

Proposed Criteria for Assessing and Accepting the Airspace Change Masterplan

CAP 1887

https://consultations.caa.co.uk/policy-development/airspace-change-masterplan-criteria/supporting_documents/CAP1887%20Proposed%20Criteria%20for%20Assessing%20the%20Airspace%20Change%20Masterplan.pdf



Published by the Civil Aviation Authority, February 2020

Civil Aviation Authority
Aviation House
Beehive Ring Road
Crawley
West Sussex
RH6 0YR

You can copy and use this text, but please ensure you always use the most up to date version, use it in context so as not to be misleading, and credit the CAA.

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

Revision history

This edition was first published in February 2020.

Typographical error in third bullet of para 82 corrected March 2020.

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

Contents

Contents	1
Executive Summary	3
Summary of the Acceptance Criteria	5
We want to hear from you	9
What we are seeking views on.....	9
What we are not seeking views on.....	9
Questions we are asking during public engagement on this draft document:	9
How to share your views	10
Next steps.....	10
Chapter 1	11
Introduction to the Airspace Change Masterplan.....	11
What is the Airspace Modernisation Strategy?.....	11
What is the purpose of the Airspace Change Masterplan?.....	12
Who will create the Masterplan?	13
Iteration One of the Masterplan.....	15
How does airspace change through the Masterplan differ from the CAP 1616 airspace change process?	16
Who is the decision-maker?.....	16
Chapter 2	18
Assessment and Acceptance Criteria.....	18
What is the distinction between assessment and acceptance?	18
What is in scope of acceptance of the Masterplan (and what is out)?	18
How will the acceptance criteria apply to multiple iterations of the Masterplan? ...	20
Iteration Two	22
Iteration Three	23
Dependencies, conflicts, trade-offs and solutions.....	23
Analysis of potential implications.....	23
Chapter 3	25
Policy Expectations.....	25
What are the agreed policy parameters?	25
How will these be applied to accepting the Masterplan?	26

Chapter 4	28
Engagement Considerations	28
Engagement with representative groups	28
Wider public engagement	29
Potential coordination with CAP 1616 consultations	29
Chapter 5	31
Next steps for finalising this document	31
Consultation with the Secretary of State for Transport	31
Key dates for assessing and accepting Iteration Two	31
Appendix	32

Executive Summary

1. In 2018, the UK Civil Aviation Authority (**CAA**) published an Airspace Modernisation Strategy (**AMS or the CAA Strategy**) to initiate the major overhaul of a key piece of national infrastructure. The CAA Strategy responds to the Government directing the CAA to “prepare and maintain a co-ordinated strategy and plan for the use of UK airspace up to 2040, including modernisation”.¹
2. The CAA Strategy sets out a new shared objective between the CAA and the Government for modernising airspace which is to deliver quicker, quieter and cleaner journeys and more capacity for the benefit of those who use and are affected by UK airspace. This will mean more choice and value for consumers, allowing airlines to add new flights, reducing flight delays and enhancing global connections that can help boost the UK economy, while continuing to improve safety standards and being more environmentally friendly by minimising the negative impacts of noise on local communities and minimising carbon emissions per flight.
3. Airspace modernisation is also expected to improve access to airspace for all users, ranging from General Aviation users such sports and recreational flyers, to commercial traffic or military operations, by enabling greater integration of different airspace user groups. Coupled with the adoption of new technology by existing airspace users, airspace modernisation will also help to integrate the operations of newer airspace users like drones and spacecraft.
4. Airspace modernisation is expected to support the Government’s objective to increase capacity, including through the development of a northwest runway at Heathrow as outlined in the Airports National Policy Statement, and other airports making best use of their existing runways subject to environmental issues being addressed.²
5. The CAA’s 2018 Airspace Modernisation Strategy replaced the CAA’s 2011 Future Airspace Strategy and sets out the ends, ways and means of modernising airspace through 15 initiatives that will upgrade the design, technology and operations of airspace, initially focusing on the period until the end of 2024. The initiatives are detailed in the **Appendix**.
6. Of these 15 initiatives, two are known as Future Airspace Strategy Implementation – South, and Future Airspace Strategy Implementation – North (known as **FASI-South** and **FASI-North** respectively). These are complex airspace design programmes that require coordination between the different ‘sponsors’ of airspace

¹ The Secretary of State has given the CAA the function to approve changes to the design of airspace in the [Civil Aviation Authority \(Air Navigation\) Directions 2017](#), as amended by the [Civil Aviation Authority \(Air Navigation\) \(Amendment\) Directions 2018](#) and the [Civil Aviation Authority \(Air Navigation\) \(Amendment\) Directions 2019](#).

² [Section 1.15](#), Airports National Policy Statement: new runway capacity and infrastructure at airports in the South East of England, June 2018.

changes. These sponsors are the airports and NERL (NATS En Route plc, which manages upper airspace and its design).

7. The FASI-South airspace change programme is particularly complicated due to the number of changes necessary to achieve modernisation over the South of the United Kingdom. The CAA and the Department for Transport (**DfT**), have commissioned NERL to lead the FASI-South programme to create a coordinated plan for airspace changes in the South of the UK (or **Masterplan** for short). NERL has been asked to establish an impartial team known as the Airspace Change Organising Group (**ACOG**) to carry out this task. In due course the Masterplan will identify the individual airspace design changes that will need to be developed to achieve the necessary modernisation.
8. The purpose of the Masterplan is to set out where airspace change could be taken forward to provide benefits and to consider potential conflicts, trade-offs and dependencies. The Masterplan does not set the detail of individual airspace designs or solutions. It will include a programme plan for the *development* of the individual changes that together will make up the Masterplan as well as an implementation plan for those changes.
9. It will identify where any airspace changes would be needed to deliver a range of benefits, including to reduce noise, deliver air quality or fuel efficiency benefits or where more direct routes are possible that could reduce controlled airspace.
10. ACOG has proposed an iterative approach to the development of the Masterplan, which recognises that different information and levels of detail will be available at different points as the plan develops.
11. The Masterplan which ACOG produces will be formally assessed by the CAA and DfT as co-sponsors and, subject to that assessment, accepted into the CAA Strategy. Acceptance of the Masterplan into the CAA Strategy makes the Masterplan, together with CAP 1616, the legal basis against which the individual airspace change decisions are made by the CAA.³ Throughout the development of the various iterations of the Masterplan, the co-sponsors need to be reassured that the conflicts and trade-offs associated with airspace redesign are identified in the Masterplan, and that the process ACOG coordinates to resolve those conflicts is transparent, fair and aligns with relevant policy. Once the co-sponsors are reassured on these points, the Masterplan can be 'accepted' into the CAA Strategy and be relied upon to inform airspace decisions taken to achieve airspace modernisation. It may also be used by the CAA when it gives advice to the Secretary of State for Transport.
12. The CAA has prepared this draft document to set out the proposed requirements on ACOG when preparing the Masterplan and the analysis the co-sponsors will undertake before deciding whether to accept the Masterplan. The analysis seeks to determine whether the commission for the Masterplan is being met, and that the Government's policy objectives are being delivered.

³ Direction 5, 2017 Air Navigation Directions.

13. **The proposed criteria and expectations covered in this document are to inform assessment and acceptance of the Airspace Change Masterplan. It is not a replacement for the CAP 1616 airspace change process which must still be followed for all individual airspace change proposals.⁴**

Summary of the Acceptance Criteria

14. There are three components to the process of assessing and accepting the Masterplan, and these are summarised over the next three pages.

⁴ [CAP1616: Airspace change](#): Guidance on the regulatory process for changing the notified airspace design and planned and permanent redistribution of air traffic, and on providing airspace information, January 2020.

1

NERL was commissioned to identify where and why airspace changes would be needed, based on the following considerations:

Identify where airspace changes could be developed in the South of the UK in light of:

- forecast growth in demand for aviation across all sectors and the required airspace capacity to accommodate that growth;
- airspace bottlenecks where delays to consumers could be alleviated by capacity;
- areas where planned development on the ground such as new runways will require new airspace designs;
- areas where more direct routes are possible that could, for example, reduce controlled airspace.

