

CAA response to Transport Select Committee airspace management and modernisation inquiry

CAP 1532



Documents

Document Sharing Hub

Published by the Civil Aviation Authority, 2017

Civil Aviation Authority,
Aviation House,
Gatwick Airport South,
West Sussex,
RH6 0YR.

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

First published 2017

Transport Select Committee – Airspace management and modernisation enquiry: Civil Aviation Authority response

Introduction

1. The Civil Aviation Authority (CAA) welcomes the Transport Select Committee's inquiry into UK airspace management and modernisation.
2. Modernising the UK's airspace, some of the most congested in the world, presents an opportunity that will benefit consumers, airlines, airports, general aviation and some local communities. Yet there are challenges that need to be addressed and wider stakeholder interests that need to be incorporated into the delivery of this modernised infrastructure to meet the increasing demands on airspace. Since the Select Committee's last inquiry into the use of airspace in 2008/9, the CAA, the Government and the industry have been working hard to create a system that works better for all stakeholders. Progress has been made and we have learned a great deal; but there is more to do.
3. Without modernisation, our airspace will not be able to cope with the predicted increase in demand, let alone the extra aircraft movements a third runway will allow for. Many aviation consumers in the UK already face unnecessary delays, while reliance on holding stacks and extended routeing increases CO2 emissions. At the same time, new generations of aircraft design are quieter and can fly more precise routes. This could reduce the impacts of aviation noise and enable noise to be more equitably distributed.
4. To achieve this vision of a modernised airspace, there needs to be a stronger system of determining how airspace is designed, how these designs are implemented, and how they are enforced. As we will outline in this submission, there are a number of important issues:

- a. More precise routes from satellite navigation can lead to a concentration of aircraft noise – an outcome that is understandably unwelcome by local communities adversely affected, while welcomed by those residents who benefit. While many airspace changes are uncontroversial – they take place in the upper airspace – those that take place around airports (lower airspace / terminal airspace) understandably cause the most concerns.
- b. At present, there is no comprehensive mechanism in the airspace management architecture to compel all the necessary parties to bring forward airspace changes. Progress is dependent on the choices of competing commercial airport entities and NATS. Further, there is no mechanism for resolving trade-offs between competing commercial airport entities, but there ought to be.
- c. There is currently no comprehensive mechanism for tracking and publishing whether aircraft fly in accordance with approved flight paths. Nor are there enforcement mechanisms for taking action against airlines and airports that do not adhere to these paths. This can undermine trust between local communities and the aviation sector.

5. The CAA considers there are six key requirements for the effective delivery of airspace change:

- Leadership and narrative: demonstrable leadership from the Government setting out the role of airspace infrastructure and the case for reform and modernisation.
- Policy: development and implementation of the necessary policy from the Government about how trade-offs between different parties should be resolved.
- Strategy: a clear ends, ways and means masterplan setting how UK airspace as a whole should be reformed based on analysis and evidence of future growth aspirations.
- Process: a clear CAA decision-making process for individual airspace changes based on transparency of process, genuine engagement with all stakeholders and robust evidence.

- Accountability: mechanisms to require change to happen and hold parties to account for delivery of change.
- Resource: the right capabilities and capacity across industry to deliver the strategy.

6. In this submission, we outline:

- The rationale for modernisation (paragraphs 8-10).
- The CAA's role in airspace management and modernisation. We also set out what the CAA is not in a position to deliver (paragraphs 11-17).
- The Government's role in airspace modernisation (paragraphs 18-22).
- Our views on the changes to airspace policy that the Department for Transport (DfT) is currently consulting on (paragraphs 23-29).
- The progress of the UK's Future Airspace Strategy, as well as existing issues with changes to lower level airspace (paragraphs 29-32).
- Airspace capacity issues pertaining to runway expansion in the South East (paragraphs 33-43).
- A summary of the challenges to modernisation (paragraphs 44-49).
- The CAA's existing airspace change process, and the significant changes the CAA is making to it (paragraphs 50-66).
- The merits of an Independent Commission on Civil Aviation Noise (paragraphs 67-70).
- Our views on aviation policy with regard to the UK's future relationship with the European Union (EU) (paragraphs 71-75).

