazards
- set mitigations for those risks.

E43. The CAA has published separate guidance (CAP 760) about the safety assessment.⁴⁷

E44. At each stage in the airspace change process that an options appraisal takes place, the change sponsor will be required to submit a safety assessment. As with other evidence required for the options appraisal, we expect the detail of the safety assessment to increase further along in the process, as the number of options reduces. The CAA will review the safety assessment as part of its decision-making, in accordance with Government policy and legislation – noting that Section 70 of the Transport Act 2000 states that the CAA must “maintain a high standard of safety”.

47. 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 www.caa.co.uk/cap760.

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Options appraisal

E45. The change sponsor will be required to provide a plain English summary of the safety assessment and the CAA will provide a plain English summary of its review (i.e. a summary of the Letter of Acceptance, which forms the CAA's review of the safety assessment) when it makes a decision. These summaries will be published on the online portal as part of the associated options appraisal material. The purpose of a summary is not to limit the information made available, but to ensure that it is clear and comprehensible. When the airspace change is likely to have a detrimental effect on a significant number of stakeholders (such as General Aviation or local communities), those stakeholders have a reasonable expectation that the change sponsor has demonstrated that it has properly considered the potential safety impacts of its proposal.

Safety assessment for the Initial options appraisal

E46. A safety assessment will need to be included in the Initial options appraisal at Stage 2 ('Develop and assess' gateway).

E47. If there is only one option put forward at this stage, on the basis that "it is the only safe option", the CAA will review the safety assessment to determine whether we agree that is the only potential option, on the grounds of safety. If we agree, the Initial appraisal may go forward with only one option. If we disagree, the change sponsor will not pass the gateway and will have to revisit its options development, i.e. Step 2a. The CAA will publish this determination on the online portal at this point.

E48. If there are two or more options, the CAA will not conduct a review of the safety assessment carried out by the change sponsor at this stage.

E49. The CAA would expect the assessment to include qualitative statements on the potential impact of each option on safety. An example might be that by reducing the complexity of airspace, the proposal is anticipated to reduce the number of controller interactions, which will impact positively on safety. We do not expect those qualitative statements to compare the safety of one option against another.

Safety assessment for the Full options appraisal

E50. A safety assessment will need to be included in the Initial options appraisal at Stage 3 ('Consult' gateway). The requirements for the Full options appraisal follow the same pattern as for the Initial options appraisal. If, by this stage, only one option remains because of safety reasons, the CAA will carry out a review of the change sponsor's safety assessment. If we disagree with the change sponsor's assessment, it will have to revisit its Full options appraisal. The CAA will publish this determination on the online portal at this point.

Safety assessment for the Final options appraisal

E51. A safety assessment will need to be included in the Initial options appraisal at Step 4B of Stage 4 (Submit proposal to CAA). At Step 4B, the change sponsor will deliver its finalised safety assessment along with the other finalised documents necessary to support the formal airspace change proposal to the CAA. The change sponsor must publish a summary version of the safety assessment and a summary of the quantitative data on the online portal. The CAA will review this as part of its assessment at Stage 5.

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Options appraisal

How the CAA will review the options appraisal

E52. The CAA will not be the owner of the options appraisal. It is a tool for the change sponsor to use in demonstrating the need for the proposed airspace change. The CAA's role in the option appraisal is threefold:

- to check that the change sponsor has undertaken a formal process of options appraisal, that there has been no bias in the process, and that the change sponsor considered all relevant options
- to undertake some validation of the change sponsor's options appraisal. As part of this the CAA will not review each individual piece of analysis undertaken by the change sponsor. However, the CAA may review the change sponsor's methodologies and

input data to ensure that they are robust and based on the best available source. The CAA may also re-run the change sponsor's analysis to check whether it achieves the same result

- the CAA may provide additional guidance to the change sponsor as it seeks to move from Initial appraisal to a Full appraisal.

E53. As such the change sponsor needs to provide the CAA with all of its supporting data in a machine-readable format to enable the CAA to validate its analysis.

E54. The CAA will provide feedback to the change sponsor on its options appraisal either by meeting or via correspondence. The CAA will publish an assessment of each phase of the change sponsor's options appraisal as indicated at the beginning of this Appendix.

Standardised format for this activity

Design principle evaluation

Sponsors should use this proforma to summarise the result of its longlist options. A report should be set out for each longlist option. The proforma should be expanded as necessary to take account of each of the change sponsors design principles. A summary of the analysis should be provided with a high level assessment of whether the design principle is not met, partially met or fully met.

Design principle evaluation		OPTION NO:	
<i>Option Name</i>		ACCEPT / REJECT	
<i>Description of option</i>			
Design principle:	NOT MET	PARTIAL	MET
<i>Summary of qualitative assessment</i>			
<i>[Repeat for each design principle]</i>			

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When to undertake this activity		
Stage 1: Define	1A: Assess requirement	X
	1B: Design principles	X
Define gateway		
Stage 2: Develop and assess	2A: Options development	X
	2B: Options appraisal	X
Develop and Assess gateway		
Stage 3: Consult	3A: Consultation preparation	X
	3B: Consultation approval	X
Consult gateway		
	3C: Commence consultation	X
	3D: Collate and review responses	X
Stage 4: Update and submit	4A: Update design	X
	4B: Submit proposal to CAA	✓
Stage 5: Decide	5A: CAA assessment	X
	5B: CAA decision	X
Decide gateway		
Stage 6: Implement		X
Stage 7: Post-implementation review		X

What does this activity entail?

The change sponsor's final submission of its airspace change proposal to the CAA for approval – the last step before the CAA assesses the proposal and makes its decision.

The text in this Appendix refers to the policy proposals and draft guidance on which the Department for Transport is currently consulting ([click here for details](#)). Should Government Directions, policy and guidance change after the consultation, this Appendix will be updated accordingly.

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Submission of a formal proposal

Why is this activity included in the process?

F1. At Step 4B of the airspace change process, the change sponsor prepares and submits the formal airspace change proposal to the CAA. In particular the change sponsor must structure its submission in accordance with a standard template, accepting the very varied nature of airspace change proposals. This makes it easier for anyone interested in

airspace change to see what is being proposed. As part of the formal submission the change sponsor must include its:

- safety assessment
- operational assessment
- environmental assessment
- consultation feedback report.

Key terms to check in our glossary

Advisory Route	Aeronautical information regulation and control (AIRAC) cycle	Air traffic service (ATS)
Air transport movement (ATM)	Airway	Conditional route
Control areas (CTA)	Control zones (CTR)	Controlled airspace (CAS)
Flexible use of airspace (FUA)	General Aviation traffic (GAT)	Holding patterns
ICAO standards and recommended practices (SARPs)	Instrument Flight Rules (IFR)	Non-directional beacon (NDB)
Operational air traffic (OAT)	Portal	P-RNAV (Area (precision) navigation)
Radiotelephony (R/T) coverage	RNAV (Area navigation)	Safety buffer
Secondary Surveillance Radar (SSR)	Single European Sky (SES)	Standard arrival route (STAR)
Standard instrument departure (SID)	Terminal manoeuvring area (TMA)	Visual Flight Rules (VFR)
VHF omni range/distance measuring equipment (VOR/DME)	World geodetic system coordinates (WGS84)	

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How to undertake this activity

Submission using the airspace change portal

- F2. The change sponsor must submit the formal proposal to the CAA using the DAP1916 form through the airspace change portal, where it will simultaneously be published and any progress will be recorded. The exception is material that is confidential in the interests of national security, or material which the CAA has agreed with the change sponsor 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). If the proposal contains any such sensitive information, then two versions are submitted – one full version for the CAA and one redacted version for publication. However, we do not anticipate agreeing to withhold large amounts of information and would only accept redaction of the minimum information necessary to comply with our obligations.
- F3. Under normal circumstances, and with the exception of such sensitive material, the formal proposal to the CAA should not contain material that has not been consulted upon. However, it is acceptable for the change sponsor to exclude unnecessary technical detail from consultation material that might compromise the clarity of the change sponsor's proposal providing a plain English summary of the relevant information has been made available. The CAA will accept technical material that has not been consulted upon provided that it makes no material change to the proposal or has any third-party impact.

Template

- F4. The change sponsor must use the CAA's template (shown at the end of this Appendix) in order to submit its formal airspace change proposal. The template can be downloaded from the CAA airspace change online portal. The template is structured into sections covering safety review, operational requirements, environmental impacts (from the options appraisal) and the stakeholder consultation response document.
- F5. Depending on the nature of the proposal, the details set out in the template may or may not be applicable. Where appropriate, the change sponsor will need to justify whether a specific requirement is not relevant in a particular case.

Redaction of confidential material

- F6. The formal proposal is submitted to the CAA by the change sponsor publishing it on the online portal. Consequently, the change sponsor should consider whether there is material in the proposal that might require redaction, although there remains a strong presumption of full disclosure and the change sponsor will be required to justify proposed redactions to the CAA before a CAA decision. Such material would include:
- commercial material that we have agreed with the change sponsor 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) and which, if published, would significantly compromise the change sponsor, such as contractual information and business relationships between sponsors and operators

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- personal details (names, contact numbers)
- sensitive information such as mandatory occurrence reports underpinning safety information, where publication is prohibited for legal reasons
- any information that might compromise ongoing legal proceedings
- material we have agreed should not be disclosed in the interests of national security.

Content of the formal proposal

F7. The formal proposal must adhere to the template using clearly defined headings, drawing from earlier stages and gateways in the process. Depending on the nature of the change, these headings may not all be required. The change sponsor should also be prepared to add to these headings if appropriate:

- Introduction
- Executive summary
- Current airspace description
- Statement of Need/justification
- Proposed airspace description
- Engagement and consultation overview
- Design principles
- Options development
- Analysis/impact of options
- Airspace description requirements
- Safety assessment
- Operational impact
- Supporting infrastructure/resources
- Airspace and infrastructure requirements

- Environmental requirements
- Appendices (draft Aeronautical Information Publication information, supporting evidence, consultation report, environmental analysis/ methodology and options appraisal, others as appropriate).

References and selected bibliography

- CAA, CAP 32, the UK Aeronautical Information Publication (which notifies some UK differences and variations from SARPs and PANS)
- CAA, CAP 493, Manual of Air Traffic Services – Part 1 (which reflects the UK application of PANS-ATM)
- CAA, CAP 670, ATS safety requirements
- CAA, CAP 724, the Airspace Charter
- CAA, 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
- CAA Paper 91010, Outline of the method for the determination of separation standards for future air traffic systems
- CAA, Safety Buffer Policy for Airspace Design Purposes Segregated Airspace
- HM Government **consultation principles** July 2012
- Department for Transport, Guidance to the Civil Aviation Authority on the environmental factors it should take into account when exercising its air navigation functions.
- Eurocontrol, ASM.ETI.ST08.5000-HBK-01-00, Airspace Management Handbook for the application of the Flexible Use of Airspace

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- Eurocontrol, Doc 94.70.08 EATCHIP, Report on Organisational Structures and Procedures Required for the Application of the Concept of the Flexible Use of Airspace
- Eurocontrol, NAV .ET1.ST10, Guidance Material for the Design of Terminal Procedures for Area Navigation
- ICAO Annex 2, Rules of the Air
- ICAO Annex 3, Meteorology
- ICAO Annex 4, Aeronautical Charts
- ICAO Annex 6, Operation of Aircraft
- ICAO Annex 10, Aeronautical Telecommunications
- ICAO Annex 11, Air Traffic Services
- ICAO Annex 15, Aeronautical Information Services
- ICAO Annex 16, Environmental Protection
- ICAO Doc 4444, PANS-ATM Procedures for Air Navigation Services – Air Traffic Management
- ICAO Doc 7030, Regional Supplements
- ICAO Doc 8168, PANS OPS Volumes 1 and 2 – Procedures for Air Navigation Services – Aircraft Operations
- ICAO Doc 9426, ATS Planning Manual
- ICAO Doc 9613, Manual on Required Navigation Performance (RNP)
- ICAO Doc 9689, Manual on Airspace Planning Methodology for Determination of Separation Minima
- Ministry of Defence, MAAs and MRPs (Military Regulation Publications)
- The Stationery Office, the Local Government Companion (2003 edition)
- The Stationery Office, Transport Act 2000.

Timescales

- F8.** The airspace change proposal must identify a preferred AIRAC⁴⁸ target implementation date and a reserve date (or dates). Actual implementation could take up to three months to complete. The precise timescale is dependent upon Aeronautical Information Publication cycles. It is, therefore, imperative that the change sponsor is realistic about the implementation and reserve dates. These must allow for the proper drafting and promulgation of documentation, including, where appropriate, Visual Flight Rules (VFR) chart changes. The reserve date is to allow enough time for the change sponsor and the CAA to give proper consideration to any further consultation on the change proposal that might become necessary. In most cases, promulgation would be not less than one AIRAC cycle prior to the effective date, although for major changes (for example those involving extensive new procedures, cross-border airspace, etc.), two AIRAC cycles would normally be necessary.
- F9.** Subject to the nature of the change, the change sponsor must include an implementation plan which addresses training and examination requirements in order to demonstrate sufficient numbers of suitably qualified staff are able to provide the appropriate levels of air traffic service. Sponsors can seek specialist advice on any such requirements from the CAA.

⁴⁸ Aeronautical Information Regulation and Control.

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Standardised format for this activity

Formal submission of an airspace change proposal

The standardised format for submission of the proposal consists of a number of headings requiring the change sponsor to provide a free-text description of the proposed change, followed by specific design requirements that demonstrate the change sponsor's regulatory compliance.

Title of airspace change proposal

Authorship & revision history

1. Contents

2. Introduction

3. Executive summary

The change sponsor should provide a concise summary of the activity that has led to and influenced the formal proposal, and outline any changes to the proposal resulting from feedback to the consultation. The executive summary should also include, where appropriate, the data required to satisfy the Secretary of State for Transport's criteria for 'call-in'.

4. Current airspace description

A free-text description of the current airspace design and operation including:

- 4.1 Structures and routes
- 4.2 Airspace usage and proposed effect
- 4.3 Operational efficiency, complexity, delays and choke points
- 4.4 Safety issues
- 4.5 Environmental issues

5. Statement of Need

A free-text description of the need for change and the change sponsor's justification for the change

6. Proposed airspace description

A free-text description of the proposed airspace design and operation including:

- 6.1 Objectives/requirements for proposed design
- 6.2 Proposed new airspace/route definition and usage

7. Impacts and consultation

A free-text summary of the engagement/consultation activity undertaken and the forecast impacts of the proposal:

- 7.1 Net impacts summary for proposed route
- 7.2 Units affected by the proposal
- 7.3 Military impact and consultation
- 7.4 General Aviation airspace users impact and consultation
- 7.5 Commercial air transport impact and consultation
- 7.6 CO₂ environmental analysis impact and consultation
- 7.7 Local environmental impacts and consultation
- 7.8 Economic impacts

8. Analysis of options

A free text summary of the options appraisal undertaken as part of the process: the options considered, the analysis of the options and why the preferred option was selected.

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9. Airspace description requirements

The change sponsor must complete the following proforma for a proposed airspace description.