Identify other changes that may be required to deliver one or more of the following benefits:

- where airspace changes are needed to deliver a safety benefit, for example, changes that ensure route separation;
- where airspace changes can reduce noise (more specifically, reduce the total adverse effects of noise, as set out in the Air Navigation Guidance 2017);
- where airspace changes can deliver air quality or fuel efficiency benefits;
- where airspace changes are needed to allow improved access to airspace for all users, for example where the existence of controlled airspace is no longer justified;
- where airspace changes are needed to enable the military to fulfil their training requirements and national security functions;
- where airspace changes are needed to introduce new technology, for example the introduction of performance-based navigation.

Also identify:

- the operational concepts required to deliver these changes and their level of maturity;
- the set of assumptions on which the proposed changes are based and are dependent;
- the key risks associated with delivering the plan and how they could be mitigated;
- the recommended coherent sequence of individual or modules of changes against the evaluated alternatives;
- the preferred timescale for their adherence against each step of the CAA's CAP 1616 process and subsequent implementation;
- the party responsible for taking each individual airspace change forward;
- the interdependencies between individual changes;
- the degree of commitment offered by each individual party.

The co-sponsors (DfT and the CAA) would also like to know the minimum number of changes that are necessary to ensure that major airspace projects (e.g. to accommodate new runway capacity) are viable.

2

The Masterplan must include the following information, which will be considered by the CAA to decide whether to accept the Masterplan:

A programme plan of airspace changes including a list of airspace changes, in specific volumes of airspace and with identified sponsors and anticipated timings and dates.

This is described further in Chapter 2.

Information about the dependencies between changes in the plan. A dependency might mean that there is a **conflict** between design options of two or more sponsors (for example they both seek to use the same airspace), or that they **enable** one another. It might be that sponsors need to work together to solve a conflict between two or more of their potential design options, or to improve the current airspace structure.

Information on trade-offs. The choice or decision to resolve a conflict is known in this document as a 'trade-off'. It can arise between two sponsors of airspace changes wanting to use the same airspace, or between two objectives of an airspace change proposal such as achieving a noise reduction and achieving growth in capacity. Where there could be potential trade-offs on Government policy objectives that could be delivered by different solutions, the CAA would want to understand the potential consequences as soon as possible.

Information about the potential solutions to dependencies. The range of potential solutions to dependencies might include decisions that require a trade-off to be made, such as:

- the sequencing of proposed changes;
- moving routes vertically, laterally or the time/day they are used to resolve a conflict;
- a sponsor no longer pursuing one of its routes to resolve a conflict;
- other potential solutions identified by ACOG and sponsors.

Information about potential implications of the proposed solutions at a system level. It is important that sponsors work together, so that the potential implications of their dependent designs can be understood by impacted stakeholders, and will, together, deliver policy objectives. Potential implications may include:

- where dependencies will lead one or more change to have knock-on effects on other airfields, airspace users, including General Aviation, or traffic;
- where the resolution of a conflict will mean one sponsor or one policy objective will need to be traded-off against another (or others) in order to resolve the conflict;
- where those impacted by airspace change are likely to be affected by multiple changes.

Dependencies, potential solutions and potential implications are described further in Chapter 2.

The CAA needs the information listed above because we will need to be confident that public government policy and the CAA's Airspace Modernisation Strategy are adhered to in the trade-off decisions taken to determine the Masterplan.

This is described further in Chapter 3.

Information about stakeholder engagement, including how sponsors are working together, solutions they are considering together that affect stakeholders, and the degree of commitment from sponsors. At an appropriate stage in the Masterplan process, a public engagement exercise should be undertaken.

This is described further in Chapter 4.

In deciding whether to accept the Masterplan, the CAA will review all the information listed here and any other documents for assessment and acceptance described in this document. The CAA may ask for additional detail or supporting information to help inform whether to accept the Masterplan. ACOG is to keep the CAA informed on how it intends to present the required information, so a decision can be made on the suitability of it.

3**The format of the information the CAA will review is for ACOG to determine, providing the CAA can use it for the following regulatory activities:**

For any proposed airspace change in the United Kingdom, the CAA will need to decide whether it conflicts with the Masterplan. For example, if a change is identified in the Masterplan as being an enabler for, or dependent with, other changes that have been identified following the commissioning requirements, this will be considered in CAA gateway assessments and decisions under CAP 1616. If a change conflicts with the Masterplan and could thereby undermine the modernisation programme, the CAA will have to consider refusing it.

For proposed changes listed in the Masterplan at **Stage 2 Gateways in CAP 1616**, the CAA will ensure that the individual proposal identifies any dependencies with any other changes identified in Iteration Two of the Masterplan. If there are conflicts, the CAA will want to understand whether and how the sponsors are working together on potential solutions to the conflicts, and what the implications of these solutions may be (for example a knock-on effect on other airfields, airspace users, including General Aviation, or a policy objective will need to be traded-off against another). This should be reflected in both sponsors' stage 2 materials, and the Masterplan will help the CAA look for this.

If one of the dependent sponsors is not yet at stage 2, the CAA will want reassurance in the Masterplan as to why the dependent sponsor does not need to be on the same timeline and that the materials it produces later will work within the scope of the Masterplan. The CAA will need to understand the risks in the Masterplan – including the consequences of one sponsor progressing through stage 2 ahead of dependent sponsors – and the degree of commitment offered by each sponsor. If a later dependent proposal delays or conflicts with one that has already passed through a gateway, the CAA will consider how best to mitigate the problem, including through considering the use of the new legislative powers currently being debated in Parliament in the [Air Traffic Management and Unmanned Aircraft Bill](#).

For proposed changes listed in the Masterplan at **Stage 3 Gateways**, the CAA will want to know that the designs the sponsors will consult on will work together to deliver a modernised system. This means that dependencies must be clear and solutions developed, and that cumulative impacts are explained in an accessible consultation for stakeholders. This means that before the CAA will consider accepting the third iteration of the Masterplan, the CAA will want evidence that a public engagement exercise has taken place to gather feedback on the proposed system-level solutions in the Masterplan including any trade-off decisions made, and to consider any potential gaps in or productive additions to the Masterplan. Further detail on the solutions and expected impacts will be necessary so the CAA can check that the outcomes align with the policy outcomes set by government. This will require greater alignment between dependent sponsors, and evidence of that alignment in the Masterplan.

The criteria and expectations covered in this document are to inform assessment and acceptance of the Airspace Change Masterplan. It is not a replacement for the CAP 1616 process which must still be followed for all individual airspace change proposals.

We want to hear from you

15. Your views are being sought over a four-week engagement period to strengthen the proposed criteria as outlined in Chapters 2 to 5, including your feedback on whether we are asking the right questions of ACOG as it develops iterations of the Masterplan.
16. This draft criteria document concerns how the CAA proposes to undertake regulatory scrutiny over the development of the Masterplan, including ensuring it delivers Government policy.
17. It is important to note that acceptance of the Masterplan is a separate regulatory decision-making process to that applied by the CAA to airspace change decisions. The individual airspace change proposals must still be assessed in accordance with CAP 1616, a process which requires each airspace change proposal sponsor to conduct a detailed public consultation on the specific changes to the airspace design that they are proposing to make.

What we are seeking views on

18. We are seeking your views on:
 - the proposed approach for assessing and accepting the Masterplan into the CAA Strategy as outlined in Chapters 2 to 5 of this document
 - commentary on the proposed criteria and evidence to inform acceptance of the Masterplan.

What we are not seeking views on

19. We are not seeking the following:
 - views on technical or operational concepts about how aircraft will fly or other aspects of airspace design. Whether potential designs are technically feasible will be a regulatory decision to be made in accordance with the CAP 1616 process
 - contributions of potential design options for individual airspace changes to be included within the Masterplan. There will be an opportunity to contribute these as the Masterplan and the individual airspace changes in it develop
 - comments on Government policy, as this derives from section 70 of the Transport Act 2000 and includes the primary duty to maintain a high standard of safety and otherwise to ensure the most efficient use of airspace, satisfy the requirements of operators and owners of all cases of aircraft and take into account any guidance on environmental objectives given to the CAA by the Secretary of State.

Questions we are asking during public engagement on this draft document:

20. We are using the dedicated engagement portal on the CAA website to ask the following questions during the four-week public engagement:
 - do you have any general comments you would like to share?
 - are these the right criteria to enable acceptance? If not, what is missing?

- do you have any comments on the engagement we are asking ACOG to undertake?
- are there examples of where further policy may be required to guide trade-off decisions? Please be specific, preferably with a local example.

How to share your views

21. We are asking for your feedback through the engagement portal on the CAA website: <https://consultations.caa.co.uk/policy-development/airspace-change-masterplan-criteria>
22. For any queries on how to access the portal, please email airspace.modernisation@caa.co.uk by the closing date of 27 March 2020. We cannot guarantee that any views submitted on these draft criteria after that date will be taken into account.

Next steps

23. We will take your views into account and, where we feel it necessary to do so, make modifications to the draft criteria. Responses to the public engagement will be published on the consultation portal, with identifying information removed where requested.
24. We will publish the outcome of the exercise and the final criteria for Assessing and Accepting the Airspace Change Masterplan in the summer of 2020, after which time it will become operational for the purposes of assessing and accepting future iterations of the Masterplan.
25. As this document will explain there will be more than one iteration of the Masterplan. Iteration One was a high-level programme plan for airspace changes in the south of England and was assessed only, without being considered for acceptance. The co-sponsors intend to publish it soon.
26. Iteration Two of the Masterplan, once accepted and incorporated into the CAA Strategy, will be used to inform the second (Develop and Assess) gateway in the individual and parallel CAP 1616 processes for airspace change. This means no FASI-South airspace change proposal will move through gateway 2 of the CAP 1616 process until the CAA has accepted Masterplan: Iteration Two. To pass through CAP 1616 gateway 2 each individual airspace change proposal will need to demonstrate appropriate coordination with other relevant proposed airspace changes and this will be demonstrated and regulated by CAA with reference to the accepted Iteration Two of the Masterplan.
27. Iteration Three will be used to inform gateway 3 of the CAP 1616 process. This means no FASI-South airspace change proposal will move through gateway 3 of the CAP 1616 process until the CAA has accepted Iteration Three of the Masterplan.

Chapter 1

Introduction to the Airspace Change Masterplan

What is the Airspace Modernisation Strategy?

28. The Government issues Air Navigation Directions to the CAA, which set out our role in airspace.⁵ As a result of the Directions, the CAA must ensure there is a strategy and plan for modernising airspace up to 2040, consult the Secretary of State in preparing it, and report annually on progress. This is in addition to the CAA's airspace regulatory role that includes deciding whether individual proposals to change airspace designs can be made.
29. The Airspace Modernisation Strategy (AMS), referred to in this document as the **CAA Strategy**, was published in December 2018, building on the foundations of the earlier Future Airspace Strategy and responding to more recent policy developments (including the Airports National Policy Statement (ANPS)⁶ that concluded more capacity was needed in the south-east of the UK which should be delivered by delivering extra capacity from the existing infrastructure and building a third runway at Heathrow, and the increasing prevalence of drones).
30. The CAA Strategy was developed through close collaboration between the CAA and the DfT. Both the objective for airspace modernisation, and the new governance structure for developing it, including descriptions of all the groups and roles, are summarised in the CAA Strategy but are jointly owned by both organisations.⁷
31. The CAA Strategy identifies the ends, ways and means for airspace modernisation. The *ends* (what modernised airspace will look like in 2040) are the policy outcomes or objectives set by Government or from international obligations. The CAA sets the *ways* through 15 initiatives, each of which supports the introduction of new airspace design, operational concepts or technologies that will deliver modernisation, and will usually be implemented by the industry.
32. The resources that will be needed to deliver modernisation (i.e. the *means*) will be identified through plans which are delegated to the entities accountable for delivery. For most initiatives this is an industry body; for many it is NERL, including for the development of the Masterplan. For the Masterplan, the CAA and DfT asked NERL to set up a separate impartial team to coordinate between NERL (as an airspace change sponsor) and the individual airports who must sponsor the

⁵ The Secretary of State has given the CAA the function to approve changes to the design of airspace in the [Civil Aviation Authority \(Air Navigation\) Directions 2017](#), as amended by the [Civil Aviation Authority \(Air Navigation\) \(Amendment\) Directions 2018](#) and the [Civil Aviation Authority \(Air Navigation\) \(Amendment\) Directions 2019](#).

⁶ Section 1.15, Airports National Policy Statement: new runway capacity and infrastructure at airports in the South East of England, June 2018.

⁷ CAP 1711, [Airspace Modernisation Strategy](#), published by the CAA in December 2018 at [1.31].

airspace changes in order to deliver airspace modernisation. This team is known as the Airspace Change Organising Group (**ACOG**).

33. The objective of the CAA Strategy is to deliver quicker, quieter and cleaner journeys and more capacity for the benefit of those who use and are affected by UK airspace.
34. This is to be achieved within the following parameters:
 - create sufficient airspace capacity to deliver safe and efficient growth of commercial aviation
 - progressively reduce the noise of individual flights, through quieter operating procedures and, in situations where planning decisions have enabled growth which may adversely affect noise, require that noise impacts are considered through the airspace design process and clearly communicated
 - use the minimum practicable volume of controlled airspace consistent with safe and efficient air traffic operations
 - in aiming for a shared and integrated airspace, facilitate safe and ready access to airspace for all legitimate classes of airspace users, including commercial traffic, General Aviation and the military, and new entrants such as drones and spacecraft
 - not conflict with national security requirements (temporary or permanent) specified by the Secretary of State for Defence.

What is the purpose of the Airspace Change Masterplan?

35. The purpose of the Masterplan is to set out where airspace change could be taken forward to support delivery of the objectives of the CAA Strategy, to consider potential conflicts⁸ between individual airspace changes, to determine trade-offs to resolve those conflicts⁹, identify and coordinate dependent airspace change proposals¹⁰, and by so doing set out a workable programme and implementation plan to deliver the objectives of modernisation. This will be achieved over a number of iterations of the Masterplan. This document sets out what will be achieved in each iteration and how this relates to the progression of the individual airspace change proposals within the plan through their requisite CAP 1616 processes. The Masterplan will not include the detail of individual airspace designs or solutions.
36. Two of the most significant initiatives set out in the CAA Strategy focus on the redesign of some of the busiest portions of the UK's airspace structure. These are essentially the roads in the sky, some of which have not been fundamentally re-designed for many decades. These initiatives are known as FASI-South and FASI-North (Future Airspace Strategy Implementation South and North). The responsibility for the re-design of the airspace and routes in these initiatives is split

⁸ A **conflict** can be described as two or more airspace change proposals that cannot both proceed in their proposed form (i.e. they intersect with one another in a way which is not technically possible for both to proceed).

⁹ A **trade-off** is the choice or decision to resolve a conflict and can be between two sponsors for an airspace change, or two objectives (i.e. achieving noise reduction and achieving fuel efficiency).

¹⁰ A **dependency** can be described as two or more airspace change proposals that are linked together either because there is a conflict in their design options that must be solved, or they enable each other at a system level.

mainly between airports (for routes close to airports) and NERL (for upper airspace routes connecting airports).