	The proposal should provide a full description of the proposed change including the following:	Description for this proposal
a	The type of route or structure; for example, airway, UAR, Conditional Route, Advisory Route, CTR, SIDs/STARs, holding patterns, etc	
b	The hours of operation of the airspace and any seasonal variations	
c	Interaction with domestic and international en-route structures, TMAs or CTAs with an explanation of how connectivity is to be achieved. Connectivity to aerodromes not connected to CAS should be covered	
d	Airspace buffer requirements (if any)	
e	Supporting information on traffic data including statistics and forecasts for the various categories of aircraft movements (passenger, freight, test and training, aero club, other) and terminal passenger numbers	
f	Analysis of the impact of the traffic mix on complexity and workload of operations	
g	Evidence of relevant draft Letters of Agreement, including any arising out of consultation and/or airspace management requirements	
h	Evidence that the airspace design is compliant with ICAO Standards and Recommended Practices (SARPs) and any other UK policy or filed differences, and UK policy on the Flexible Use of Airspace (or evidence of mitigation where it is not)	
i	The proposed airspace classification with justification for that classification	
j	Demonstration of commitment to provide airspace users equitable access to the airspace as per the classification and where necessary indicate resources to be applied or a commitment to provide them in line with forecast traffic growth. 'Management by exclusion' would not be acceptable	
k	Details of and justification for any delegation of ATS	

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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.⁵³

11. Operational impact

The change sponsor must complete the following proforma to outline the operational impact:

	An analysis of the impact of the change on all airspace users, airfields and traffic levels must be provided, and include an outline concept of operations describing how operations within the new airspace will be managed. Specifically, consideration should be given to:	Evidence of compliance/proposed mitigation
a	Impact on IFR general air traffic and operational air traffic or on VFR General Aviation (GA) traffic flow in or through the area	
b	Impact on VFR operations (including VFR routes where applicable);	
c	Consequential effects on procedures and capacity, i.e. on SIDs, STARs, and/or holding patterns. Details of existing or planned routes and holds	
d	Impact on aerodromes and other specific activities within or adjacent to the proposed airspace	
e	Any flight planning restrictions and/or route requirements	

49. www.caa.co.uk/cap670

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12. Supporting infrastructure/resources

The change sponsor must complete the following proforma to outline the supporting infrastructure and resources:

	General requirements	Evidence of compliance/proposed mitigation
a	Evidence to support RNAV and conventional navigation as appropriate with details of planned availability and contingency procedures	
b	Evidence to support primary and secondary surveillance radar (SSR) with details of planned availability and contingency procedures	
c	Evidence of communications infrastructure including R/T coverage, with availability and contingency procedures	
d	The effects of failure of equipment, procedures and/or personnel with respect to the overall management of the airspace must be considered	
e	Effective responses to the failure modes that will enable the functions associated with airspace to be carried out including details of navigation aid coverage, unit personnel levels, separation standards and the design of the airspace in respect of existing international standards or guidance material	
f	A clear statement on SSR code assignment requirements	
g	Evidence of sufficient numbers of suitably qualified staff required to provide air traffic services following the implementation of a change	

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13. Airspace and infrastructure

The change sponsor must complete the following proforma to outline the requirements for airspace and infrastructure:

	General requirements	Evidence of compliance/ proposed mitigation
a	The airspace structure must be of sufficient dimensions with regard to expected aircraft navigation performance and manoeuvrability to fully contain horizontal and vertical flight activity in both radar and non-radar environments	
b	Where an additional airspace structure is required for radar control purposes, the dimensions shall be such that radar control manoeuvres can be contained within the structure, allowing a safety buffer. This safety buffer shall be in accordance with agreed parameters as set down in CAA policy statement 'Safety Buffer Policy for Airspace Design Purposes Segregated Airspace'	
c	The Air Traffic Management system must be adequate to ensure that prescribed separation can be maintained between aircraft within the airspace structure and safe management of interfaces with other airspace structures	
d	Air traffic control procedures are to ensure required separation between traffic inside a new airspace structure and traffic within existing adjacent or other new airspace structures	
e	Within the constraints of safety and efficiency, the airspace classification should permit access to as many classes of user as practicable	
f	There must be assurance, as far as practicable, against unauthorised incursions. This is usually done through the classification and promulgation	
g	Pilots shall be notified of any failure of navigational facilities and of any suitable alternative facilities available and the method of identifying failure and notification should be specified	

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	General requirements	Evidence of compliance/ proposed mitigation
h	The notification of the implementation of new airspace structures or withdrawal of redundant airspace structures shall be adequate to allow interested parties sufficient time to comply with user requirements. This is normally done through the AIRAC cycle	
i	There must be sufficient R/T coverage to support the Air Traffic Management system within the totality of proposed controlled airspace	
j	If the new structure lies close to another airspace structure or overlaps an associated airspace structure, the need for operating agreements shall be considered	
k	Should there be any other aviation activity (low flying, gliding, parachuting, microlight site, etc) in the vicinity of the new airspace structure and no suitable operating agreements or air traffic control procedures can be devised, the change sponsor shall act to resolve any conflicting interests	
	ATS route requirements	Evidence of compliance/ proposed mitigation
a	There must be sufficient accurate navigational guidance based on in-line VOR/DME or NDB or by approved RNAV derived sources, to contain the aircraft within the route to the published RNP value in accordance with ICAO/Eurocontrol standards	
b	Where ATS routes adjoin terminal airspace there shall be suitable link routes as necessary for the ATM task	
c	All new routes should be designed to accommodate P-RNAV navigational requirements	

Appendix F

Submission of a formal proposal

	Terminal airspace requirements	Evidence of compliance/ proposed mitigation
	There are no proposed changes to terminal airspace structures	
	Off Route airspace requirements	Evidence of compliance/ proposed mitigation
	There are no proposed changes to off-route airspace structures	

14. Environmental assessment

The change sponsor must complete an environmental assessment including the following details:

- all environmental assessment requirements must be consistent with the information presented throughout the engagement and consultation process; there should be no new assessment outputs presented in the final proposal that have not already been presented to stakeholders
- where impacts have been modified since consultation, a rationale for the revision must be presented by the change sponsor; the change sponsor should be aware that changes to environmental impacts after consultation has closed may mean that the CAA advises on the need for re-consultation
- for all proposals submitted to the CAA, the underlying data and assumptions for assessment outputs must be made available to the CAA; if this is in the form of separate assessment reports, these must be provided
- more information on the metrics and methodology for an environmental assessment is set out in **Appendix B** and the **environmental requirements technical annex**.

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14. Environmental assessment (continued)

The change sponsor must complete the following proforma:

	Theme	Content	Evidence of compliance/ proposed mitigation
a	WebTAG analysis	Output and conclusions of the analysis (if not already provided elsewhere in the proposal)	
b	Assessment of noise impacts (Level 1/M1 proposals only)	Consideration of noise impacts, and where appropriate the related qualitative and/or quantitative analysis If the change sponsor expects that there will be no noise impacts, the rationale must be explained	
c	Assessment of CO ₂ emissions	Consideration of the impacts on CO ₂ emissions, and where appropriate the related qualitative and/or quantitative analysis If the change sponsor expects that there will be no impact on CO ₂ emissions impacts, the rationale must be explained	
d	Assessment of local air quality (Level 1/M1 proposals only)	Consideration of the impacts on local air quality, and where appropriate the related qualitative and/or quantitative analysis If the change sponsor expects that there will be no impact on local air quality, the rationale must be explained	
e	Assessment of impacts upon tranquillity (Level 1/M1 proposals only)	Consideration of any impact upon tranquillity, notably on Areas of Outstanding Natural Beauty or National Parks, and where appropriate the related qualitative and/or quantitative analysis If the change sponsor expects that there will be no tranquillity impacts, the rationale must be explained	

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	Theme	Content	Evidence of compliance/ proposed mitigation
f	Operational diagrams	Any operational diagrams that have been used in the consultation to illustrate and aid understanding of environmental impacts must be provided	
g	Traffic forecasts	10-year traffic forecasts, from the anticipated date of implementation, must be provided (if not already provided elsewhere in the proposal)	
h	Summary of environmental impacts and conclusions	A summary of all of the environmental impacts detailed above plus the change sponsor's conclusions on those impacts	

Note: As explained in [Appendix B](#), the CAA must only take account of civil environmental impacts, meaning that noise, carbon and local air quality assessments will exclude impacts generated by military aircraft and operations.

15. Annexes

Formal airspace change submissions will include a number of annexes depending on the nature of the change. These may include, but are not limited to:

- proposed changes to the UK Aeronautical Information Publication required to implement the change
- supporting evidence such as traffic figures, economic data, trial and simulation data
- procedure design information
- safety case information
- details of any Letters of Agreement between the change sponsor and other stakeholders required to mitigate issues raised during the development of the proposal.

Appendix G

CAA decision criteria

When to undertake this activity		
Stage 1: Define	1A: Assess requirement	X
	1B: Design principles	X
Define gateway		
Stage 2: Develop and assess	2A: Options development	X
	2B: Options appraisal	X
Develop and Assess gateway		
Stage 3: Consult	3A: Consultation preparation	X
	3B: Consultation approval	X
Consult gateway		
	3C: Commence consultation	X
	3D: Collate and review responses	X
Stage 4: Update and submit	4A: Update design	X
	4B: Submit proposal to CAA	X
Stage 5: Decide	5A: CAA assessment	✓
	5B: CAA decision	✓
Decide gateway		
Stage 6: Implement		X
Stage 7: Post-implementation review		X

What does this activity entail?

The CAA reviews and assesses the airspace change proposal, and for Level 1 will hold a Public Evidence Session. The CAA may request supplementary information or clarifications to the proposal, which will be published on the online portal. The CAA prepares assessment papers to inform and provide guidance to the airspace change decision-maker.

The CAA decides whether to grant (possibly with conditions) or reject the airspace change proposal. For Level 1 proposals the CAA normally publishes a draft decision before reaching its final decision. Where the Secretary of State calls-in the proposal and is therefore the decision-maker, the CAA produces a 'minded to' decision for the Secretary of State.

The text in this Appendix refers to the policy proposals and draft guidance on which the Department for Transport is currently consulting ([click here for details](#)). Should Government Directions, policy and guidance change after the consultation, this Appendix will be updated accordingly.

Appendix G

CAA decision criteria

Why is this activity included in the process?

G1. As the UK's regulator of civil aviation, the CAA role in the airspace change process is ultimately to decide whether a change proposal should be approved or rejected. In order to fulfil that role, the CAA must take into consideration a wide range of legislative and regulatory requirements and guidance in reaching a balanced decision, as set out in the Directions and section 70 of the Transport Act 2000.

G2. At this stage in the process the CAA assesses the proposal in detail, producing reports on safety, operational, environmental and consultation activities and implications. The CAA considers all the information it has requested and received from the change sponsor during the process, and which must inform its decision in accordance with the legal and policy framework. If we have held a Public Evidence Session we will also take into account information we have received directly from other stakeholders. This stage is included so the CAA can undertake that detailed assessment, take further representations from stakeholders when deemed necessary, and make its thinking transparent when making a decision.

Key terms to check in our glossary

Call-in	CNS infrastructure	Controlled airspace (CAS)
Flexible use of airspace (FUA)	General Aviation traffic (GAT)	Instrument Flight Rules (IFR)
Operational air traffic (OAT)	Portal	Public Evidence Session
Section 70	Single European Sky (SES)	Sponsor
Standard arrival route (STAR)	Standard instrument departure (SID)	Visual Flight Rules (VFR)
VHF omni range/distance measuring equipment (VOR/DME)	World geodetic system coordinates (WGS84)	

Appendix G

CAA decision criteria

How we undertake this activity

Step 5A CAA assessment

- G3. During this step, the CAA assesses the airspace change proposal and all the documentation and evidence accompanying it. In all, four reports will be generated by the CAA:
- **safety review:** assessing whether the design proposed will maintain a high standard of safety
 - **operational assessment:** covering the operational/technical compliance of the proposal
 - **consultation/process assessment:** covering process compliance and consultation/engagement activity
 - **environmental assessment and statement:** assessing the environmental impact of the change.
- G4. The CAA will publish on the online portal the operational and consultation assessments, and the environmental assessment and statement. Templates for these reports are at the end of this Appendix. The CAA will publish on the online portal a summary of the safety review. The purpose of the summary is not to limit the information made available, but to ensure that it is clear and comprehensible. The four reports inform whether the proposal should be approved.

Technical queries or clarifications to the proposal

- G5. In some cases, the CAA will require additional information or clarification from the change sponsor in order to progress its assessment. This may lead to changes to the proposal itself which, if substantial, will require re-consultation. Where such activity does not result in a requirement for the change sponsor to undertake additional consultation, the following procedure will apply:
- the CAA writes to the change sponsor explaining the assessment and requesting supplementary information, or technical corrections or clarifications
 - if applicable, the change sponsor resubmits the proposal as 'version 2.0' (and so on, if further revisions are needed)
 - once resolved, the CAA's request and the change sponsor's resubmission or response (including any revised consultation and a log of correspondence leading to that revision) are published on the online portal together.

Public Evidence Session

- G6. For Level 1 proposals, there is the opportunity for a Public Evidence Session to be held. The Session is an opportunity for stakeholders to share with the CAA their view on the submitted proposal, which due to revision made after taking into account the consultation feedback, may differ from the proposal shared during the consultation stage.
- G7. For all Level 1 changes the CAA offers a Public Evidence Session. We will announce the date on the online portal and communicate this to stakeholders who responded to the consultation and gave permission to be contacted again. If no one books a slot to give evidence, the session will be cancelled.
- G8. The session is held in accordance with the principles set out in the description of Stage 5 in the main body of this document.

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CAA decision criteria

Step 5B CAA decision

G9. The CAA's general duties and material factors in the exercise of its air navigation functions are set out in section 70 of the Transport Act 2000. This section of the guidance concerns the CAA's role in making decisions on proposed airspace changes with the aim of:

- providing greater transparency and evidence of consistency in decision-making in line with better regulation principles
- defining how the CAA interprets its section 70 duties
- provide as much certainty as possible for stakeholders on how the CAA will consider the those factors and the decision we will reach
- show stakeholders (whether they be users of airspace or not) how the CAA expects to balance the statutory material factors where there is a conflict between them
- maintaining the CAA's ability to make the best decision in every circumstance.

Potential conflicts between the factors in section 70(2)

G10. During the assessment, the CAA will consider any conflicts that may arise as a result of the implementation of the proposed changes.

G11. Subject to maintaining a high level of safety, the CAA will approve an airspace change proposal that contributes positively to all the material factors in section 70(2) and where there is no conflict between those material factors.

G12. Where a particular proposed airspace change would contribute positively to some of the material factors, but negatively in respect of others, section 70(3) refers to this situation as a conflict. Section 70(3) then requires the CAA to apply those material factors in the manner it thinks is reasonable having regard to them as a whole.

Weighting implied by the language of CAA's duties in section 70(2)

G13. Once a proposal has been formally submitted, and the anticipated impacts analysed against the material factors, the CAA has a duty to take into account, the CAA will first assess whether there is a conflict between the factors in section 70(2). As its starting point, when considering a proposal, the CAA will give its duty to 'secure' something higher weight than its duty to 'satisfy' or 'facilitate'. (These are all terms used in the CAA's statutory duties in section 70(2). For example, the CAA would give the obligation to secure the most efficient use of airspace higher weight than the obligation to satisfy owners and operators of aircraft.