37. To achieve this re-design, a plan (the “**Masterplan**”) is required that identifies all the places in which airspace design changes are required and the inter-dependencies between them. The Masterplan is needed so that the CAA can take decisions about what changes are required in the best interests of the overall aviation network and the wider public, and not just in the interests of one individual airport or air navigation service provider.
38. The Masterplan is strategically important for coordinating the delivery of many of the initiatives under the Airspace Modernisation Strategy. Not only does it include the coordinated design changes for terminal airspace in the South (initiative 4 of the AMS) but it will, eventually, be expanded across the UK to include the terminal airspace redesign in northern England and Scotland (initiative 5 of the AMS). Some of the changes in the Masterplan will also enable delivery of new operations such as performance-based navigation (AMS initiatives 7,8 and 14).
39. A Masterplan for the South of the UK is required as a matter of urgency, but the final assessment and acceptance criteria (or later versions of it, if required) will apply to other phases of the airspace modernisation programme which will eventually be extended to cover the rest of the UK.
40. The Masterplan will be used to inform two types of decisions:
 - the CAA is the regulatory decision-maker for airspace changes. Airspace changes must be developed and proposed by a change sponsor in accordance with the CAA’s airspace change process, as set out in CAP 1616. The CAA must make airspace design change decisions in accordance with its statutory strategy and plan for airspace modernisation. For the CAA to know whether a proposal conflicts with, or supports, airspace modernisation it must review it against the strategy and plan. This means that the Masterplan (or aspects of it) must be accepted as an integral part of the CAA’s Strategy.
 - Parliament is considering a Bill that will create new powers for the Secretary of State to compel development of an airspace change if in their view it ‘*will assist in the delivery of the CAA’s airspace strategy*’. (The Secretary of State may choose to delegate this power to the CAA.) When determining whether to use the power, the Secretary of State will consider advice from the CAA. This advice will take into account the Masterplan, and how critical the airspace change in question is in contributing to overall airspace modernisation. To that end, the Masterplan (or aspects of it) must be accepted by the co-sponsors to effectively inform decisions to compel an organisation to prepare and/or submit an airspace change proposal.¹¹

Who will create the Masterplan?

41. The CAA and DfT have commissioned NERL to prepare the Masterplan, currently for the South of the UK. CAA and DfT agree that it is in the public interest for

¹¹ Committee Stage in the House of Lords for The Air Traffic Management and Unmanned Aircraft Bill 2019-20 commenced on 10 February 2020. The progress of the Bill can be monitored here.

NERL to apply its expertise and experience in fulfilling the roles envisaged as the provider of UK en route air traffic control services.

42. Given the large number of parties involved in contributing to the Masterplan, including many airports and NERL itself for the upper and lower airspace, the CAA has asked NERL to put in place some additional governance and support arrangements for the creation of the Masterplan. This has led to the creation of the Airspace Change Organising Group (ACOG). ACOG will create the Masterplan. ACOG will operate as an impartial team within NERL but with an additional layer of governance through a cross-industry Steering Committee to guide it to act impartially and to facilitate the production of a Masterplan that is the product of input from all relevant airports and is in the interests of the whole airspace network and its stakeholders, and the wider public.
43. NERL has been commissioned to set up ACOG to prepare a Masterplan that meets the following criteria:
 - A. *Identifies where airspace changes could be developed in the South of the UK considering:*
 - *forecast growth in demand for aviation across all sectors and the required airspace capacity to accommodate that growth;*
 - *airspace bottlenecks where delays to consumers could be alleviated by capacity;*
 - *areas where planned development on the ground such as new runways will require new airspace designs;*
 - *areas where more direct routes are possible that could, for example, reduce controlled airspace.*
 - B. *Identifies other changes that may be required to deliver one or more of the following benefits:*
 - *where airspace changes are needed to deliver a safety benefit, for example, changes that ensure route separation;*
 - *where airspace changes can reduce noise (more specifically, reduce the total adverse effects of noise, as set out in the Secretary of State's guidance to the CAA on its environmental duties known as the Air Navigation Guidance 2017);*
 - *where airspace changes can deliver air quality benefits or reduce fuel burn;*
 - *where airspace changes are needed to allow improved access to airspace for all users, for example where the existence of controlled airspace is no longer justified;*
 - *where airspace changes are needed to enable the military to fulfil their training requirements and national security functions;*
 - *where airspace changes are needed to introduce new technology, for example the introduction of performance-based navigation.*
 - C. *Also identifies:*
 - *the operational concepts required to deliver these changes and their level of maturity;*

- *the set of assumptions on which the proposed changes are based and are dependent;*
- *the key risks associated with delivering the plan and how they could be mitigated;*
- *the recommended coherent sequence of individual or modules of changes against the evaluated alternatives;*
- *the preferred timescale for their adherence against each step of the CAA's CAP 1616 process and subsequent implementation;*
- *the party responsible for taking each individual airspace change forward;*
- *the interdependencies between individual changes;*
- *the degree of commitment offered by each individual party.*

D. The CAA would also like to know the minimum number of changes that are necessary to ensure that major airspace projects (e.g. to accommodate new runway capacity) are viable.

44. By contributing to the objectives of the CAA Strategy, the Masterplan will also therefore set out the changes necessary for delivery of the Airports National Policy Statement to increase capacity in the south-east of the UK, which includes the implementation and operation of Heathrow's third runway. Without the Masterplan, it will not be possible to know which other airports may need to change their airspace arrangements to facilitate the most efficient introduction of additional runway traffic at Heathrow, and how they can do so while also delivering other objectives (for example, their own growth, or noise reduction, etc). The Masterplan will also include NERL's network-level upper airspace change which is also necessary to facilitate Heathrow's new traffic and the changes at other airports.

Iteration One of the Masterplan

45. The first iteration of the masterplan was sent to the co-sponsors (CAA and DfT) on 7 August 2019. It included:
- a high-level programme plan for airspace changes in the south of England (known as FASI-South)
 - information about new operational concepts that NERL and the airports propose to introduce. Some of this was technical information that we might expect to see in the individual airspace change, rather than the Masterplan
 - new modelling to help identify (a) areas of underused controlled airspace in the south east and (b) noise heat maps, to help sponsors identify opportunities that may be included in designs.
46. A co-sponsor letter of 30 July 2019 asked that future iterations of the Masterplan include:
- dependencies, conflicts and trade-offs (of those conflicts) between airspace changes. As the letter noted, NERL's view was that identification of dependencies and conflicts will not be available until sufficient airports have completed Stage 2b of the CAA's CAP 1616 airspace change process, by when a comprehensive list of design options has been prepared for each change

- other changes, in addition to those proposed as part of FASI-South that may deliver other benefits including noise alleviation and access for other users¹²
 - engagement with stakeholders listed in the airspace modernisation governance structure (see CAP 1711b¹³).
47. Iteration One of the Masterplan and the CAA's and DfT's feedback will be published shortly.

How does airspace change through the Masterplan differ from the CAP 1616 airspace change process?

48. The process for assessing and accepting the Masterplan is not a replacement for the CAP 1616 process. Rather, both will need to be relied on by regulatory decision makers for making airspace change decisions to achieve airspace modernisation.
49. The CAA's airspace change decision-making process, as set out in CAP 1616, is an established regulatory process which is designed to assess *individual* airspace change proposals. It is used by airspace change 'sponsors' such as airports and is overseen by the Airspace Regulation team at the CAA.
50. The volume of interrelated airspace change proposals required to modernise airspace means that a strategic coordinating mechanism is required. So, while the CAP 1616 considerations are relevant at an individual level, consideration must *also* be given to how all the proposed changes interact at a programme level through the Masterplan.

Who is the decision-maker?

51. The DfT and CAA are co-sponsors for airspace modernisation. This role means working together towards delivering the shared objective for the modernisation of UK airspace. There are two distinct roles within this co-sponsor arrangement worth noting:
- the **Secretary of State and DfT** will develop and own national policy, including the strategic case for airspace modernisation and the objectives it must deliver; the Secretary of State also sets the CAA's role in the Air Navigation Directions
 - the **CAA** will develop and maintain an Airspace Modernisation Strategy (referred to in this document as the CAA Strategy) and oversee and report annually on its delivery.
52. Together, acting as co-sponsors, the CAA and DfT work towards delivering the shared objective for the modernisation of UK airspace; commission specific projects necessary for airspace modernisation; and agree deliverables and outcomes and set parameters for delivery groups tasked with planning and delivering modernisation projects.

¹² Note that since the letter was drafted on 30 July 2019, the CAA has launched the **2019-2020 Airspace Classification Review** which is being led by the CAA and closes on the 3 March 2020. The CAA is consulting to identify volumes of controlled airspace in which the classification could be amended to better reflect the needs of all airspace users on an equitable basis. More detail can be found [here](#).