G14. The CAA regards the term 'to take account of' as meaning that the material factors in question may or may not be applicable in a particular case (for example, national security) and also that the range of ways they could affect our decision could be wide. This means that sometimes, a factor we must 'take account of' is prioritised over one we need to 'secure'.

G15. Not all of the material factors will be relevant in all airspace change proposals.

G16. Table G1 later in this Appendix sets out examples of beneficial characteristics of an airspace change proposal which could be used to demonstrate how the proposal impacts each material factor. The table also sets out examples of detrimental characteristics which, if they arise from the proposal, would likely indicate that the proposal has not contributed positively towards one of the material factors or has had a detrimental effect.

G17. The examples are not an exhaustive list, nor should they be taken as examples that will demonstrate a factor under every circumstance. However, it is expected that for most proposals that reflect these examples, they will be evidence that a change sponsor has considered the factor in question.

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CAA decision criteria

G18. The examples act as guidance for airspace change sponsors to help them gauge whether or not any of the material factors are in conflict (section 70(3) of the Transport Act 2000). If there is conflict between any material factors, this does not mean that the proposal automatically fails and is refused by the CAA. What it does mean is that the CAA will need to use its judgement to decide whether, despite there being a conflict between these factors, a balance can be struck relating to the weight of the factors and that the proposal should be approved.

G19. Where there is a conflict, and therefore section 70(3) applies, the CAA will use its discretion to determine the weight that each of the section 70(2) factors should be given. In such cases the CAA will be prepared to provide impartial advice to the change sponsor prior to the proposal being submitted formally about how this conflict could be minimised, including encouraging the change sponsor to engage as appropriate with affected stakeholders about how this might be achieved. Any such advice will be published.

G20. There may be good reasons why the CAA may need to resolve a conflict other than in accordance with the relevant weight indicated by the wording of section 70(2) (as explained above). Some examples are given below, but this list is not exhaustive:

- *Local circumstances* – such as where the CAA might make an airspace change that takes account of the noise of aviation over the ability to secure the most efficient use (i.e. where design principles, as described in Stage 2 of the process, mean an airspace design creates less efficient paths that avoid a population centre, where this is supported by the change sponsor and by local communities)

- *Interdependencies* – such as where the CAA might make an airspace change that reduces the efficient use of airspace or does not meet the requirements of operators and owners in order to meet an international obligation
- *Magnitude of the impact* – such as when the impact of an airspace change on a higher-weight objective is small, whereas the impact on a lower-weight objective is large
- *Complexity of the airspace* – such as when an airspace structure modified through the consultation process in an attempt to meet different user requirements may render it safe, but almost unusable by operators or owners of aircraft, or unworkable by air traffic control
- *Airspace not at full capacity* – such as when it is deemed that securing the efficient use of airspace is less important and it could be appropriate to increase the weight placed on other factors.

G21. Once the proposal is submitted formally for decision, the CAA will consider the rationale and evidence supporting the proposal against its statutory duties.

G22. Where the initial assessment was that the application of those material factors is in conflict, the CAA will judge the proposal according to the extent of that conflict, having regard to the factors as a whole. For example, a change sponsor may be able to demonstrate that a conflicting objective has a ‘minimal’, ‘acceptable’, ‘reasonable’, or ‘equitable’ impact despite being negative.

G23. For the avoidance of doubt, it should be noted that the obligation on the CAA in section 70(3) is not fulfilled by securing the most efficient use of airspace. That objective, in section 70(2) (a), is just one of the section 70(2) factors that the CAA must balance in making its decision.

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CAA decision criteria

The CAA's interpretation of section 70(2)(a) including "the most efficient use of airspace"

G24. This sub-paragraph requires the CAA "to exercise its air navigation functions in the manner it thinks best calculated to secure the most efficient use of airspace consistent with the safe operation of aircraft and the expeditious flow of air traffic."

G25. The CAA regards an efficient use of a scarce resource as one that makes the best use of it. In determining the best use of airspace, the CAA has identified the different elements that could make up an airspace change and its consequences, applying recognised principles of statutory interpretation. For example, because section 70(2)(a) explicitly refers to both the efficient use of airspace and the expeditious flow of aircraft, the latter cannot be viewed as a synonym for the former. Thus, while expeditious flow may contribute to the efficient use of airspace, and is therefore a consideration in determining efficient use of airspace, efficient use of airspace must mean something different. Similarly, the matters set out in sections 70(2)(b) to (g) cannot be viewed as characteristics of an efficient airspace change; they are different material factors and, applied singly, would yield different outcomes.

G26. The CAA uses the following overall definition of "the most efficient use of airspace": The most aircraft movements through a given volume of airspace over a period of time in order to make the best use of the limited resource of UK airspace from a whole system perspective.

G27. The CAA uses the following definition of "expeditious flow": The shortest amount of time that an aircraft spends from gate to gate, from the perspective of an individual aircraft, rather than the wider air traffic system.

G28. Thus the CAA would regard the increased efficiency of an individual flight, sometimes referred to as flight efficiency, as a factor in expeditious flow rather than an efficient use of airspace.⁵⁰

G29. The CAA may consider multiple factors in assessing a proposal against the duty of making the most efficient use of airspace. Those factors may also be relevant to the CAA's other section 70(2) duties. In general, the CAA will be guided by the factors that contribute to an efficient use of airspace shown in Table G2 on page 176, but not all will be relevant in a given airspace change proposal, and some may actually oppose each other.

G30. Section 70(2)(a) gives the CAA the duty to secure the most efficient use of airspace, but the most the CAA can currently achieve is an analysis of options presented by an airspace change sponsor as to which is the most efficient. To judge this, the CAA regards the appropriate metric as the number of aircraft through a given volume of airspace. While it is theoretically possible to attribute a value to different types of use of airspace, and/or to measure the efficient use of airspace in terms of the number of passengers, these metrics are not currently technically feasible. In assessing the efficient use of airspace, the CAA will therefore count each aircraft, whatever its size or purpose, as one.

⁵⁰ It is a standard feature of airspace management that the most expeditious flow for an individual aircraft is sacrificed in the interests of the most efficient use of airspace, i.e. aircraft do not fly their most direct route to their destination; they fly their most direct route permitted by air traffic control within an airspace structure designed to make the most efficient use of airspace, from a whole-system, all-aircraft, perspective.

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CAA decision criteria

The CAA's interpretation of section 70(2)(c)

G31. The CAA interprets “any person (other than an operator or owner of an aircraft)” as including airport operators, air navigation service providers, people or businesses on the ground who may be affected by aviation noise or other environmental impacts (although the environmental impact on all stakeholders is also considered separately), passengers on aircraft, owners of cargo being shipped by air, or anyone else affected by an airspace change proposal.

Beneficial and detrimental characteristics of airspace change in the context of the CAA's section 70(2) duties

G32. For every airspace change proposal submitted to the CAA, the change sponsor is required to demonstrate in both its stakeholder consultation and its submission to the CAA how it has considered each of the material factors in section 70(2) of the Transport Act 2000.

G33. Table G1 on the next page sets out examples of beneficial characteristics of an airspace change proposal which could be used to demonstrate how the proposal addresses each factor. The table also sets out examples of detrimental characteristics which, if they arise from the proposal, would likely indicate that the proposal has not contributed positively towards one of the material factors or has had a detrimental effect.

G34. The examples are not an exhaustive list, nor should they be taken as examples that will demonstrate a factor under every circumstance. However, it is expected that for most proposals that reflect these examples, there will be evidence that a change sponsor has considered the factor in question.

G35. The examples act as guidance for airspace change sponsors to help them gauge whether or not any of the factors are in conflict (see section 70(3) of the Transport Act 2000). If there is conflict between any factors, this does not mean that the proposal automatically fails and is refused by the CAA. What it does mean is that the CAA will need to use its judgement to decide whether, despite there being a conflict between factors, a balance can be struck and that the proposal should be approved.

G36. If it is apparent that a proposal will result in the application of the section 70(2) factors being in conflict, the CAA is obliged by section 70(3) to apply those objectives in the manner it thinks is reasonable having regard to them as a whole. In such cases the CAA will be prepared to provide impartial advice to the change sponsor prior to the proposal being submitted formally about how this conflict could be minimised, including encouraging the change sponsor to engage as appropriate with affected stakeholders about how this might be achieved.

G37. Once the proposal is submitted formally for decision, the CAA will consider the rationale and evidence supporting the proposal against its statutory duties. Where the initial assessment was that the application of those factors is in conflict, the CAA will judge the proposal according to the extent of that conflict, having regard to its duties as a whole. For example, a change sponsor may be able to demonstrate that a conflicting objective has a ‘minimal’, ‘acceptable’, ‘reasonable’, or ‘equitable’ impact, despite being negative.

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CAA decision criteria

Table G1: Examples of characteristics of an airspace change proposal

Transport Act 2000 section 70(2)	Examples of a beneficial characteristic for this objective	Examples of a detrimental characteristic for this objective
<p>“to secure the most efficient use of airspace”</p> <p><u>The efficient use of airspace is defined as:</u></p> <p>“The most aircraft movements through a given volume of airspace over a period of time in order to make best use of the limited resource of UK airspace from a whole system perspective.”</p>	<ul style="list-style-type: none"> • The volume of regulated airspace (meaning controlled and subject to a classification other than G) is appropriate (including any buffer) for operations intending to use the airspace but no bigger • Airspace classification is appropriate for operations intending to use the airspace but classification is no higher than necessary • High proportion of movements are sequenced • High proportion of movements take place alongside similar aircraft or aircraft with similar capability (Uniformity) • (Assuming high demand for use of a particular airspace) high proportion of movements are planned and/or follow pre-planned path (Predictability) • Low number of controller interactions • Least complex airspace design (one way of achieving this is systemised airspace, for example, performance-based navigation) appropriate for the intended utilisation • Airspace which is designed to be used flexibly, that is activated/deactivated and can be accessed when active if operations permit (Flexible Use of Airspace) • Appropriate surveillance capability for the intended use in accordance with national policy • Minimise the occurrence of ‘choke-points’ 	<ul style="list-style-type: none"> • A proposal that reduces the total number of aircraft movements • Existence of obsolete or unused procedures and/or profiles • Inappropriate airspace classification that results in a reduction in the total number of aircraft in an airspace, for example because the airspace is classified as X when all the other factors in fact only require Y • A greater need for tactical interventions • A high number of controller interactions

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CAA decision criteria

Table G1: Examples of characteristics of an airspace change proposal (continued)

Transport Act 2000 section 70(2)	Examples of a beneficial characteristic for this objective	Examples of a detrimental characteristic for this objective
<p>“the expeditious flow of air traffic”</p> <p>Proposed definition: “The shortest amount of time that an aircraft spends from gate to gate, from the perspective of an individual aircraft, rather than the wider air traffic system”.</p>	<ul style="list-style-type: none"> • Enabling optimum routes (vertical and/or horizontal) • Enabling 3D/4D operations (for example, free routing) • Short or no delays (airborne holding or on the ground) 	<ul style="list-style-type: none"> • A proposal that increases gate-to-gate times • Creating sub-optimal routes, for example, longer track miles, stepped climbs/descents
<p>“to satisfy the requirements of operators and owners of all classes of aircraft”</p>	<ul style="list-style-type: none"> • Satisfy the requirements of all operators • Minimum financial cost to operators using airspace (i.e. minimum cost of capability/equipment) (Equipage) • Enabling 3D/4D operations (for example, free routing) • Only establish the least restrictive airspace structure • Enable the most fuel efficient routes to be flown thereby reducing the cost of fuel for operators 	<ul style="list-style-type: none"> • Failing to satisfy the requirements of all operators • Restricting access for some operators • Increasing costs to aircraft operators for access to airspace

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CAA decision criteria

Table G1: Examples of characteristics of an airspace change proposal (continued)

Transport Act 2000 section 70(2)	Examples of a beneficial characteristic for this objective	Examples of a detrimental characteristic for this objective
<p>“to take account of the interests of any person (other than an operator or owner of an aircraft) in relation to the use of any particular airspace or the use of airspace generally”</p>	<ul style="list-style-type: none"> • No increase or a reduction in third-party safety risk • No reduction or an improvement in third-party impact • Meets known requirements of interested parties, for example Air Navigation Service Providers, airports, Government (local and national), Non-Governmental Organisations, residents, general public • No negative impact on other commercial interests 	<ul style="list-style-type: none"> • Increase in third-party safety risk • A potential reduction in competition in a particular market – for example, between competing airports or operators • Consequences that run counter to Government policy or instruction • Increase in public annoyance due to overflights • Negative impact upon tranquillity or visual intrusion in Areas of Outstanding Natural Beauty or National Park • Negative impact upon biodiversity
<p>“to take account of any guidance on environmental objectives given to the CAA by the Secretary of State”</p>	<ul style="list-style-type: none"> • Demonstrating that the requirements and priorities of the Department for Transport’s Air Navigation Guidance have been met • Improvements to environmental impacts, or at least no reduction • Improvement or no impact on any environmental factors required by the CAA 	<ul style="list-style-type: none"> • Failing to demonstrate that the requirements of the Department for Transport’s Air Navigation Guidance have been met • Worsening of any environmental impacts • Negative impact on any environmental factors required by the CAA

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CAA decision criteria

Table G1: Examples of characteristics of an airspace change proposal (continued)

Transport Act 2000 section 70(2)	Examples of a beneficial characteristic for this objective	Examples of a detrimental characteristic for this objective
<p>“to facilitate the integrated operation of air traffic services provided by or on behalf of the armed forces of the Crown and other air traffic services”</p>	<ul style="list-style-type: none"> Facilitates Ministry of Defence access where required Maintenance of tactical freedom Use of common Communication, Navigation, Surveillance platforms negating technical non-compatibility Technical interoperability 	<ul style="list-style-type: none"> Increase in costs imposed on Ministry of Defence Inadequate access for Ministry of Defence Increased resource implications for military Lower Airspace Radar Services units
<p>“to take account of the interests of national security”</p>	<ul style="list-style-type: none"> A proposal that maintains or improves national security A proposal that improves the ability to react to national security needs 	<ul style="list-style-type: none"> A proposal that weakens national security Negative impact on tactical freedom/military training
<p>“to take account of any international obligations of the United Kingdom notified to the CAA by the Secretary of State”</p>	<ul style="list-style-type: none"> A proposal that directly achieves or enables progress towards such an obligation especially in relation to Functional Airspace Block/Single European Sky Air Traffic Management Research (SESAR) 	<ul style="list-style-type: none"> A proposal that means the UK fails to meet any such obligation, or that would delay meeting such an obligation

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CAA decision criteria

Table G2: Factors in assessing the most efficient use of airspace

Factors that the CAA <i>would</i> consider in assessing the efficient use of airspace	Factors that the CAA <i>would not</i> consider in assessing the efficient use of airspace	
	Factor	Comment
Volume of airspace	Efficiency of an individual flight	Any resulting benefits would be a factor in assessing the impact on, for example, the requirements of aircraft operators and owners
Classification of airspace	Reduced fuel burn	This is an outcome from the increased efficiency of an individual flight
Sequencing of movements	Access to or sharing of airspace	This would be a factor in assessing the impact on the requirements of aircraft operators and owners
Uniformity (aircraft or capability level)	Price paid by airspace users to the air navigation service provider for services received	En-route services are subject to separate economic regulation by the CAA
Predictability (high-demand airspace)		
Air traffic controller interactions		
Presence of choke points		
Complexity of airspace design		
Level of surveillance capability		
No obsolete procedures or profiles		
Flexible use of airspace		
Level of air traffic control service offered		

Appendix G

CAA decision criteria

Secretary of State's call-in function

G39. For strategic nationally important change proposals, for proposals with significant impacts on the UK economy, or for proposals with high (as defined) noise impact potential, the CAA may be notified at the decision stage that the Secretary of State has decided to call-in the proposal for the Secretary of State to make the decision rather than the CAA. Anyone can request that the Secretary of State calls-in an airspace decision within the first 28 days after the airspace change proposal has been submitted to the CAA on the online portal (Stage 4B). It is solely a matter for the Secretary of State whether he/she agrees to that request. The CAA's function in this process is then to issue to the Secretary of State a 'minded to' decision which contains the same information as a CAA decision (see below), with the objective of providing a CAA opinion on a proposal to the Secretary of State.