¹³ [Governance Annex to the Airspace Modernisation Strategy](#)

53. The Masterplan to deliver specific initiatives in the the CAA Strategy has been tasked to NERL and ACOG, as explained earlier in this document.
54. The Air Navigation Directions require the CAA to consult the Secretary of State on the strategy and plan for airspace modernisation. This means that before accepting the Masterplan into the Airspace Modernisation Strategy, the CAA will consult with the DfT and the Secretary for State. In this way, the co-sponsors both have a role in accepting the Masterplan.¹⁴
55. If the CAA finds that the Masterplan demonstrates the need for trade-offs between different sponsors or different policy objectives (see Chapter 3), and the CAA finds that the existing policy framework does not offer clarity on how to resolve those trade-offs, the CAA will defer to the Secretary of State.
56. In order to implement the Masterplan, individual airspace change proposals will need to be developed by sponsors and then approved by the CAA. Those CAP 1616 decisions will be informed in some respects by accepted version of the Masterplan as discussed in this document.

Question for public engagement:

- Do you have any general comments you would like to share?

¹⁴ To the extent it is necessary to hold a view on a technical aspect of any airspace change proposal under consideration and identified in the Masterplan in order to accept Iteration 3 of the Masterplan (as discussed later in this document), those views will be made in accordance with the CAP 1616 process.

Chapter 2

Assessment and Acceptance Criteria

What is the distinction between assessment and acceptance?

57. The purpose of assessing the Masterplan (or assessing work in progress towards the Masterplan) is to give the co-sponsors (DfT and CAA) confidence that our commission is in the process of being delivered.
58. **Assessment** is an ongoing process and can include both formal and informal feedback on multiple versions. We will need to be confident that work is progressing on schedule without necessarily committing to acceptance of the product. We may therefore assess iterations of the Masterplan and work in progress without accepting it.
59. In assessing the Masterplan, we will review the content and analysis to check whether it answers the questions in our commissioning letters and in the final version of this document and check whether it accords with government policy and strategy. We may offer feedback on areas in which we would expect to see more detail or in which we believe further work will be necessary in the next iteration, as we move towards a version of the Masterplan that we can consider for acceptance.
60. As mentioned previously, there will be more than one iteration of the Masterplan. In order that an accepted form of the Masterplan forms part of the CAA Strategy to help inform various gateway decisions that will need to be taken for each individual airspace change, more than one iteration of the Masterplan will be formally accepted into the CAA Strategy.
61. We may assess supporting technical work that is developed by ACOG in the creation of the Masterplan, such as the operational concepts or assumptions. This means operational concepts may be reviewed by relevant CAA regulatory experts who may in the future need to consider technical work as part of one or more of the CAP 1616 airspace change proposals needed to implement the Masterplan. This will not form part of our acceptance of the Masterplan.
62. To **accept** the Masterplan, on the other hand, means that specific criteria must be considered and met in order for the CAA to accept the Masterplan into the CAA's Strategy so that certain regulatory or enforcement decisions can be made that aid the delivery of airspace modernisation as discussed in Chapter 1. Acceptance will be based on policy considerations and relevant evidence.

What is in scope of acceptance of the Masterplan (and what is out)?

63. The Masterplan must include the following information, which will be considered by the CAA to decide whether to accept the Masterplan:
 - **a programme plan of airspace changes** including a list of airspace changes, in specific volumes of airspace and with identified sponsors and anticipated timings and dates

- **information about the dependencies between changes in the plan.** A dependency might mean that there is a **conflict** between two or more design options (for example they cannot both be achieved), or that they **enable** one another. It might be that sponsors need to work together to solve a conflict between two or more of their potential design options, or to improve the current airspace structure, for example by removing bottlenecks or holds
 - **information on trade-offs.** The choice or decision to resolve a conflict is known in this document as a 'trade-off'. It can arise between two sponsors of airspace changes wanting to use the same airspace, or between two objectives of an airspace change proposal such as achieving a noise reduction and achieving growth in capacity. Where there could be potential trade-offs on policy objectives that could be delivered by different solutions the CAA would want to understand the potential consequences as soon as possible
 - **information about the potential solutions to dependencies.** The range of potential solutions to dependencies might include decisions that require a trade-off to be made, such as:
 - the sequencing of proposed changes;
 - moving routes vertically, laterally or the time/day they are used to resolve a conflict;
 - a sponsor no longer pursuing one of its routes to resolve a conflict;
 - other potential solutions identified by ACOG and sponsors
 - **information about potential implications** of the proposed solutions at a system level. It is important that sponsors work together, so that the potential implications of their dependent designs can be understood by impacted stakeholders, and will, together, deliver policy objectives. Potential implications may include:
 - where dependencies will lead one or more changes to have knock-on effects on other airfields, airspace users such as General Aviation
 - where the resolution of a conflict will mean one sponsor or one policy objective will need to be traded-off against another (or others) in order to resolve the conflict
 - where those impacted by airspace change are likely to be affected by multiple changes
 - **information about stakeholder engagement**, including how sponsors are working together, solutions they are considering together that affect stakeholders, and the degree of commitment from sponsors. At an appropriate stage in the Masterplan process, a public engagement exercise should be undertaken.
64. In deciding whether to accept the Masterplan, we will review all the information listed here and any other documents for assessment and acceptance described in this criteria document. We may ask for additional detail or supporting information to help us decide whether to accept the masterplan. ACOG is to keep the CAA informed on how it intends to present the required information, so a decision can be made on the suitability of it.
65. In accepting the Masterplan, we **will not** accept the comprehensive list of potential design options for each individual airspace change identified within the

Masterplan. This will be a regulatory decision to be made in accordance with the CAP 1616 process, and not by the co-sponsors (the CAA and the DfT) when we consider acceptance of the Masterplan. To prepare the Masterplan, ACOG will use information created by the sponsors as they create their lists of potential design options prepared during Stage 2 of CAP 1616.

66. In creating the Airspace Change Masterplan, NERL, through ACOG, may propose technical or operational concepts about how aircraft will fly or other aspects of the design. Whether the designs are technically feasible will be a regulatory decision made in accordance with CAP 1616. Generally this decision will be made when they consider the individual changes that the Masterplan has identified under Stage 5 of the CAP 1616 process. However, it may become necessary for the CAA to hold a view on the technical or operational concepts of any proposal in order for the co-sponsors to assess and accept Iteration Three of the Masterplan, earlier than Stage 5 of CAP 1616.

How will the acceptance criteria apply to multiple iterations of the Masterplan?

67. ACOG has proposed an iterative approach to the development of the Masterplan, which recognises that different information and levels of detail will be available at different points of the programme planning, and that progressive levels of detail will be needed in the Masterplan in order that the CAA can make airspace change decisions (including gateway decisions) in accordance with it. This means that the acceptance process will need to be both agile and flexible enough to assess and accept successive iterations in order to ensure that they are providing the detail necessary to deliver on the objectives of airspace modernisation.
68. As discussed in Chapter 1, Iteration One of the Masterplan was provided to the CAA in August 2019, and at a high level it concentrated on the overall principles of the airspace concept and the key issues and opportunities that should be considered when progressing the FASI-South airspace changes. It was intended to be aligned, in level and tone, to the material necessary for Stage 1 of the airspace change process in CAP 1616. Iteration One was not subject to acceptance.
69. Further iterations are planned, and are intended to cover the following:

Iteration	Focus
One Submitted 2019	Principles of the overall airspace concept and key issues and opportunities that should be considered
Two 2020	<p><i>Aim and content:</i></p> <p>Primarily aims to derive from the CAP 1616 Stage 2 work of the FASI-South airspace change proposal during Stages 1 (development of design principles) and 2 (where airspace change options are developed and tested with sponsors own stakeholders). This iteration will support the CAA's Gateway 2 decision for the airspace change proposals. The scope and nature of the potential airspace interactions between various options in the FASI-South airspace change proposals will be identified, to determine the conflicts and/or dependencies that will have to be resolved. Those conflicts and dependencies will not be resolved in this iteration. However, the potential implications of such dependencies and conflicts will be described qualitatively such as:</p> <ul style="list-style-type: none"> ▪ where dependencies will lead one or more change to have knock-on effects on other airports ▪ where the resolution of a conflict will mean one airport or one policy objective will need to be traded-off against another (or others) in order to resolve the conflict ▪ where those impacted by airspace change are likely to be affected by multiple changes. <p><i>Engagement undertaken to develop this iteration:</i></p> <p>Iteration Two will be informed by sponsor-led CAP 1616 Stage 2 engagement on their own design principles which informed the development of their options and on their own initial list of options, and by ACOG's own stakeholder engagement (as required by and listed in CAP 1711b) at a strategic level.</p>
Three From 2021	<p><i>Aim and content:</i></p> <p>It will include a description of the proposed airspace structure and route network envisaged by the dependent airspace change proposals when viewed as a collective, including a quantification of the overall macro impacts drawn together from the full options appraisals of each airspace change proposal. It will not include detailed designs of all the routes.</p> <p>All conflicts and dependencies identified in Iteration Two will have been transparently (led by ACOG coordination and public engagement) traded-off and thereby resolved. As part of their assessment of Iteration Three the co-sponsors will be reviewing the process followed to make these trade-offs and ensure the trade-offs deliver extant government policy. (Where necessary CAA will seek additional policy clarification from the Secretary of State if the existing policy framework is insufficient to make and assess these trade-offs.)</p> <p><i>Engagement undertaken to develop this iteration:</i></p> <p>Prior to submission of Iteration Three for acceptance this iteration will be subject to a full public engagement exercise that allows all stakeholders to offer their views on the proposed solution to conflicts, particularly where they alter or reduce the airspace design options of individual airspace changes. Stakeholders will also be able to identify gaps where additional airspace changes could be included in the Masterplan to deliver a wider range of benefits.</p> <p>Following the engagement and any adjustments to Iteration Three necessary as a result of that engagement, Iteration Three of the Masterplan will be submitted to the CAA for acceptance ahead of FASI-South sponsors reaching the Stage 3 gateway.</p>
Four From 2022	Detailed description of the proposed airspace structure, route network and impacts updated to incorporate the output of the individual airspace change consultations.

Iteration Two

70. To provide further detail on the table above, Iteration Two of the Masterplan is expected to identify the potential dependencies and conflicts between the options under considerations in each component airspace change proposal and the potential implications of those conflicts and dependencies. ACOG's proposed approach to developing this iteration with which (subject to the outcome of this engagement exercise) we are content, is detailed below:

- a draft of Masterplan Iteration Two is created by ACOG working in close collaboration with the FASI-South sponsors (and their CAP 1616 Stage 2 work) that provides a high-level description of the options under consideration in each component airspace change proposal
- where dependencies or conflicts between individual proposals arise, the Masterplan lays out the scope and nature of the potential airspace interactions between the options included in the component airspace change proposals
- the airspace change proposals are grouped into deployment modules, each with different implementation timelines. The Masterplan will focus first on the potential for airspace interactions between airspace change proposals in the same module and then on the potential interactions between modules (at a macro level).
- for each interaction, the relevant FASI-South sponsors lay out in the Masterplan what types of solutions may be deployed to resolve the overlapping aspects of their airspace change proposals, for example moving routes laterally, vertically or using them at different times of day, or no longer pursue one option.
- some example assessments of the potential implications of deploying different solutions to manage the interactions will be included in the Masterplan to demonstrate how effective trade-off decisions between options could be made and the different implications of the differing solutions. There may be thousands of assessments that need to be made, so there is an expectation that the plan will demonstrate only some of the examples and help the co-sponsors identify strategic trade-off decisions that will need to be made in Iteration Three (see below) to make sure those decisions align with government policy.
- when all airspace change proposals sponsors agree (individually and collectively) to the descriptions of the options, conflicts and dependencies, various solutions and example assessments described in the Masterplan, Iteration Two will be submitted to the CAA so that, once accepted, it can support regulatory decision-making at Gateway 2 of CAP 1616.
- the sponsors of the component airspace change proposals are responsible for engaging adequately with their stakeholder representatives when developing their airspace change options as part of Stage 2 of CAP 1616, the potential dependencies and conflicts these options lead to (those which can be identified by the sponsors at that early stage) and the range of potential solutions (and their potential impacts). This recognises that CAP 1616 is a separate process which must also be followed.
- ACOG is responsible for demonstrating that the engagement conducted by sponsors with stakeholder representatives and entities listed in the Airspace Modernisation Strategy governance structure (CAP 1711b) is sufficient for

the depth of the information including in the Masterplan, commensurate with the engagement expectations set out for Stage 2 of CAP 1616.

Iteration Three

71. Iteration 3 (once accepted) will support CAA airspace regulatory Gateway 3 decisions at which the CAA (amongst other things) assesses:
- **the sponsors' full appraisal of the preferred options under consideration.** Iteration Three of the Masterplan will be the basis on which the CAA can be assured as to which options have been taken forward by the sponsors for full options appraisal and which are no longer being pursued. In other words, if a sponsor has removed an airspace design option in order for the system of airspace changes to work together, the Masterplan must identify that this is the case, and that removal will have been informed by a public engagement exercise prior to Iteration Three being prepared
 - **the airspace change sponsors' proposed consultation strategy and document.** This strategy will take account of the Masterplan engagement exercise that has already taken place and the dependencies with other proposals as identified in Iteration Three of the Masterplan.
72. The acceptance criteria outlines the information the CAA needs to see in the Masterplan and how the CAA will need to use it to help inform CAP 1616 decisions. This document outlines how it applies to Iterations Two and Three of the Masterplan, and may be developed further if necessary.

Dependencies, conflicts, trade-offs and solutions

73. As discussed earlier in this document, the Masterplan will need to provide information about the dependencies between changes in the plan, as well as information on trade-offs used to resolve any conflicts. Further, it will need to include information on potential solutions to dependencies, and information about potential implications for the proposed solutions at a systems level.
74. The Masterplan will need to make clear where the resolution of a conflict will mean one sponsor or one policy objective will need to be traded-off against another (or others) in order to resolve the conflict, and where there may be knock-on effects on other airfields, airspace users, including General Aviation, and traffic.
75. Before any of these solutions are decided between sponsors i.e trade-off decisions are made, they will be subject to a public engagement exercise led by ACOG (see Chapter 4) and the impact of the various solutions – including whether each delivers the policy objectives of airspace modernisation and what benefit is being traded-off – must be demonstrated as described in this guidance document. All trade-off decisions will be made transparently with the coordination of ACOG (and assessed by the co-sponsors) and not via private bilateral agreements between airports.

Analysis of potential implications

76. For *any* airspace change in the UK, the CAA will need to decide whether it conflicts with the Masterplan. This will allow the DfT and the CAA to see how modernisation would work at a system level. Therefore, the Masterplan is expected to provide some sample assessments of the potential implications of deploying different

solutions to manage interactions in order to demonstrate how effective trade-off decisions between options can be made.

77. Co-sponsors will need to see a quantification of the overall macro impacts drawn together from the full options appraisals of each airspace change proposal as part of their assessment of Iteration 3. However, at Iteration Two, the co-sponsors will need to see an identification of all the potential dependencies and conflicts as well as examples of the solutions that could be deployed to resolve them.

Question for public engagement:

- Are these the right criteria to enable acceptance? If not, what is missing?

Chapter 3

Policy Expectations

What are the agreed policy parameters?

78. The decision to accept the Masterplan must align with 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 amend government policy, nor can it make an airspace change decision that does not give effect to that policy
79. When assessing, and ultimately accepting the Masterplan, the co-sponsors will seek to reassure themselves that the Masterplan accords with agreed policy and CAA Strategy. The relevant policy considerations are driven by the parameters and objectives set out in the Airspace Modernisation Strategy, which were derived from section 70 of the Transport Act 2000.
80. The Airspace Modernisation Strategy (referred to in this document as the CAA Strategy) summarised the Government's policy objectives, which include:
- create sufficient airspace capacity to deliver safe and efficient growth of commercial aviation
 - progressively reduce the noise of individual flights, through quieter operating procedures and, in situations where planning decisions have enabled growth which may adversely affect noise, require that noise impacts are considered through the airspace design process and clearly communicated
 - use the minimum volume of controlled airspace consistent with safe and efficient air traffic operations
 - in aiming for a shared and integrated airspace, facilitate safe and ready access to airspace for all legitimate classes of airspace users, including commercial traffic, General Aviation and the military, and new entrants such as drones and spacecraft
 - not conflict with national security requirements (temporary or permanent) specified by the Secretary of State for Defence.
81. The Government believes that there is clear and strong evidence that there is a need to increase capacity in the South East of England by 2030 by constructing one new runway. It was agreed in the Airports National Policy Statement that a new northwest runway at Heathrow Airport (commonly known as the 'third runway') and making more efficient use of existing airport infrastructure in the south-east, combined with a significant package of supporting measures, is the means to deliver additional airport capacity in the South of the UK.¹⁵ Additionally, the Government is supportive of all airports beyond Heathrow making best use of their existing runways subject to environmental issues being addressed.