G40. The Secretary of State will then decide whether to call the change in. If the change is not called in, the CAA proceeds with the process.

G41. If the Secretary of State decides to call the proposal in, once they have reached their decision they will communicate that to the CAA who will take the necessary next steps in our process (Stage 6) to implement the decision.

'Draft decision' and final decision

G42. Before reaching a final decision on Level 1 proposals, the CAA will publish a draft decision for public review. The objective of doing this is to ensure that we have not missed, misunderstood, or misinterpreted any relevant matters. The draft decision:

- is not designed for stakeholders to make new representations
- should not be considered as a further opportunity to go back over material that the CAA has already considered and addressed.

G43. This part of the process aims to ensure that the final decision is as comprehensive, clear and robust as possible and can be demonstrated to have been reached fairly, with adequate opportunity for all interested parties to provide representations.

G44. The CAA will publish the draft decision on the online portal. Responses should be made using the portal⁵¹, subject to the following conditions:

- responses are limited to one per individual (verified by email address)
- written statements will be moderated by the CAA before publication to remove unacceptable material
- we cannot give any assurance that we will take into account any response received more than four weeks after the draft decision is published.

G45. It will be our normal policy to publish a draft decision on Level 1 proposals. However, we recognise that this adds more time to the process, and in certain circumstances the delay may be disproportionate to the benefit of publishing a draft decision. In such circumstances, when the CAA publishes its final decision we will clearly explain our reason for not publishing a draft decision.

G46. The CAA will give stakeholders 28 days to respond. We give no assurance that we will take account of comments received after that time. We will then allow a further 28 days for us to assess stakeholder comments.

⁵¹ The CAA will also accept postal responses for the time being. We will reconsider in the light of experience whether the offline response mechanism is still necessary when we conduct a review of the airspace change process three years after implementation, to judge whether the administrative burden of uploading, monitoring and analysing postal responses remains proportionate.

Appendix G

CAA decision criteria

Timescale

G47. Timescales will be clearly stated on the online portal.

G48. The CAA offers a key performance indicator for the time period for the decision at Stage 5, in the form of ‘best endeavours to make the decision within 16 weeks (for Level 1 changes) or 10 weeks (for Level 2 changes), subject to the change sponsor also meeting its time commitments’. This will be dependent on:

- the timeline provided by the change sponsor for the submission of the formal proposal at Step 4A, subject to our agreement
- the CAA and change sponsor adhering to those deadlines
- whether the change sponsor has fulfilled the requirements set out in this guidance
- whether the CAA holds a Public Evidence Session, in which case a further two weeks will be needed for the CAA assessment
- whether the CAA publishes a draft decision, in which case a further eight weeks will be needed for the CAA decision.

Appendix G

CAA decision criteria

Standardised format for this activity

The text in this section refers to the policy proposals and draft guidance on which the Department for Transport is currently consulting ([click here for details](#)). Should Government policy and guidance change after the consultation, this section will be updated to reflect the final policy and guidance.

List of proforma:

- A. Consultation/process assessment
- B. Operational assessment
- C. Environmental assessment and statement
- D. CAA decision templates
 - D1: Tier 1a (Levels 1 and 2)
 - D2: Tier 1b
 - D3: Tier 1c
 - D4: Tier 1a (Level 0)

Proforma A: Consultation/process assessment

Title of airspace change proposal	
Change sponsor	
Project no.	
SARG project leader	
<i>Case study commencement date</i>	
<i>Case study report as at</i>	
<p><i>Instructions</i></p> <p>In providing a response for each question, please ensure that the 'status' column is completed using the following options:</p> <p>• yes • no • partially • n/a</p> <p>To aid the SARG project leader's efficient project management it may be useful that each question is also highlighted accordingly to illustrate what is:</p> <p>resolved Green not resolved Amber not compliant Red</p>	
Executive Summary	

Backgrd Info	H: PIR
Stage 7	G: Decision
Stage 6	F: Submission
Stage 5	E: Options
Stage 4	D: Design
Stage 3	C: Consultation
Stage 2	B: Environment
Stage 1	A: S of Need
Tier 1	Tier 2/3
Tier categories	Glossary

Appendix G

CAA decision criteria

Proforma A: Consultation/process assessment

PART A – Summary of activity		
A.1	Stage 1 Steps 2A/2B (Define) – Engagement activity	
A.1.1		
Define gateway (<i>design principles accepted?</i>)		
A.2	Stage 2 Steps 2A/2B (Develop and Assess) – Engagement activity	
A.2.1		
Develop and assess gateway		
A.3	Stage 3 (Consult) Steps 3A/B	
A.3.2		
Consult gateway		
A.3.3	Stage 3 (Consult) Steps 3C/3D	
A.3.4		
A.4	Stage 4 Steps 4A/4B (Update and submit)	
A.4.1		
A.5	Stage 5 Steps 5A/5B (Decide)	
A.5.1		
PART B – Consultation/engagement assessment		
B.1	<p>Is the following information complete and satisfactory?</p> <ul style="list-style-type: none"> a copy of all correspondence sent by the change sponsor to stakeholders during consultation a copy of all correspondence received by the change sponsor from stakeholders during consultation a referenced tabular summary record of formal consultation/engagement actions details of and reasons for any changes to the original proposal as a result of the consultation. 	
B.2	Stage 1 Engagement activity	
	<ul style="list-style-type: none"> Coverage Accessibility Receptiveness Response Quality of material 	

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CAA decision criteria

Proforma A: Consultation/process assessment

B.3	Stage 3 Consultation activity		
	<ul style="list-style-type: none"> Was the consultation material clear and concise? Was the purpose of the consultation clearly articulated? Did the consultation include a sufficient amount of information? Were suitable methods of engagement used during the consultation period? Was the period of consultation proportionate to the proposed change? Did the consultation target the appropriate stakeholders? Were stakeholder needs/requirements taken into account during the consultation period? Has an appropriate level of scrutiny been applied to the consultation responses? Was the consultation feedback material published in a timely fashion? Did the sponsor correctly categorise consultation responses? What % of all operational consultees replied? (Include actual numbers). What % of all environmental consultees replied? (Include actual numbers). Were reasonable steps taken to ensure as much substantive feedback was obtained from the consultees, for example through follow-up letters/ phone calls? Have all objections to the change proposal been resolved (or sufficiently mitigated)? 		
B.4	Additional engagement activity		
B.5	Outstanding issues		
	Serial	Issue	Action required
B.6	Additional compliance requirements (to be satisfied by change sponsor)		
	Serial	Requirement	

Appendix G

CAA decision criteria

Proforma A: Consultation/process assessment

PART C – Recommendations			
C.1	Does the consultation/engagement activity and associated material meet CAA requirements?		
C.2	General summary		
C.3	Comments/observations		
PART D – Consultation/engagement assessment sign-off/approvals			
	Name	Signature	Date
Consultation assessment completed by (Airspace Regulator (Coordination))			
Consultation assessment approved by (Head Airspace Regulation)			
PART E – Group Director Safety and Airspace Regulation – comment/approval			
	Name	Signature	Date

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CAA decision criteria

Proforma B: CAA operational assessment

Title of airspace change proposal		
Change sponsor		
Project no.		
SARG project leader		
<i>Case study commencement date</i>		
<i>Case study report as at</i>		
<p><i>Instructions</i></p> <p>In providing a response for each question, please ensure that the 'status' column is completed using the following options:</p> <ul style="list-style-type: none"> • yes • no • partially • n/a <p>To aid the SARG project leader's efficient project management it may be useful that each question is also highlighted accordingly to illustrate what is:</p> <p>resolved Green not resolved Amber not compliant Red</p>		
Executive Summary		
1.	Justification for change and options analysis (operational/technical)	Status
1.1	Is the explanation of the proposed change clear and understood?	
1.2	Are the reasons for the change stated and acceptable?	
1.3	Have all appropriate alternative options been considered, including the 'do nothing' option?	

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CAA decision criteria

Proforma B: CAA operational assessment

1.4	Is the justification for the selection of the proposed option sound and acceptable?	
2.	Airspace description and operational arrangements	Status
2.1	Is the type of proposed airspace design clearly stated and understood?	
2.2	Are the hours of operation of the airspace and any seasonal variations stated and acceptable?	
2.3	Is any interaction with adjacent domestic and international airspace structures stated and acceptable including an explanation of how connectivity is to be achieved? Has the agreement of adjacent States been secured in respect of High Seas airspace changes?	
2.4	Is the supporting statistical evidence relevant and acceptable?	
2.5	Is the analysis of the impact of the traffic mix on complexity and workload of operations complete and satisfactory?	
2.6	Are any draft Letters of Agreement and/or Memoranda of Understanding included and, if so, do they contain the commitments to resolve ATS procedures (ATSD) and airspace management requirements?	

Appendix G

CAA decision criteria

Proforma B: CAA operational assessment

2.7	Should there be any other aviation activity (low flying, gliding, parachuting, microlight site etc) in the vicinity of the new airspace structure and no suitable operating agreements or ATC Procedures can be devised, what action has the change sponsor carried out to resolve any conflicting interests?	
2.8	Is the evidence that the airspace design is compliant with ICAO SARPs, airspace design & FUA regulations, and Eurocontrol guidance satisfactory?	
2.9	Is the proposed airspace classification stated and justification for that classification acceptable?	
2.10	Within the constraints of safety and efficiency, does the airspace classification permit access to as many classes of user as practicable?	
2.11	Is there assurance, as far as practicable, against unauthorised incursions? (This is usually done through the classification and promulgation.)	
2.12	Is there a commitment to allow access to all airspace users seeking a transit through controlled airspace as per the classification, or in the event of such a request being denied, a service around the affected area?	

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CAA decision criteria

Proforma B: CAA operational assessment

2.13	Are appropriate arrangements for transiting aircraft in place in accordance with stated commitments?	
2.14	Are any airspace user group's requirements not met?	
2.15	Is any delegation of ATS justified and acceptable? (If yes, refer to Delegated ATS Procedure).	
2.16	Is the airspace design of sufficient dimensions with regard to expected aircraft navigation performance and manoeuvrability to contain horizontal and vertical flight activity (including holding patterns) and associated protected areas in both radar and non-radar environments?	
2.17	Have all safety buffer requirements (or mitigation of these) been identified and described satisfactorily (to be in accordance with the agreed parameters or show acceptable mitigation)? (Refer to buffer policy letter.)	
2.18	Do ATC procedures ensure the maintenance of prescribed separation between traffic inside a new airspace structure and traffic within existing adjacent or other new airspace structures?	

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CAA decision criteria

Proforma B: CAA operational assessment

2.19	Is the airspace structure designed to ensure that adequate and appropriate terrain clearance can be readily applied within and adjacent to the proposed airspace?	
2.20	If the new structure lies close to another airspace structure or overlaps an associated airspace structure, have appropriate operating arrangements been agreed?	
2.21	Where terminal and en-route structures adjoin, is the effective integration of departure and arrival routes achieved?	
3.	Supporting resources and communications, navigation and surveillance (CNS) infrastructure	Status
3.1	Is the evidence of supporting CNS infrastructure together with availability and contingency procedures complete and acceptable? The following are to be satisfied:	
	<ul style="list-style-type: none"> Communication: Is the evidence of communications infrastructure including RT coverage together with availability and contingency procedures complete and acceptable? Has this frequency been agreed with AAA Infrastructure? 	
	<ul style="list-style-type: none"> Navigation: Is there sufficient accurate navigational guidance based on in-line VOR or NDB or by approved RNAV-derived sources, to contain the aircraft within the route to the published RNP value in accordance with ICAO/ Eurocontrol standards? For example, for nav aids, has coverage assessment been made, such as a DEMETER report, and if so, is it satisfactory? 	
	<ul style="list-style-type: none"> Surveillance: Radar provision – have radar diagrams been provided, and do they show that the ATS route/airspace structure can be supported? 	

Appendix G

CAA decision criteria

Proforma B: CAA operational assessment

3.2	Where appropriate, are there any indications of the resources to be applied, or a commitment to provide them, in line with current forecast traffic growth acceptable?	
4.	Maps/charts/diagrams	Status
4.1	Is a diagram of the proposed airspace included in the proposal, clearly showing the dimensions and WGS84 co-ordinates? (We would expect sponsors to include clear maps and diagrams of the proposed airspace structure(s) – they do not have to accord with aeronautical cartographical standards (see airspace change guidance), rather they should be clear and unambiguous and reflect precisely the narrative descriptions of the proposals.)	
4.2	Do the charts clearly indicate the proposed airspace change?	YES
4.3	Has the change sponsor identified AIP pages affected by the change proposal and provided a draft amendment?	
4.4	Has the change sponsor completed the WGS84 spreadsheet and submitted to the CAA for approval?	
5.	Operational impact	Status
5.1	Is the change sponsor's analysis of the impact of the change on all airspace users, airfields and traffic levels, and evidence of mitigation of the effects of the change on any of these, complete and satisfactory? Consideration should be given to:	

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CAA decision criteria

Proforma B: CAA operational assessment

	a) Impact on IFR General Aviation traffic, on Operational air traffic or on VFR General Aviation traffic flow in or through the area.	
	b) Impact on VFR Routes.	
	c) Consequential effects on procedures and capacity, i.e. on SIDs, STARs, holds. Details of existing or planned routes and holds.	
	d) Impact on airfields and other specific activities within or adjacent to the proposed airspace.	
	e) Any flight planning restrictions and/ or route requirements.	
5.2	Does the change sponsor consultation material reflect the likely operational impact of the change?	
Case study conclusions – to be completed by SARG project leader		Yes/No
	Has the change sponsor met the SARG airspace change proposal requirements and airspace regulatory requirements above?	