¹⁵ [Section 1.15](#), Airports National Policy Statement: new runway capacity and infrastructure at airports in the South East of England, June 2018.

82. Furthermore, in a letter to the Chair of the CAA dated 4 November 2019, the Terms of Reference for the ACOG Steering Committee were confirmed by the Secretary of State for Transport and include;
- create airspace capacity to support the growth of aviation
 - reduce controlled airspace
 - release lower airspace
 - reduce delay for passengers to ensure that they get to their destination on time
 - reduce noise and CO2 emissions.

How will these be applied to accepting the Masterplan?

83. Alignment with relevant policy will always be considered when individual airspace changes go through the CAP 1616 process. However, as noted previously, CAP 1616 is designed to guide consideration of individual airspace change proposals. The volume of airspace change proposals required to modernise airspace at a systemised level means that a strategic coordinating mechanism is required, such as the Masterplan. So, while the CAP 1616 considerations are relevant at an individual level, consideration must also be given to how all the proposed changes interact, and deliver policy, at a programme level.
84. If a single volume of airspace cannot deliver all of the section 70 objectives at once, a trade-off will need to be made. The Masterplan will need to identify that trade-off, and the CAA and DfT, as co-sponsors, will need to be assured that the solution reached is aligned with policy. At present, there is no clear and consistent hierarchy of policy considerations to inform airspace change decisions, except of course, for the duty conferred upon the CAA under Section 70 of the Transport Act 2000 to exercise its air navigation functions so as to maintain a high standard of safety in the provision of air traffic services.¹⁶
85. Where ACOG is unable to facilitate an agreement between two sponsors relating to conflicting airspace change proposal through its mediation process, or where a trade-off is proposed between the objectives listed here, it will escalate this issue to the oversight team in the CAA. DfT and the CAA are considering what formal process needs to be in place to manage decision-making and escalation to the Secretary of State. This will include consideration of the need for policy guidance on how trade-offs should be struck that might prevent conflicts being escalated to CAA/DfT or be used to advise the Secretary of State.
86. Policy guidance may be needed on how trade-offs should be struck between different airspace changes (for example, if two airports want to make use of the same volume of airspace) and between the different objectives that a single airspace design could be focused on achieving (for example, reducing controlled airspace, increasing commercial capacity, noise reduction). Such policy could also help guide decisions where the relationship between two or more airspace changes will reduce opportunities for, or create impacts on, another sponsor's airspace design regarding the objectives listed above.

¹⁶ [See Section 70 Transport Act 2000.](#)

87. The policy and the acceptance of the Masterplan does not override the need to consider all these factors when developing an airspace change, each of which must still follow the CAP 1616 process.

Question for public engagement:

- Are there examples of where further policy may be required to guide trade-off decisions? Please be specific, preferably with a local example.

Chapter 4

Engagement Considerations

Engagement with representative groups

88. ACOG must provide the co-sponsors with an engagement plan for the creation of the Masterplan. It is fundamental that representative groups, as identified in the airspace modernisation governance structure, are provided with a meaningful opportunity to engage with, and influence, a plan for airspace that may impact them.¹⁷ In developing Iteration Two of the Masterplan, ACOG is expected to engage the list of entities on the airspace modernisation governance structure. These entities are either conduits to, or representatives of, a wider stakeholder group.
89. The engagement plan must identify how ACOG will undertake a two-way conversation with each of the entities listed in the airspace modernisation governance structure and the reasoning behind the approach. This is important as it recognises that different stakeholders are affected in different ways and to different extents. They may also have different engagement preferences, ranging from email or phone discussions, to face-to-face meetings. Where possible, ACOG should work to the preferences of these groups, while also acting proportionately. ACOG needs to ensure there is an opportunity for the relevant stakeholders to have a say on the Masterplan at a point where there is still a reasonable opportunity for those stakeholders to influence it.
90. This is not the same as the sponsor's consultation requirements within the CAP 1616 airspace change process – it is, rather, about ensuring that stakeholders potentially impacted by dependent changes participate at a meaningful stage in an engagement on matters that impact them (see below).
91. The acceptance criteria outlines the information the CAA needs to see in the Masterplan and how the CAA will need to use it to help inform CAP 1616 decisions. This document outlines how it applies to Iterations Two and Three of the Masterplan, and may be developed further if necessary.
92. During the development of Iteration Two the individual sponsors will be engaging with their own stakeholders in their initial list of options. Such sponsors will include airports and, at the network level, NERL. Iteration Three of the Masterplan will provide sponsors with information they can provide their consultees on other changes that might also impact them. Among other things, CAP 1616 gateway assessments require that potential cumulative impacts are clearly explained (see more below).

¹⁷ Detail on the Airspace Modernisation Governance Structure can be found in CAP1711b, the Governance Annex to the Airspace Modernisation Strategy

Wider public engagement

93. As part of ACOG's stakeholder engagement plans, the strategic significance of the Masterplan merits a wider, public engagement activity, so that all interested groups and individuals have the opportunity to offer a perspective or idea for consideration. As noted previously, the Masterplan will include a list of airspace changes, which could either impact positively, negatively or neutrally on a range of people.
94. Stakeholders might be able to offer alternative or additional solutions as to how conflicts between airspace changes could be resolved, or they may be able to identify a new airspace change that could be added to the Masterplan to improve the benefits delivered or better meet the policy objectives. This must take place as Iteration Three is being developed.
95. Due to the diversity of stakeholders who may be interested in submitting an idea, and the inability of the national airspace modernisation governance structure to include every individual or group, it would be appropriate for ACOG to invite such views through a defined, time-limited public exercise.
96. When considering whether to accept Iteration Three of the Masterplan, the co-sponsors will want to see assessment of all the ideas and views received through the public engagement exercise, and a statement as to whether each of them could be considered as part of the Masterplan (and result in a change to the draft Iteration Three) or if not why not. ACOG might, for example, summarise all the ideas and views received, and explain how it has tried to reflect them in the Masterplan. Or ACOG might choose to categorise responses received in a similar activity to that which airspace change sponsors must undertake.¹⁸
97. To further underscore the importance of meaningful and effective consideration, there is an expectation that stakeholders' views are listened to and acted upon where possible and practical. It will be important to ensure that these views are offered at a time where it is possible for the feedback to be taken into account. Consultation by individual sponsors at Stage 3 of the CAP 1616 process is too late for public views to be taken into account as solutions to conflicts have already been decided.
98. The expectation for meaningful engagement on the contents of the Masterplan itself does not replace the need for specific engagement and consultation on individual airspace changes through the existing CAP 1616 process.

Potential coordination with CAP 1616 consultations

99. The accepted Iteration Three of the Masterplan will identify which individual airspace changes need to be coordinated whether in terms of describing the cumulative impacts by means of a joint consultation document (or part document) or by holding a joint consultation or both. ACOG is expected to help coordinate sponsor-led communications activities between dependent changes. This might

¹⁸ Airspace change sponsors must, at consultation stage, categorise responses into those that could and those that could not affect the proposal. See Table C2 of CAP 1616.

mean encouraging coordination between sponsors on their airspace change consultations when the impacts of one or more changes have a cumulative impact on stakeholders.

100. This activity is additional to the sponsor's consultation requirements within the CAP 1616 airspace change process¹⁹ – it is about coordinating those consultations so that a stakeholder potentially impacted by dependent changes can be well informed by the sponsor and participate meaningfully in the consultation. Such sponsors will include airports and, at network level, NERL.

Question for public engagement:

- Do you have any comments on the engagement we are asking ACOG to undertake?

¹⁹ Stage 3 of CAP 1616 details consultation requirements and can be found [here](#).

Chapter 5

Next steps for finalising this document

Consultation with the Secretary of State for Transport

101. The Government's Air Navigation Directions to the CAA require the CAA to consult the Secretary of State in relation to the preparation and maintenance of the Airspace Modernisation Strategy and the detail to be included in the plan, as well as to report annually on the delivery of the Strategy.
102. To satisfy the direction to consult the Secretary of State, the CAA will provide the guidance to the DfT and Secretary of State before a final version of this document is published.

Key dates for assessing and accepting Iteration Two

103. The CAA needs to use the Masterplan to make regulatory decisions at the second gateway in CAP 1616 for the reasons set out in this document.
104. To that end, the co-sponsors are working towards publishing the final version of the criteria for assessing and accepting the Masterplan in the summer of 2020, with a view to having it operational to inform decisions at the second gateway of relevant airspace change proposals later in 2020.

Appendix

Figure 1 – AMS Initiatives and Delivery Entities

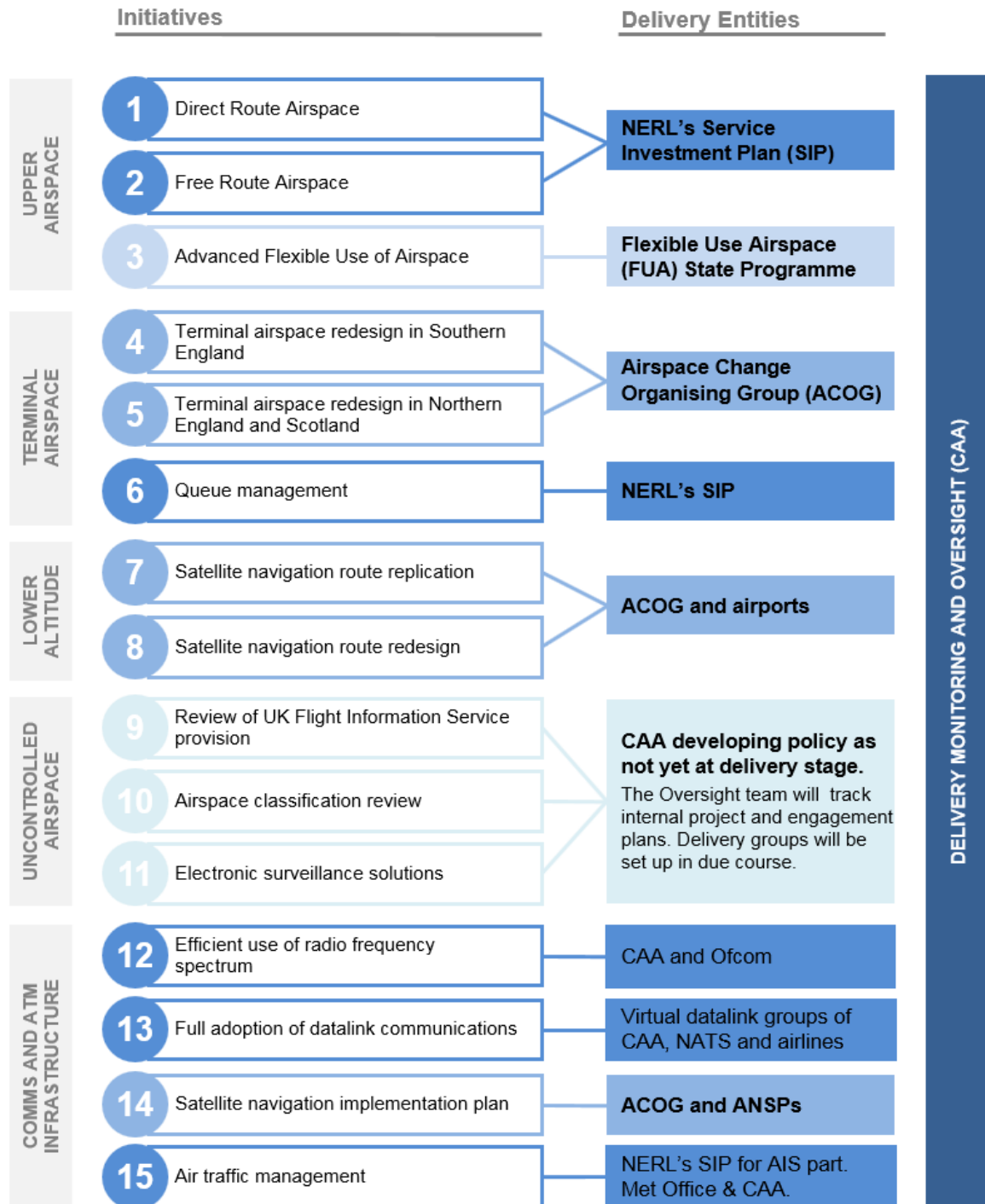
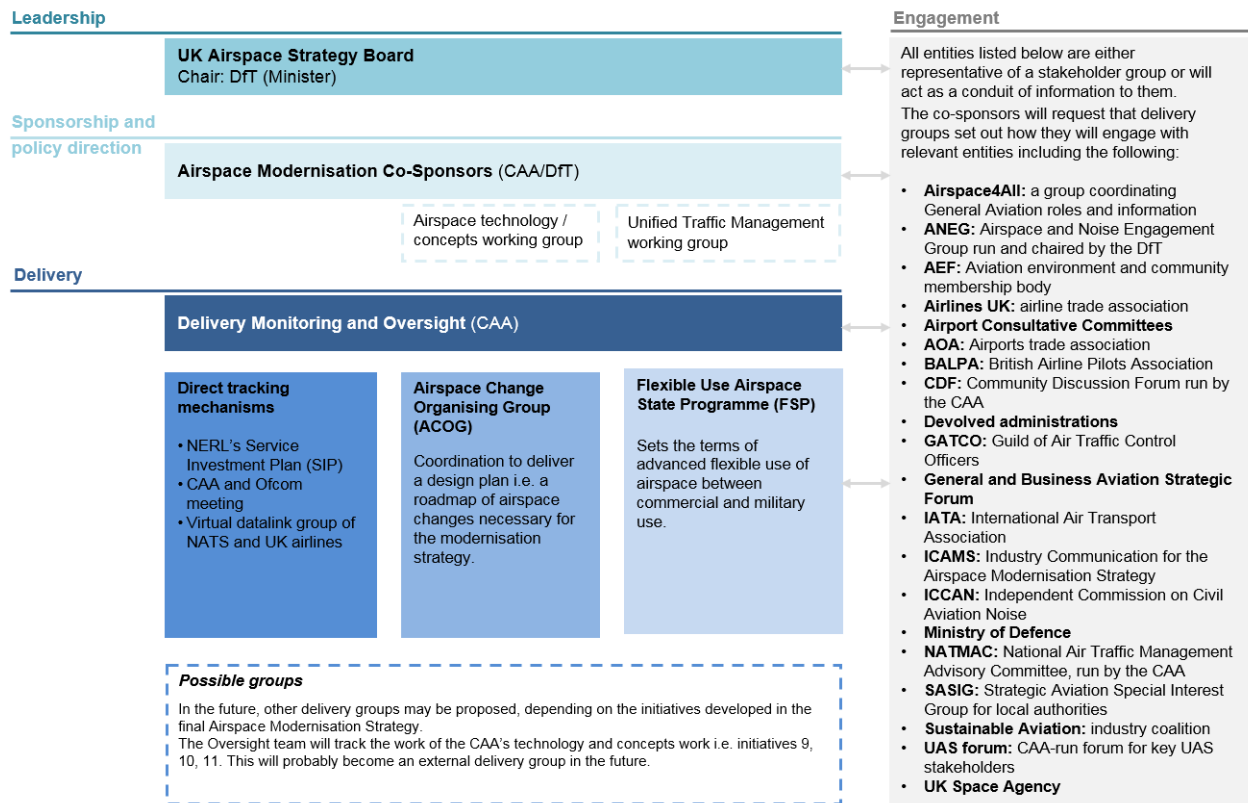


Figure 2 - Proposed Governance Structure Update



1. Note that this is a revised structure which replaces the governance structure in the annex (CAP1711b) to the Airspace Modernisation Strategy, jointly owned with the Department for Transport.
2. Also note that these figures are supporting information only and are not subject to engagement.