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CAA decision criteria

Proforma B: CAA operational assessment

Outstanding issues		
Serial	Issue	Action required
1		
2		
Additional compliance requirements including post-implementation review requirements (to be satisfied by change sponsor)		
Serial	Requirement	
1		
2		
Recommendations		Yes/No
Is the approval of the Ministry of Defence required in respect of national security issues surrounding the airspace change?		
General summary		
Comments and observations		

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CAA decision criteria

Proforma B: CAA operational assessment

Operational assessment sign-off/ approvals	Name	Signature	Date
Operational assessment completed by:	AR Case Officer		
Operational assessment approved:	Manager Airspace Regulation		
Manager Airspace Regulation comments:			
Head AAA comment/ approvals	Name	Signature	Date
Operational assessment conclusions approved:	Head AAA		
Head AAA Comments:			
Group Director Safety and Airspace Regulation Group (GD SARG) decision/approval	Name	Signature	Date
GD SARG decision:	GD SARG		
GD SARG comments:			

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CAA decision criteria

Proforma C Environmental assessment and statement

Title of airspace change proposal	
Change sponsor	
Project no.	
SARG project leader	
<i>Case study commencement date</i>	
<i>Case study report as at</i>	
<p><i>Instructions</i></p> <p>In providing a response for each question, please ensure that the 'status' column is completed using the following options:</p> <ul style="list-style-type: none"> • yes • no • partially • n/a <p>To aid the SARG project leader's efficient project management it may be useful that each question is also highlighted accordingly to illustrate what is:</p> <p>resolved Green not resolved Amber not compliant Red</p>	
1. Introduction	
	A brief summary of the proposed change, covering aspects such as key elements of the airspace design, sponsor, CAA scalability Level, any key documents used for this report, any links (contingent or otherwise) to other proposals etc.
2. Nature of the proposed change	Status
2.1	Is it clear how the proposed change will operate, and therefore what the likely environmental impacts will be?
3. Secretary of State call-in noise criterion	
Status	
3.1	Is the proposal likely to meet the Secretary of State's criterion for call-in on noise impacts? If yes, has the additional assessment on that criterion been undertaken and what are the results? If no, what is the rationale for that conclusion? The criterion, as set out in the Department for Transport's Air Navigation Guidance is that the proposed airspace change could lead to a change in noise distribution resulting in a 10,000 net increase in the number of people subjected to a noise level of at least 54 dB ⁵² <u>as well as</u> having an identified adverse impact on health and quality of life. ⁵³

52. 100% mode L_{Aeq 16h} noise exposure.

53. The assessment of the numbers of people affected and the associated adverse impacts on health and quality of life of the airspace change proposal should be carried out by the change sponsor in accordance with the requirements set out in the Department for Transport's guidance.

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CAA decision criteria

Proforma C Environmental assessment and statement

4. Statement of Need		Status
4.1	Does the Statement of Need include any environmental factors?	
5. Design principles		Status
5.1	Does the final set of design principles include any environmental factors?	
5.2	Does the proposal explain how and to what extent the final proposal achieves any environmental design principles?	
5.3	Were there any proposed environmental design principles that were rejected from the final set? If so, is the rationale for rejecting those principles reasonable?	
5.4	Were there any design options during the airspace change process that better met the environmental design principles than the final proposal as submitted to the CAA? If so, is the rationale for rejecting those options set out?	
6. Options appraisal		Status
6.1	Have environmental impacts been adequately reflected and assessed in the options appraisal? [Summarise the outputs of the environmental factors from the options appraisal.]	
6.2	Is the final proposal as submitted to the CAA the design option that also produced the best environmental impacts as assessed by the options appraisal? If not, does the rationale for selecting the preferred option adequately explain this choice?	
7. Noise [for Level 1 and Level M1 airspace change proposals]		Status
7.1	Has the noise impact been adequately assessed and presented in the consultation material and the final submission to the CAA, taking account of scalability and proportionality?	
7.2	If a noise assessment has not been undertaken by the change sponsor, has this decision been adequately explained in both the consultation material and the final submission to the CAA, and is the rationale reasonable?	
7.3	Summary of anticipated noise impacts from the final proposed airspace change.	
8. CO ₂ emissions		Status
8.1	Has the impact on CO ₂ emissions been adequately assessed and presented in the consultation material and the final submission to the CAA, taking account of scalability and proportionality?	

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CAA decision criteria

Proforma C Environmental assessment and statement

8.2	If an assessment of the impact on CO ₂ emissions has not been undertaken by the change sponsor, has this decision been adequately explained in both the consultation material and the final submission to the CAA, and is the rationale reasonable?	
8.3	Summary of anticipated impact on CO ₂ emissions from the final proposed airspace change.	
9.	Local air quality [for Level 1 and Level M1 airspace change proposals]	Status
9.1	Has the impact on local air quality been adequately assessed and presented in the consultation material and the final submission to the CAA, taking account of scalability and proportionality?	
9.2	If an assessment of the impact on local air quality has not been undertaken by the change sponsor, has this decision been adequately explained in both the consultation material and the final submission to the CAA, and is the rationale reasonable?	
9.3	Summary of anticipated impact on local air quality from the final proposed airspace change.	

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CAA decision criteria

Proforma C Environmental assessment and statement

10.	Tranquillity [for Level 1 and Level M1 airspace change proposals]	Status
10.1	With specific reference to Areas of Outstanding Natural Beauty and National Parks – has the impact on tranquillity been adequately considered and presented in the consultation material and the final submission to the CAA, taking account of scalability and proportionality?	
10.2	If consideration of the impact on tranquillity has not been undertaken by the change sponsor, has this decision been adequately explained in both the consultation material and the final submission to the CAA, and is the rationale reasonable?	
10.3	Summary of anticipated impact on tranquillity from the final proposed airspace change.	
11.	Biodiversity [for Level 1 and Level M1 airspace change proposals]	Status
11.1	Has the impact on biodiversity been adequately assessed and presented in the consultation material and the final submission to the CAA, taking account of scalability and proportionality?	
11.2	If assessment of the impact on biodiversity has not been undertaken by the change sponsor, has this decision been adequately explained in both the consultation material and the final submission to the CAA, and is the rationale reasonable?	

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CAA decision criteria

Proforma C Environmental assessment and statement

11.3	Summary of anticipated impact on biodiversity from the final proposed airspace change.	
12. Traffic forecasts		
		Status
12.1	Have traffic forecasts been provided, are they reasonable, and have these been used to reflect the anticipated environmental impacts of the proposal?	
13. Consultation		
		Status
13.1	Has the change sponsor taken account of any environmental factors (noise, CO ₂ emissions, local air quality, tranquillity or biodiversity) raised by consultees or has evidence been provided to indicate why this has not been possible?	
	Summarise key themes or issues raised and sponsor's response, particularly if it has resulted in a modification to the proposed airspace design.	
14. Public Evidence Session (if held)		
		Status
14.1	If a Public Evidence Session has been held, was any <u>new</u> evidence on potential environmental impacts presented?	
14.2	If so, was the new evidence relevant and material to the CAA's consideration of the environmental impacts of the submitted airspace change proposal?	

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CAA decision criteria

Proforma C Environmental assessment and statement

15. Compliance with policy and guidance from Government or the CAA		Status
15.1	Has the change sponsor satisfied all relevant policy and/or guidance from either Government or the CAA, with regard to environmental impacts of the proposed airspace change?	
	Notably, has the change sponsor complied with the Department for Transport's Air Navigation Guidance and the CAA's guidance on the airspace change process?	
16. Other aspects		Status
16.1	Are there any other aspects of the airspace change proposal that have not already been addressed in this report but that may have a bearing on the environmental impact?	
17. Recommendations		Status
17.1	Are there any recommendations for conditions or undertakings to be included with the CAA's decision?	
	Details of any recommended conditions or undertakings.	
17.2	Are there any recommendations for the post-implementation review requirements?	
	Details of any recommended requirements.	

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CAA decision criteria

Proforma C Environmental assessment and statement

Outstanding issues?		
Serial	Issue	Action required
1		
2		

Environmental assessment and statement sign-off and approval			
	Name	Signature	Date
Environmental assessment and statement completed by:	Principal Environment		
Environmental assessment and statement approved by:	Programme Head – Environment		
Programme Head – Environment comments:			

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CAA decision criteria

Proforma D1

CAA decision template

Tier 1a (Levels 1 and 2)

TITLE OF AIRSPACE CHANGE DECISION, CAP 1520

Template version date 9 February 2017

Contents

Executive summary

Objective of the proposal

1. This will briefly set out what the organisation proposing the change was seeking to achieve by its proposal and the changes to the airspace design that aimed to achieve it.

Summary of the decision made

2. Where applicable, this will contain a precise statement of the changes agreed, with reference to the means by which they were described by the change sponsor in the proposal submitted to the CAA at Step 4B.
3. If there are any conditions attached to a decision to approve a proposal, they will be set out here.
4. If the proposal was not approved, we will record that here.

Next steps

5. (if applicable) this will set out the planned date for implementation of the approved change, the planned start date of the post-implementation review and the data collection requirements placed on the change sponsor during the period of implementation.

Decision process and analysis

Chronology of proposal process

Statement of Need and assessment meeting (Stage 1, Step 1A)

6. A summary of the issue being addressed by the proposed change and its aims and objectives reflected in the Statement of Need. A reference to when the assessment meeting took place and the minutes produced after that meeting. A record of the CAA's assessment that a change to airspace design was an appropriate method of addressing the issue identified.

Process followed to arrive at the proposal's design principles (Stage 1, Step 1B)

7. A summary of the engagement carried out to arrive at the design principles and a statement of those principles.

'Define' gateway

8. A statement that the CAA accepted the process and approach used to develop the design principles, and why the CAA was satisfied that those principles were influenced by that engagement. A statement that accordingly the CAA permitted the proposal to proceed through the 'Define' gateway and when.

Options development and appraisal (Stage 2, Step 2A and 2B)

9. A summary of the process that the change sponsor went through to identify, develop and preliminarily test with stakeholders the options. This may include a trial. This will include engagement.

'Develop and assess' gateway

10. A statement that the CAA approved that the change sponsor produced a satisfactory design principles evaluation.

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CAA decision criteria

11. A statement that the change sponsor prepared an Initial appraisal of the options identified (including the do nothing option) and that the CAA carried out a review of that exercise which is recorded on the portal.
12. If there is only one option put forward at this stage, on the basis that “it is the only safe option,” the CAA will review the safety assessment to determine whether we agree that is the only potential option, on the grounds of safety. If we agree, the Initial appraisal may go forward with only one option. If we disagree, the sponsor will not pass the gateway and will have to revisit its options development, i.e. Step 2a. The CAA will publish this determination at this time.
13. A statement that accordingly the CAA permitted the proposal to proceed through the ‘Develop and assess’ gateway and when.

‘Consult’ gateway

14. A statement that the CAA reviewed the change sponsor’s consultation and engagement strategy against the criteria set out in our guidance document. An explanation of why the CAA approved that strategy.
15. This will include a statement that the CAA assessed the Full options appraisal as satisfactory and why.
16. If by this stage, because of safety, only one option remains, the CAA will carry out a review of the sponsor’s safety assessment. If we disagree with its assessment, the sponsor will have to revisit its Full options appraisal. The CAA will publish this determination at this time.
17. A statement that the CAA approved the documents prepared as the package of consultation documentation, and why. A statement that accordingly the CAA permitted the proposal to proceed through the ‘Consult’ gateway and when.

Public consultation and consultation responses (Steps 3C and 3D)

18. A summary of the events during the consultation period, including any additional information provided to stakeholders (for example FAQ) stemming from the continuous monitoring of the responses and the reasons why the consultation period was extended if applicable.
19. A description of the criteria identified by the change sponsor to categorise the response and a statement by the CAA (based on the review of a sample) that this categorisation was carried out satisfactorily, and why.

Proposal update and submission to CAA (Stage 4, Step 4A and 4B)

20. A summary of the steps taken by the change sponsor to finalise its proposals taking the feedback received during the public consultation into account, including a description of the process by which the change sponsor settled the Final options appraisal and a summary of that Final options appraisal.
21. A statement whether re-consultation took place. Where there was no re-consultation, a statement from the CAA why we are content that any differences between the proposal in the public consultation (or the last one if there were more than one in relation to this proposal) and the final proposal that was then submitted to the CAA, did not require re-consultation.
22. A statement as to when the proposal was submitted to the CAA.

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CAA decision criteria

Secretary of State call-in

23. If applicable, a summary that:

- A request for call-in was made and the change met one or more of the three thresholds that entitled the Secretary of State to call in the decision (and why the Secretary of State concluded that it met that threshold)
- one or more stakeholders requested it be called in within the 28-day time limit after submission to the CAA of the proposal (Stage 4D)
- the Secretary of State has exercised his/her discretion to call the proposal in
- this decision is therefore not a final decision but a CAA minded-to decision which will only provide the CAA's opinion on the proposal but will not be binding on the Secretary of State who may make a different decision (regarding whether or not to approve the change, and what conditions if any to apply to the approval if applicable)
- that if the Secretary of State's decision is to approve the change he/she will instruct the CAA to take the necessary steps to arrange for implementation (Stage 6) and that the CAA will be responsible for the post-implementation review (Stage7)

Public Evidence Session and written statements (if applicable)

24. The decision will record that a Public Evidence Session took place and that a record of that session is available on the portal. Furthermore the decision will record whether any stakeholder took the opportunity (between notification of the Public Evidence Session and the date of that session) to provide direct written feedback to the CAA.

CAA's assessment of the change sponsor's Final options appraisal assessment

25. By its development of its Initial, Full and Final appraisal of the options, the change sponsor will have been required to fully consider the options open to it, and to have engaged with stakeholders when doing so, to address the issue(s) identified in the Statement of Need at the beginning of this process.
26. The CAA will summarise whether it has concluded that the change sponsor has fully considered the options available to it and why. The CAA will also record whether it considers that it was reasonable for the change sponsor to proceed with the final option progressed by the change sponsor and submitted to the CAA in its change proposal, and why.

CAA analysis of the material provided

27. A summary and formal record of the final and complete set of material provided to the CAA and relied upon by the change sponsor requesting the change will be set out. This will take into account whether any technical amendments were made to the proposal after submission. The CAA will also record the complete set of data provided by other stakeholders direct to the CAA that has been taken into account by the CAA when reaching our decision.
28. A record of the documents produced by the CAA as evidence of our analysis of this material and a reference to where these assessments can be reviewed on our portal will be made here:
- safety review (plain English summary)
 - operational assessment
 - environmental assessment and statement
 - consultation assessment.

Appendix G

CAA decision criteria

CAA consideration of factors material to our decision whether to approve the change

Explanation of statutory duties

29. We will explain, with reference to material on our website, the legal and policy framework which bounds our duty to take this decision and the material factors which we are required to consider before taking it. In some cases the material on the website will be a complete explanation. In other cases there may be other international obligations, government policy or CAA policy which are relevant to the particular proposal under consideration which we will additionally set out here.

Conclusions in respect of our safety duty

30. We will set out our understanding of our duty and our assessment of the data put forward by the change sponsor in support of its request for the change proposed and the data submitted by other stakeholders. We will set out our assessment of the prospective impact of the proposed change on the objectives represented in this duty.

Conclusions in respect of our duty to secure the most efficient use of airspace and an expeditious flow of traffic

31. We will set out our understanding of our duty and our assessment of the data put forward by the change sponsor in support of its request for the change proposed and the data submitted by other stakeholders. We will set out our assessment of the prospective impact of the proposed change on the objectives represented in this duty.

Conclusions in respect of our duty to take into account the Secretary of State's guidance to the CAA on environmental objectives

32. We will set out our understanding of our duty and our assessment of the data put forward by the change sponsor in support of its request for the change proposed and the data submitted by other stakeholders. We will set out our assessment of the prospective impact of the proposed change on the objectives represented in this duty.

Conclusions in respect of our duty to satisfy the requirements of aircraft operators and owners

33. We will set out our understanding of our duty and our assessment of the data put forward by the change sponsor in support of its request for the change proposed and the data submitted by other stakeholders. We will set out our assessment of the prospective impact of the proposed change on the objectives represented in this duty.

Conclusions in respect of our duty to take account of the interests of any other person

34. We will set out our understanding of our duty and our assessment of the data put forward by the change sponsor in support of its request for the change proposed and the data submitted by other stakeholders. We will set out our assessment of the prospective impact of the proposed change on the objectives represented in this duty.

Conclusions in respect of our duty to facilitate integrated operation of ATS provided by the armed forces and others ATS providers

35. We will set out our understanding of our duty and our assessment of the data put forward by the change sponsor in support of its request for the change proposed and the data submitted by other stakeholders. We will set out our assessment of the prospective impact of the proposed change on the objectives represented in this duty.

Appendix G

CAA decision criteria

Conclusions in respect of our duty to take account of the interests of national security

36. We will set out our understanding of our duty and our assessment of the data put forward by the change sponsor in support of its request for the change proposed and the data submitted by other stakeholders. We will set out our assessment of the prospective impact of the proposed change on the objectives represented in this duty.

Conclusions in respect of our duty to take account of any International obligations notified to us by the Secretary of State

37. We will set out our understanding of our duty and our assessment of the data put forward by the change sponsor in support of its request for the change proposed and the data submitted by other stakeholders. We will set out our assessment of the prospective impact of the proposed change on the objectives represented in this duty.

CAA's regulatory decision

38. We will record the exact terms of our decision (whether to approve or reject the proposal) here together with reasons for that decision.

Conditions

39. If our decision is to approve the change, but subject to conditions subsequent to that decision, we will record those conditions and the reasons for them here.

Period regulatory decision remains valid for implementation

40. If our decision is to approve the change, we will detail any applicable time limitation for implementation here.

Implementation

41. If our decision is to approve the change, we will record when the new airspace design will become effective here.

Post-implementation review

42. If applicable, we will set out when we anticipate the post-implementation review will commence and the known data collection requirements with which the change sponsor will need to comply here. We will always make it known that we may need to request additional data in order to complete the post-implementation review and that these additional requirements will be made known to the change sponsor as soon as possible.

Annexes/glossary

43. These will be appended as appropriate, and will include a diagram of the approved airspace design.

Appendix G

CAA decision criteria

Proforma D2

CAA decision template

Tier 1b (Temporary airspace change)

TITLE OF AIRSPACE CHANGE DECISION, CAP 1520

Template version date 22 February 2017

Contents

Executive summary

Objective of the temporary change

1. This will briefly set out what the organisation proposing the temporary change was seeking to achieve and the temporary changes to the airspace design that aimed to achieve it.

Summary of the decision made

2. Where applicable, this will contain a precise statement of the temporary changes agreed, with reference to the means by which they were described by the change sponsor in the proposal submitted to the CAA at Step 4B.
3. The timescale the temporary change will be operational and when the airspace will revert to the pre-existing design.
4. If there are any conditions attached to a decision to agree to the temporary change, they will be set out here.
5. If the request was not approved, we will record that here.

Next steps

6. (If applicable) we will record here our requirements with respect to the temporary change sponsor's obligations to undertake continuous engagement with stakeholders during the operation of the temporary change and to collate, monitor and report back to the CAA on the level and contents of feedback received during that period.

Decision process and analysis

Chronology of proposal process

Statement of Need and assessment meeting (Stage 1, Step 1A)

7. A summary of the issue being addressed by the temporary change and its aims and objectives reflected in the Statement of Need. A reference to when the assessment meeting took place and the minutes produced after that meeting. A record of the CAA's assessment that a temporary airspace change was an appropriate method of addressing the issue identified.

Consultation gateway

8. A statement that the CAA reviewed the change sponsor's consultation and engagement strategy and documents against the criteria set out in our guidance document. An explanation why the CAA approved that strategy and the contents as appropriate for this proposed temporary airspace change.

Proposal update and submission to the CAA (Stage 4, Step 4A and 4B)

9. A summary of the steps taken by the change sponsor to finalise its proposals taking the feedback received during the consultation with aviation stakeholders into account. A statement as to when the request for a temporary airspace change was submitted to the CAA.

CAA analysis of the material provided

10. A summary and formal record of the final and complete set of material provided to the CAA and relied upon by the change sponsor requesting the temporary change will be set out. The CAA will also record the complete set of data provided by other stakeholders direct to the CAA that has been taken into account by the CAA when reaching our decision.

Appendix G

CAA decision criteria

11. A record of the document produced by the CAA as evidence of our analysis of this material containing our:

- safety review
- operational assessment
- environmental assessment and statement
- consultation assessment

of the potential impact of the proposed temporary change.

CAA consideration of factors material to our decision whether to agree to the temporary change

Explanation of statutory duties

12. We will explain, with reference to material on our website, the legal and policy framework which bounds our duty to take this decision and the material factors which we are required to consider before taking it. In some cases the material on the website will be a complete explanation. In other cases there may be other international obligations, government policy or CAA policy which are relevant to the particular proposal under consideration which we will additionally set out here.

Conclusions in respect of our safety duty

13. We will set out our understanding of our duty and our assessment of the data put forward by the change sponsor in support of its request for the change proposed and the data submitted by other stakeholders. We will set out our assessment of the prospective impact of the proposed temporary change on the objectives represented in this duty.

Conclusions in respect of our duty to secure the most efficient use of airspace and an expeditious flow of traffic

14. We will set out our understanding of our duty and our assessment of the data put forward by the change sponsor in support of its request for the temporary change proposed and the data submitted by other stakeholders. We will set out our assessment of the prospective impact of the proposed temporary change on the objectives represented in this duty.

Conclusions in respect of our duty to take into account the Secretary of State's guidance to the CAA on environmental objectives

15. We will set out our understanding of our duty and our assessment of the data put forward by the change sponsor in support of its request for the temporary change proposed and the data submitted by other stakeholders. We will set out our assessment of the prospective impact of the proposed temporary change on the objectives represented in this duty.

Conclusions in respect of our duty to satisfy the requirements of aircraft operators and owners

16. We will set out our understanding of our duty and our assessment of the data put forward by the change sponsor in support of its request for the temporary change proposed and the data submitted by other stakeholders. We will set out our assessment of the prospective impact of the proposed temporary change on the objectives represented in this duty.

Conclusions in respect of our duty to take account of the interests of any other person

17. We will set out our understanding of our duty and our assessment of the data put forward by the change sponsor in support of its request for the temporary change proposed and the data submitted by other stakeholders. We will set out our assessment of the prospective impact of the proposed temporary change on the objectives represented in this duty.

Appendix G

CAA decision criteria

Conclusions in respect of our duty to facilitate integrated operation of ATS provided by the armed forces and others ATS providers

18. We will set out our understanding of our duty and our assessment of the data put forward by the change sponsor in support of its request for the temporary change proposed and the data submitted by other stakeholders. We will set out our assessment of the prospective impact of the proposed temporary change on the objectives represented in this duty.

Conclusions in respect of our duty to take account of the interests of national security

19. We will set out our understanding of our duty and our assessment of the data put forward by the change sponsor in support of its request for the temporary change proposed and the data submitted by other stakeholders. We will set out our assessment of the prospective impact of the proposed temporary change on the objectives represented in this duty.

Conclusions in respect of our duty to take account of any International obligations notified to us by the Secretary of State

20. We will set out our understanding of our duty and our assessment of the data put forward by the change sponsor in support of its request for the temporary change proposed and the data submitted by other stakeholders. We will set out our assessment of the prospective impact of the proposed temporary change on the objectives represented in this duty.

CAA's regulatory decision

21. We will record the exact terms of our decision (whether to approve or reject the request to agree to a temporary airspace change) here together with reasons for that decision.

Conditions

22. If our decision is to approve the temporary change, but subject to conditions subsequent to that decision, we will record those conditions and the reasons for them here.

Period regulatory decision remains valid for implementation

23. If our decision is to approve the temporary change, we will detail any applicable time limitation for implementation here.

Implementation

24. If our decision is to approve the temporary change, we will record when the new airspace design will become effective here and when the airspace will revert back to the existing design at the end of the temporary change.

On-going engagement and monitoring post-implementation during period of operation of the temporary airspace change

25. We will record here our requirements with respect to the temporary change sponsor's obligations to undertake continuous engagement with stakeholders during the operation of the temporary change and to collate, monitor and report back to the CAA on the level and contents of feedback received during that period

Annexes/glossary

26. These will be appended as appropriate, and will include a diagram of the approved temporary airspace design.

Appendix G

CAA decision criteria

Proforma D3

CAA decision template

Tier 1c (Trials of airspace design)

TITLE OF AIRSPACE CHANGE DECISION, CAP 1520

Template version date 22 February 2017

Contents

Executive summary

Objective of the trial

1. This will briefly set out what the organisation proposing the trial is seeking to achieve and the detail of the trial to the airspace design that aims to achieve it.

Summary of the decision made

2. Where applicable, this will contain a precise statement of the trial agreed to, with reference to the means by which it was described by the change sponsor in the Statement of Need submitted to the CAA.
3. The timescale the trial will be operational and when the trial will cease.
4. If there are any conditions attached to a decision to agree to the trial, they will be set out here.
5. If the request for a trial was not approved, we will record that here.

Next steps

6. (If applicable) we will record here our requirements with respect to the trial sponsor's obligations to undertake continuous engagement with stakeholders during the operation of the trial and to collate, monitor and report back to the CAA on the level and contents of feedback received during that period.

Decision process and analysis

Chronology of proposal process

Statement of Need and assessment meeting (Stage 1, Step 1A)

7. A summary of the issue being addressed by the trial and its aims and objectives reflected in the Statement of Need. A reference to when the assessment meeting (if applicable) took place and the minutes produced after that meeting. A record of the CAA's assessment that a live trial was an appropriate.

Consultation gateway

8. A statement that the CAA reviewed the change sponsor's consultation and engagement strategy and documents against the criteria set out in our guidance document. An explanation of why the CAA approved that strategy and the contents as appropriate for this proposed temporary airspace change.
9. A statement that the change sponsor has satisfactorily assessed the likely noise impact of the trial while in operation.

Proposal update and submission to the CAA (Stage 4, Step 4A and 4B)

10. A summary of the steps taken by the change sponsor to finalise its proposals taking the feedback received during the consultation with aviation stakeholders into account. A statement as to when the request for a temporary airspace change was submitted to the CAA.

CAA analysis of the material provided

11. A summary and formal record of the final and complete set of material provided to the CAA and relied upon by the change sponsor requesting the trial will be set out. The CAA will also record the complete set of data provided by other stakeholders direct to the CAA that has been taken into account by the CAA when reaching our decision.

Appendix G

CAA decision criteria

12. A record of the document produced by the CAA as evidence of our analysis of this material containing our:

- safety review
- operational assessment
- environmental assessment and statement
- consultation assessment

of the potential impact of the proposed trial.

CAA consideration of factors material to our decision whether to agree to the trial

Explanation of statutory duties

13. We will explain, with reference to material on our website, the legal and policy framework which bounds our duty to take this decision and the material factors which we are required to consider before taking it. In some cases the material on the website will be a complete explanation. In other cases there may be other international obligations, government policy or CAA policy which are relevant to the particular trial under consideration which we will additionally set out here.

Conclusions in respect of our safety duty

14. We will set out our understanding of our duty and our assessment of the data put forward by the change sponsor in support of its request for the trial proposed. We will set out our assessment of the prospective impact of the proposed trial on the objectives represented in this duty.

Conclusions in respect of our duty to secure the most efficient use of airspace and an expeditious flow of traffic

15. We will set out our understanding of our duty and our assessment of the data put forward by the change sponsor in support of its request for the trial proposed. We will set out our assessment of the prospective impact of the proposed trial on the objectives represented in this duty.

Conclusions in respect of our duty to take into account the Secretary of State's guidance to the CAA on environmental objectives

16. We will set out our understanding of our duty and our assessment of the data put forward by the change sponsor in support of its request for the trial proposed. We will set out our assessment of the prospective impact of the proposed trial on the objectives represented in this duty. We will indicate how we took the change sponsors noise impact assessment into account as part of this decision whether or not to agree to the trial.

Conclusions in respect of our duty to satisfy the requirements of aircraft operators and owners

17. We will set out our understanding of our duty and our assessment of the data put forward by the change sponsor in support of its request for the trial proposed. We will set out our assessment of the prospective impact of the proposed trial on the objectives represented in this duty.

Conclusions in respect of our duty to take account of the interests of any other person

18. We will set out our understanding of our duty and our assessment of the data put forward by the change sponsor in support of its request for the trial proposed. We will set out our assessment of the prospective impact of the proposed trial on the objectives represented in this duty.

Conclusions in respect of our duty to facilitate integrated operation of ATS provided by the armed forces and other ATS providers

19. We will set out our understanding of our duty and our assessment of the data put forward by the change sponsor in support of its request for the trial proposed. We will set out our assessment of the prospective impact of the proposed trial on the objectives represented in this duty.

Appendix G

CAA decision criteria

Conclusions in respect of our duty to take account of the interests of national security

20. We will set out our understanding of our duty and our assessment of the data put forward by the change sponsor in support of its request for the trial proposed. We will set out our assessment of the prospective impact of the proposed trial on the objectives represented in this duty.

Conclusions in respect of our duty to take account of any International obligations notified to us by the Secretary of State

21. We will set out our understanding of our duty and our assessment of the data put forward by the change sponsor in support of its request for the trial proposed. We will set out our assessment of the prospective impact of the proposed trial on the objectives represented in this duty.

CAA's regulatory decision

22. We will record the exact terms of our decision (whether to approve or reject the request to agree to a trial) here together with reasons for that decision.

Conditions

23. If our decision is to approve the trial, but subject to conditions subsequent to that decision, we will record those conditions and the reasons for them here.

Period of trial

24. If our decision is to approve the trial, we will detail any applicable time limitation for implementation here.

Implementation

25. If our decision is to approve the trial, we will record when the trial will be operational here and when the airspace will revert back to the existing design at the end of the trial.

On-going engagement and monitoring post-implementation during period of operation of the temporary airspace change

26. We will record here our requirements with respect to the trial sponsor's obligations to undertake continuous engagement with stakeholders during the operation of the trial and to collate, monitor and report back to the CAA on the level and contents of feedback received during that period

Annexes/glossary

27. These will be appended as appropriate, and will include a diagram of the approved trial airspace design.

Appendix G

CAA decision criteria

Proforma D4

CAA decision template

Tier 1a (Level 0)

TITLE OF AIRSPACE CHANGE DECISION, CAP 1520

Template version date 22 February 2017

Contents

CAA's regulatory decision

1. This will briefly set out what the organisation proposing the change was seeking to achieve by its proposal and the changes to the airspace design that aimed to achieve it.

Decision made

2. The CAA will confirm that the change requested is identified as a Level 0 change in the CAA's guidance on its airspace change process.
3. This will contain a precise statement of the change agreed, with reference to the means by which the way the change was described by the change sponsor in the proposal submitted to the CAA in the Statement of Need.
4. If the proposal was not approved, we will record that here.

Next steps

5. (if applicable) this will set out the planned date for implementation of the approved change.

Period regulatory decision remains valid for implementation

6. If our decision is to approve the change, we will detail any applicable time limitation for implementation here.

Implementation

7. If our decision is to approve the change, we will record when the new airspace design will become effective here.

Annex

8. If applicable this decision will include a diagram of the approved airspace design.

Appendix H

Post-implementation review

When to undertake this activity		
Stage 1: Define	1A: Assess requirement	X
	1B: Design principles	X
Define gateway		
Stage 2: Develop and assess	2A: Options development	X
	2B: Options appraisal	X
Develop and Assess gateway		
Stage 3: Consult	3A: Consultation preparation	X
	3B: Consultation approval	X
Consult gateway		
	3C: Commence consultation	X
	3D: Collate and review responses	X
Stage 4: Update and submit	4A: Update design	X
	4B: Submit proposal to CAA	X
Stage 5: Decide	5A: CAA assessment	X
	5B: CAA decision	X
Decide gateway		
Stage 6: Implement		X
Stage 7: Post-implementation review		✓

What does this activity entail?

The change sponsor collects and publishes data on how the airspace change has performed over a 12-month period. During a defined window at the end of that 12-month period, stakeholders can provide their own feedback to the CAA.

The post-implementation review is an assessment of whether the anticipated impacts and benefits in the original proposal and published decision are as expected and, where there are differences, what steps (if any) the CAA requires to be taken.

The text in this Appendix refers to the policy proposals and draft guidance on which the Department for Transport is currently consulting ([click here for details](#)). Should Government Directions, policy and guidance change after the consultation, this Appendix will be updated accordingly.

Appendix H

Post-implementation review

Why is this activity included in the process?

H1. While the impact of any particular airspace change can, in most cases, be simulated and the subsequent outcome predicted, there may be unpredicted consequences that appear once a change is implemented. These consequences could be safety-related, operational, technical or environmental. The post-implementation review is an assessment of whether the anticipated impacts and benefits in the original proposal and published decision are as expected, and where there are differences,

what steps (if any) the CAA requires to be taken. The review is necessary to identify any subsequent requirements to further modify flight procedures or the airspace structure (as applicable) to give effect to the terms of the original CAA decision (Stage 5), the need for which can only be determined after a period of operational experience, post-implementation. In addition, it is important to establish whether any conditions placed on the original CAA approval have been met.

H2. The post-implementation review does not, however, set out to re-run the original decision associated with the airspace change.

Key terms to check in our glossary

Air navigation service provider	Air safety report	Airprox report
Airspace design	Airspace infringement	Airspace structure
Communications, navigation and surveillance infrastructure	Continuous Climb Operations (CCO)	Continuous Descent Operations (CDO)
Feedback	Flight procedures	Instrument flight procedures (IFP)
Letter of Agreement	Mandatory occurrence report	Portal
Standard Arrival Route (STAR)	Standard Instrument Departure (SID)	

Appendix H

Post-implementation review

How to undertake this activity

Data collection

H3. When the change sponsor receives a decision document from the CAA, it will include the data the CAA expects the change sponsor to collect to aid the post-implementation review. This data may need to be collected incrementally. The types of data that the change sponsor may be required to provide, why it may be needed and how it is assessed are shown in Table H1 on page 216.

Timescales

H4. The post-implementation review will usually commence 12 months after the change is implemented. If it is deemed unlikely that the necessary data will be available after 12 months, the CAA may agree to it taking place up to 18 months after the change is implemented.

H5. The data collected by the change sponsor and any analysis required to be undertaken by the change sponsor under the terms of the review will be published on the online portal 28 days after the post-implementation review commences. Following the publication, the change sponsor may be required to submit supplementary data should the need arise.

H6. After this data is published, stakeholders will have 28 days in which to submit any evidence or views on the data or the impact of the change that they want the CAA to take into account as we carry out the post-implementation review. The change sponsor will make relevant stakeholders aware (including those who responded to the consultation and permitted the change sponsor to contact them again) and direct them towards the online portal to submit their feedback. The CAA will not review as part of the post-implementation review data submissions received outside of this period.

H7. The CAA will usually publish the results of the review within three months of receipt of the change sponsor's data. This period may be extended in the event that:

- a large volume of feedback is received, to allow for the additional analysis required, or
- assessment of the original data set leads the CAA to request further data from the change sponsor.

Analysis

H8. The CAA's analysis of the data collected as part of the post-implementation review will consist of the following:

1. An **assessment** comparing the actual **operational** impact of the change against the impact forecast in the original options appraisal and subsequent formal proposal. This assessment contains:
 - the CAA's assessment of whether the level of detail supplied by the change sponsor as part of the post-implementation review met the requirements outlined in the original decision document
 - the CAA's assessment of the ongoing operational situation and the current operating environment
 - the CAA's assessment of how the airspace change has, or has not, delivered the forecast operational benefits
 - the CAA's assessment of whether adequate resource has been applied to deliver the change and whether adequate communications, navigation and surveillance infrastructure remains in place
 - the CAA's assessment of the actual operational impacts to all airspace users and airfields, and on traffic levels, and whether these differ markedly from those forecast.

Appendix H

Post-implementation review

2. An **assessment** of the **environmental** impacts which reviews the environmental assessment provided by the change sponsor requesting the change and considers whether the actual impact is as predicted. The assessment will also consider whether any assumptions in the original environmental assessment remain valid. The change sponsor will have to either:

- confirm that the impacts are as anticipated and presented in the approved airspace change proposal (together with any necessary supporting evidence), or
- present a re-assessment of the impacts that were presented in the airspace change proposal using actual data to update the results.

3. An **assessment** of the **feedback**, comprising:

- feedback that the change sponsor has received in the period since the change was implemented (the change sponsor will need to maintain a database of that feedback and provide it to the CAA in the form set out in Table H1), and
- feedback that the CAA has received in the period since the change was implemented, which the CAA will provide to the change sponsor for inclusion in its feedback database, and
- feedback received by the CAA during the 28-day window via the online portal.

H9. Together these assessments will seek to identify the core issues associated with the impact of the change and any unforeseen consequences that may need to be addressed as part of the review.

Outcome from the post-implementation review

H10. The post-implementation review can lead to two possible outcomes. The CAA may:

- confirm that the implemented design satisfactorily achieves – within acceptable tolerance limits – the objective and terms of the CAA's approval, and the change is confirmed; or
- require modifications to better achieve the objective and terms of the CAA's approval; 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, the CAA may conclude that the original design was satisfactory and the original change is confirmed; or
 - noting that the modifications did not better achieve the objective and terms of the CAA's approval, the CAA may conclude that the original design was not satisfactory and the original change is not confirmed. In this case, in order to pursue its change, the change sponsor will need to commence a fresh airspace change request from Stage 1; or
 - the CAA may conclude that the modifications do better achieve – within acceptable tolerance limits – the objective and terms of the CAA's approval and so the modified design is confirmed.

Appendix H

Post-implementation review

H11. In the event that the review identifies the need for modification to the airspace design (for the reasons set out above), the change sponsor will be required to identify a timeline for modification, simulation and/or validation, CAA design approval (if required) and implementation. This timeline will be published on the online portal. Typically, the original airspace design will remain in operation until the amended design is implemented. Once implemented, the revised airspace design will be monitored, nominally for a six-month period. During that time, stakeholders will be able to provide feedback on the revised design via the online portal. Following the monitoring period, the CAA will assess the impact of the amended airspace design using the criteria established for the original post-implementation review.

H12. In the event that the modified airspace design does not meet the requirements set out in the post-implementation review, consideration will be given to returning the airspace to its original design structure. Any further change will be subject to a new airspace change proposal. In some cases, returning the airspace to its original design may not be possible because of interdependencies with adjoining airspace structures and operations. In that event, the CAA will work with the change sponsor to identify an appropriate course of action.

The change sponsor's post-implementation review submission

H13. Table H1 on page 216 sets out a list of the potential data sets the CAA may require the change sponsor to submit for the CAA's post-implementation review assessment. This list is not exhaustive, and some requirements will not apply in every case.

H14. Where the data illustrates impacts other than those anticipated, the change sponsor will need to provide (and evidence) its analysis of why this is the case.

Appendix H

Post-implementation review

Table H1: Potential post-implementation review data requirements

Data/information	Why it is needed	How it is assessed
<p>Safety data – incidents related to the airspace design:</p> <ul style="list-style-type: none"> • Mandatory Occurrence Reports • AIRPROX reports • Air Safety Reports 	<p>The change sponsor will need to provide data to enable an assessment whether that the new airspace design is at least as safe as the original design, if not safer (taking into account changes in traffic levels)</p>	<p>The CAA will review the change sponsor’s statistics concerning these events and assess whether the revised airspace design is a contributory factor in those incidents</p>
<p>Service provision/ resource issues</p> <ul style="list-style-type: none"> • data on refusals of service • data on air traffic delays • details of additional resource allocated, taking into account daily and seasonal traffic patterns 	<p>The change sponsor will need to demonstrate that adequate resources are in place to facilitate the operation of the new airspace design, and that air traffic services are being provided as forecast in the original proposal without unanticipated impact on other airspace users</p>	<p>The CAA will assess whether there is adequate resource in place to support the operation comparing the change sponsor’s data with the approved proposal</p>
<p>Utilisation of Continuous Climb Operations (CCO) and Continuous Descent Operations (CDO)</p> <ul style="list-style-type: none"> • % achieving CCO and/or CDO, compared monthly before and after the change (i.e. comparing the month of July before and after the change) 	<p>Where the original change cited improvements in CCO/CDO utilisation, the change sponsor will need to provide data to demonstrate any subsequent improvement</p>	<p>The CAA will assess whether the anticipated benefit has been delivered comparing the change sponsor’s data against the approved proposal</p>

Backgrd Info	H: PIR
Stage 7	G: Decision
Stage 6	F: Submission
Stage 5	E: Options
Stage 4	D: Design
Stage 3	C: Consultation
Stage 2	B: Environment
Stage 1	A: S of Need
Tier 1	Tier 2/3
Tier categories	Glossary

Appendix H

Post-implementation review

Table H1: Potential post-implementation review data requirements (continued)

Data/information	Why it is needed	How it is assessed
Infringement statistics <ul style="list-style-type: none"> % change in infringements, compared monthly before and after the change 	Where the revised airspace design changes the dimensions of controlled airspace, the change sponsor will need to provide an analysis of airspace infringements	The CAA will assess whether the airspace design was a contributory factor in any increase in infringements. Was an infringement risk identified in the approved proposal and has it been mitigated?
Traffic figures (air transport movements) <ul style="list-style-type: none"> actual vs predicted figures % change compared monthly before and after the change reconfirmation that there have been no factors that would cause a material change to the traffic forecasts provided in support of the original proposal, i.e. that the original forecasts are still reasonable 	Traffic figures over the period will give a general overview of the nature of the operation following the implementation of the change. In addition, where the change was predicated on a forecast increase in traffic numbers, the change sponsor will need to confirm whether or not the increase forecast in the approved proposal has been realised	The CAA will assess whether the anticipated benefit has been delivered comparing the change sponsor's data against the approved proposal If the traffic growth is significantly higher than forecast, the CAA will use the environmental impact assessment to determine whether the scale of any unanticipated consequences are such that they need to be addressed
Traffic dispersion comparisons <ul style="list-style-type: none"> graphical representation (traffic density plots) lateral and vertical analysis 	It is necessary to establish whether aircraft are flying to routes forecast in the approved proposal. A key part of the CAA's post-implementation review will be to analyse the 'before and after' dispersal of aircraft to understand whether the new airspace design is being operated as anticipated	The CAA will assess whether the dispersion of traffic is as anticipated in the approved proposal

Appendix H

Post-implementation review

Table H1: Potential post-implementation review data requirements (continued)

Data/information	Why it is needed	How it is assessed
Operational feedback: <ul style="list-style-type: none"> Air Safety Reports direct feedback from airlines relevant Flight Operation Sub-Committee (sub-group of Airport Consultative Committee) 	The change sponsor will have to present any feedback directly received by aviation stakeholders operating in, or affected by, the revised airspace design	The CAA will assess whether there have been any unforeseen or unintended operational impacts of the proposal
Denied access statistics <ul style="list-style-type: none"> refusals of access (month on month/ before and after the change) reasons for individual refusals of access 	This links to service provision/ resources mentioned above. The change sponsor provides data on refusals of access to the revised airspace design and any underlying factors	The CAA will assess whether other airspace users are being impacted other than as anticipated as a result of the change. CAA will analyse the reasons for any refusals
Utilisation of SIDs/ STARs/IFPs <ul style="list-style-type: none"> % of flights achieving track keeping, compared month on month before and after the change 	Information concerning the utilisation of the various procedures implemented as part of the change. The information may highlight areas of unforeseen consequence, for example where a particular procedure is being used more than anticipated with a subsequent impact	The CAA will assess whether the utilisation data is other than expected
Letters of Agreement (LoAs) <ul style="list-style-type: none"> operational agreements between ANSPs and airspace users data on activation/ utilisation of LoA procedures 	Where a Letter of Agreement detailing specific procedures was a specific condition of the CAA approval, the change sponsor will need to evidence the level of use of that agreement	The CAA will assess whether any LoAs have had the anticipated effect of mitigating the impact of the change on stakeholder activities

Appendix H

Post-implementation review

Table H1: Potential post-implementation review data requirements (continued)

Data/information	Why it is needed	How it is assessed
<p>Impact on environmental factors (including noise)</p> <p>In general, change sponsors will undertake a re-assessment of the impacts that formed part of the original proposal. Depending on the Level and scale of the proposal that may include:</p> <ul style="list-style-type: none"> re-assessment of noise impacts, taking account of actual traffic patterns and traffic volumes re-assessment of CO₂ emissions, taking account of actual traffic patterns and traffic volumes 	<p>The change sponsor will have to either:</p> <p>(a) confirm that the impacts are as anticipated and presented in the approved airspace change proposal (together with any necessary supporting evidence); or</p> <p>(b) present a re-assessment of the impacts presented in the airspace change proposal using actual data to update the results</p>	<p>The CAA will review and assess the change sponsor's analysis and determine the extent to which the CAA agrees</p>
<p>International obligations – impact</p> <ul style="list-style-type: none"> details on any feedback from operators or neighbouring States 	<p>The change sponsor will need to demonstrate that any international obligations identified at the time of the change have been discharged</p>	<p>The CAA assesses whether the obligations have been met</p>
<p>Impact on Ministry of Defence operations</p> <ul style="list-style-type: none"> details on any feedback from Ministry of Defence 	<p>The change sponsor will need to demonstrate that there has been no unforeseen impact on Ministry of Defence operations</p>	<p>The CAA assesses whether there has been any unforeseen impact on the Ministry of Defence that would need rectifying</p>
<p>Stakeholder feedback (in the format specified by the CAA)</p> <ul style="list-style-type: none"> feedback/complaints received by the change sponsor and CAA in the period between implementation and post-implementation review details of location of complaints 	<p>Feedback is needed to identify any issues from a community perspective that were not anticipated as part of the approved proposal; monthly data over the course of a year is needed so that seasonal traffic changes are taken into account</p>	<p>An assessment is made to identify any unforeseen or unintended impacts of the proposal</p>

Appendix I

Glossary

The text in this Appendix refers to the policy proposals and draft guidance on which the Department for Transport is currently consulting ([click here for details](#)). Should Government Directions, policy and guidance change after the consultation, this Appendix will be updated accordingly.

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

Term	Abbreviation	Description
Acute Myocardial Infarction	AMI	Medical condition – usually referred to as a heart attack.
Advisory route	ADR	A designated <i>route</i> along which air traffic <i>advisory</i> 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		<i>[Text to be updated should new directions be issued]</i> The Civil Aviation Authority (Air Navigation) Directions 2001 (incorporating variation Direction 2004). These Directions set out the CAA's air navigation duties and were jointly issued by the Secretary of State for Transport and the Secretary of State for Defence.

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Term	Abbreviation	Description
Air navigation guidance	ANG	<i>[Text to be updated should new guidance be issued]</i> Guidance to the Civil Aviation Authority on Environmental Objectives Relating to the Exercise of its Air Navigation Functions, January 2014, DfT. Government guidance which the CAA is required to take account of when considering airspace change proposals. https://www.gov.uk/government/publications/air-navigation-guidance
Air navigation service provider	ANSP	Air navigation service provider – an organisation which operates the technical system, infrastructure, procedures and rules of an air navigation service system, which may include air traffic control.
Air safety report		A report raised internally within an airline/operator whereby flight crew can report safety-related concerns
Air traffic control	ATC	Service from an ANSP providing guidance to aircraft through controlled airspace.
Air traffic control surveillance minimum altitude chart	ATSMAC	The lowest altitude that a radar controller can allocate to an inbound or outbound aircraft.
Air traffic management	ATM	Air traffic management – 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 traffic services airspace	ATS Airspace	Airspace in which control by air traffic services and specific rules of operations are required.
Air transport movement	ATM	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.
Airline customers		Those airlines which operate from an airport or use the services of an ANSP.

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Term	Abbreviation	Description
Airport Consultative Committee		An advisory body set up by an airport which provides a forum for representatives of airport users, local authorities and other relevant bodies to discuss matters concerning the development or operation of the airport that may affect users and people living and working locally. See section 35 of the Civil Aviation Act 1982 (as amended by the Airports Act 1986).
Airprox report		An airprox is a situation in which, in the opinion of a pilot or air traffic services personnel, the distance between aircraft as well as their relative positions and speed have been such that the safety of the aircraft involved may have been compromised.
Airspace change process		The staged process an airspace change sponsor follows to submit an airspace change to the CAA for a decision. The process includes actions associated with implementation and post-implementation review, after the CAA or, where applicable Secretary of State, decision.
Airspace change proposal		A request (usually from an airport or air navigation services provider) for a permanent change to the design of UK airspace.
Airspace design		Together, the airspace structure and flight procedures.
Airspace infringement	Infringement	When an aircraft enters controlled airspace without having previously obtained permission to do so from air traffic services.

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Term	Abbreviation	Description
Airspace structure		<p>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.</p> <p>The volumes of airspace are designed to ensure the safe and optimal operation of aircraft. Airspace structures consist of:</p> <ul style="list-style-type: none"> (a) controlled airspace, namely control zones, control areas, terminal control areas and airways (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.
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 (precision) navigation	P-RNAV	Type of performance-based navigation. See Performance Based Navigation.
Area navigation	RNAV	Type of performance-based navigation. See Performance Based Navigation.
Area navigation routes		An air traffic service route created for aircraft capable of employing performance based navigation technology.
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.
Base case		Scenario in analysis of different options where the impacts of the change not being implemented are analysed (also known as Do Nothing or Do Minimum option).

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Term	Abbreviation	Description
Bilateral meeting		Meeting between two participants as a part of the engagement around an airspace change.
Biodiversity		The variability among living things from all ecosystems (including terrestrial, marine and other aquatic among others) and the ecological complexes of which they are part; including diversity within species, between species and of ecosystems.
Call-in (by Secretary of State)		For certain types of airspace change, the Secretary of State may decide to call-in a particular airspace change proposal and to make a decision instead of the CAA, which the CAA will then be required to implement.
Carbon dioxide	CO ₂	Naturally occurring atmospheric gas, which causes greenhouse effects leading to global warming, and ocean acidification in increased concentrations.
Classes of airspace		Airspace is broken down into different classes, defined by ICAO. In the UK, Classes A, C, D and E are controlled airspace and Class G is uncontrolled airspace (Classes B and F are currently unused in the UK).
Communications, navigation and surveillance infrastructure	CNS infrastructure	Technological infrastructure supporting air traffic service provision.
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.
Continuous climb (or descent) operations	CCO or CDO	Allow arriving or departing aircraft to descend or climb continuously, to the greatest extent possible.
Control areas	CTA	Area of controlled airspace, usually surrounding an aerodrome.
Control zones	CTR	See control area.
Controlled airspace	CAS	Airspace in which air traffic control must have control over aircraft to maintain safe separation between them.

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Term	Abbreviation	Description
Danger Area		Airspace within which activities dangerous to the flight of aircraft may exist at notified times.
Direct	DCT	In relation to flightplan clearances and type of approach.
Discount		A method used to convert future costs or benefits to present values using a discount rate.
Discount factor		The annual percentage rate at which the present value of a future pound, or other unit of account, is assumed to fall away through time.
Discount rate		The factor by which a future pound, or other unit of account, needs to be multiplied by to obtain the present value.
Elected representatives		Democratically elected politicians – can be local (parish council, local authorities), regional and national (Assembly members and Parliamentarians), or trans-national (Members of the European Parliament).
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.
En-route holding		Pattern adopted by aircraft on the instruction of air traffic services to manage delay and sequencing, and hold them in the air until onward clearance (usually to land) is provided.
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.
Environmental research and consultancy department	ERCD	Environmental Research and Consultancy Department (of the CAA).
Equivalent continuous sound level	L_{eq}	Measure of sound.
European Aviation Safety Agency	EASA	The European Union authority for aviation safety.

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Term	Abbreviation	Description
Facilitation		Process (usually led by a neutral third party) to help structure and run discussions and engagement in a mutually beneficial way.
Feedback		Informal response to engagement – change sponsors may be expected to seek feedback from stakeholders in addition to formally consulting them.
Flexible use of airspace	FUA	Concept promoted by Eurocontrol wherein airspace is no longer designated as purely ‘civil’ or ‘military’ airspace, but considered as one continuum and allocated according to user requirements.
Flight information region	FIR	Specified region of airspace, coordinated through ICAO.
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).
Focus group		Small group of stakeholders brought together to offer feedback or discussion relating to proposals.
Future airspace strategy	FAS	Future Airspace Strategy – a collaborative initiative between a range of stakeholders for modernising the UK’s airspace (which sets the direction, but does not include details or recommendations about specific structures or flightpaths). www.caa.co.uk/fas
Future Airspace Strategy Industry Implementation Group	FASIIG	Implementation group representing largely commercial aviation industry interests in FAS.
Future Airspace Strategy Visual Flight Rules Implementation Group	FASVIG	Implementation group representing VFR community interests (including General Aviation) in FAS.
General Aviation	GA	Essentially all civil flying other than commercial airline operations, which therefore encompasses a wide range of aviation activity from powered parachutes, gliding and ballooning to corporate business jets, and includes all sport and recreational flying.
General Aviation traffic	GAT	See General Aviation.

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Term	Abbreviation	Description
Green Book		'The Green Book: appraisal and evaluation in central government' is HM Treasury's guidance for public sector bodies on how to appraise proposals before committing funds to a policy, programme or project.
Gross domestic product	GDP	Monetary measure of the market value of goods and services produced by a country in a period (quarterly or yearly). Airspace change proposals may have a monetary value impact on GDP.
Gross domestic product deflator	HMT GDP Deflator	HM Treasury tool that sets out a time series of general inflation in the economy, and which can be used to calculate nominal prices in real terms over time.
Gunning principles		Principles that set out the legal expectations surrounding formal consultation.
Hedonic pricing		A pricing model to help calculate values based on value and market conditions.
Helicopter routes		Nominated airspace routes designed for use by helicopter traffic.
Holding patterns		Flight patterns adopted by aircraft to hold until cleared to land by air traffic control.
Holding stack		Airspace used to 'hold' aircraft until they are able to land at an airport. Heathrow airport has four stacks set by government.
Independent Commission for Civil Aviation Noise	ICCAN	A body proposed by the Department of Transport which would input into the airspace change process at various points.
Inflation		The general change in the value of goods and services over time. At a national level it is measured by the Consumer Price Index.
Information provision		The requirement on change sponsors to ensure that stakeholders are provided with relevant, comprehensible information about proposals in a timely fashion.
Instrument approach procedure	IAP	A set series of aircraft manoeuvres from the initial approach to landing.

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Term	Abbreviation	Description
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	See flight rules.
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.
Judicial review		A type of court proceeding in which a judge reviews the lawfulness of a decision or action made by a public body. A judicial review is a challenge to the way in which a decision has been made, rather than the rights and wrongs of the conclusion reached. The court will not substitute what it thinks is the 'correct' decision.
Letter of Agreement	LoA	Operational agreements between air navigation service providers and airspace users.
Local air quality	LAQ	Measure of pollutants in the air.
Local authorities		Local government institutions, which although differing in composition and role across the UK, are led by elected representatives.
London airspace management programme	LAMP	Major airspace change proposal covering airspace in the south east of the UK aimed at modernising airspace structures.
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).

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Term	Abbreviation	Description
Magnetic variation		Magnetic variation is the angle on the horizontal plane between <i>magnetic</i> north (the direction the north end of a compass needle points, corresponding to the direction of the Earth's magnetic field lines) and <i>true</i> north (the direction along a meridian towards the geographic North Pole). Variation changes as the position of the magnetic North Pole drifts, affecting compass bearings.
Manual of Air Traffic Services Part II	MATS Pt II	A locally specific manual used by each air navigation service provider which underpins how its air traffic controllers manage aircraft, and in turn influences their decisions.
Maximum sound level	L_{\max}	Measure of sound.
Military operations		Operations undertaken by military aircraft, or military aerodromes.
N70 contour		Measure of noise impact that shows the number of aircraft noise events above 70 decibels during a period.
Name-code designators		Short standardised names for geographical coordinates.
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). www.nats.co.uk
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 nor covered by the processes described in this guidance.

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Term	Abbreviation	Description
Non-directional beacon	NDB	Radio transmitter at a specified location used by aircraft as a navigational aid.
Non-governmental organisation	NGO	An organisation that is neither a part of a government nor a conventional for-profit business.
Notified airspace design		Details of airspace structure and procedures published in the UK aeronautical information publication.
NOx	Oxides of nitrogen	Term used to describe nitric oxide (NO), nitrogen dioxide (NO ₂) and other oxides of nitrogen.
One-off costs		Costs that are incurred only once as part of a project, for example new infrastructure. One-off costs may be either sunk or recoverable costs.
Ongoing costs		Costs that are incurred on an ongoing basis as part of a project, for example fuel costs or staffing costs.
Operational air traffic	OAT	Military aircraft undertaking Ministry of Defence activities.
Overflight		For the purposes of airspace changes, overflight is defined according to the CAA's report, CAP 1498 which outlines a measurement based upon community perception. It does not portray noise impacts. www.caa.co.uk/cap1498
Overflight contours		Contours created using the CAA's overflight metric. They are similar in concept to noise contours but differentiate areas according to the frequency with which they are overflown.
Performance-based navigation	PBN	The broad range of technologies that reflect the replacement of a navigation system based on ground-based navigation aids with one that relies more on the performance and capabilities of equipment on board the aircraft, including satellite-based navigation aids and area navigation procedures capability.
Permanent and planned redistribution of air traffic	PPR	A type of change to operational use of airspace that results in a redistribution of noise. Covered as a Tier 2 airspace change.

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Term	Abbreviation	Description
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.
Primary noise metrics		Those metrics used by the change sponsor to determine significant impacts of noise, for example L_{Aeq} contours, and which will be the primary impact metrics used by the CAA when considering the anticipated noise impacts of a proposed airspace change.
Prohibited area		An area of airspace of defined dimensions within which the flight of aircraft is prohibited.
Public Evidence Session		An opportunity for stakeholders other than the sponsor to provide the CAA with views on an airspace change proposal directly.
Radio mandatory zone	RMZ	Defined airspace structure in which the carriage and operation of radio equipment is mandatory unless previously agreed.
Radio telephony coverage	R/T coverage	The volume of airspace that a radio frequency emanating from a particular transmitter/receiver site can operationally cover.
Real prices		Real price or constant prices are prices adjusted for general price level changes over time, i.e. inflation. Real price are displayed in a base year such that a statement may say the data is 'in 2017 prices'. This means that all the prices shown are as they would cost in 2017.
Relief		Unplanned period where overflight or noise impact are reduced or halted.
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).
Required navigation performance	RNP	Type of performance-based navigation. See Performance Based Navigation.

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Term	Abbreviation	Description
Respite		Planned and notified periods where overflight or noise impact are reduced or halted to allow communities undisturbed time.
Restricted area		An area of airspace of defined dimensions within which the flight of aircraft is restricted in accordance with certain conditions.
Revealed preference		The inference of willingness to pay for something for which there is no market price by examining consumer behaviour in a similar or related market.
Safety buffer requirement		CAA policy setting out requirements for a safety buffer between classes of airspace.
Secondary noise metrics		Those metrics used by the change sponsor to determine non-significant impacts of noise, for example Nx contours, and which will be the secondary impact metrics used by the CAA when considering the anticipated noise impacts of a proposed airspace change.
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.
Single European sky air traffic management research	SESAR	European project which concerns the roll-out of new technology across the European Union.
Single European sky regulations		Regulations which underpin the SES process.
Sound exposure level	SEL	A metric for the duration and intensity of noise generated by a single aircraft at the measurement point.
Sound exposure level footprints		Contour map which shows the noise impact of individual or multiple aircraft over an area over a period of time.
Special visual flight rules	SVFR	See Flight Rules.

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Term	Abbreviation	Description
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		An interested third party in an airspace change proposal – neither the change sponsor nor the CAA or DfT.
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 instrument departure	SID	Published flight procedures followed by aircraft on an Instrument Flight Rules (IFR) flightplan 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.
Stated preference		The inference of willingness to pay for something for which there is no market price, derived from people's responses to questions about preferences for various combinations of situations and/or controlled discussion groups.
Terminal control area		Area of controlled airspace surrounding an airport.
Terminal manoeuvring area	TMA	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 and therefore there is no accepted metric by which it can be measured. 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

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Term	Abbreviation	Description
Transponder mandatory zone	TMZ	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.
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 control service.
Upper air traffic services route	Upper ATS route	An air traffic route notified in the UK aeronautical information publication in upper airspace.
Upper airspace		Controlled airspace above Flight Level 245 (a nominal altitude of 24,500 feet).
Upper information region	UIR	Flight information region in upper airspace.
VHF Omni Range and Distance Measuring Equipment	VOR/DME	Combination of two types of radio beacon placed together and used in the UK to provide an en-route navigation service.
Visual flight rules	VFR	See Flight Rules.
Visual reference point	VRP	Fixed point on land or sea used by pilots to fix position of their aircraft in relation to their route.
Willingness to accept		The amount that someone is willing to receive or accept to give up a good or service.
World geodetic system coordinates	WGS84 coordinates	Standardised global coordinate system used in navigation and Global Positioning Systems (GPS).