7. UK airspace policy is informed by a broad number of stakeholders, including local communities, airlines, air navigation service providers, general aviation users, the military, and passengers as well as national and supranational bodies. The resulting framework can be complicated, but understanding the various interactions is crucial in appreciating the challenges to progress.

The rationale for modernisation

8. The success of the UK's aviation industry over the last 50 years has been dependent on the quality of the infrastructure that underpins it. A key component of this system is the UK's airspace. For commercial aviation, the UK airspace allows aircraft to move passengers and freight safely in and out of the UK. For the military, our airspace provides a training ground to allow for the protection of the UK's borders. For the General Aviation community it offers the ability to fly light aircraft, balloons, gliders, microlights and other forms of aircraft freely in many parts of the country.
9. Rising incomes, liberalisation of global regulations and greater competition between airlines and airports has boosted demand for civil aviation services in the UK. However, the design of the airspace has not kept pace with this demand or modern aircraft navigational technologies. Many of the routes in and out of the UK's major airports remain unchanged since the 1970s, and rely on fixed navigational beacons on the ground. While safe, these constrain capacity and growth. Changes have been made in a piecemeal, uncoordinated and reactive fashion. In parts of the country, this has created significant aircraft congestion leading, for instance, to a reliance on extended routeing and high levels of air traffic controller management of each flight to make the system work. This has the unwanted effect of increasing both emissions and noise pollution for communities on the ground.
10. In order to rectify this, the Government and the CAA have already been changing their respective policies and processes so that the needs of all stakeholders are taken into account. The CAA's reforms to its airspace change process have been aimed at improved evidence, transparency and stakeholder engagement. This will be particularly important as we look towards a third runway at Heathrow, which could ultimately introduce upwards of 200,000 additional flights a year into the UK's airspace.

The CAA's role in airspace management and modernisation

11. The CAA was established as a statutory corporation in 1971. It is independent of the Government, and its functions are set out in legislation, chiefly the Civil Aviation Act 1982, Transport Act 2000 and Civil Aviation Act 2012. The main statutory functions of the CAA in relation to airspace are: safety regulation of aviation in the UK within the global and European aviation framework; deciding whether to agree individual changes to the design of UK's airspace proposed by stakeholders (usually airport operators or NERL); and the economic regulation of the dominant airports with substantial market power (currently Heathrow and Gatwick) and of the provision of UK en route air traffic services (through the Air Traffic Services Licence for NATS (En Route) PLC, "NERL").
12. The CAA also plays a role in providing independent policy advice on airspace issues to Government, which includes: collaborating externally with national and international aviation organisations and regulatory bodies; advice on changes to UK airspace arrangements that might have an effect on the environment; and on proposed European legislation affecting aviation.
13. With regards to airspace modernisation, following the Transport Select Committee's last airspace inquiry, the CAA facilitated the development of the UK's Future Airspace Strategy in partnership with DfT, the MoD, the Irish Aviation Authority, NATS and the wider industry. The Future Airspace Strategy, which is the responsibility of the industry to deliver, was developed to ensure that UK airspace benefits from being supported by modern technology and is kept in line with the Single European Sky initiative (an EU initiative to harmonise airspace design and management across Europe). The strategy sets out a range of measures that could be adopted to deliver this reform, but contains neither a detailed blueprint of what should be implemented nor a detailed masterplan of airspace changes that are required.
14. The Civil Aviation Authority (Air Navigation) Directions 2001 from Government give the CAA a broad role in the development of airspace

policy and strategy. The CAA interprets this broad duty to include, for example, the economic and safety regulation of NERL, classification of different types of UK airspace, providing clarity about which international legal obligations UK industry should implement, and making decisions about airspace change proposals submitted by change sponsors. It does not, however, give the CAA overarching responsibility either to develop or deliver an airspace strategy that sets out a comprehensive masterplan describing all the airspace, operational and technical changes that are required and who and how they should be delivered. This is for three important reasons - potential conflicts of interest, the importance of unelected regulators not making major policy decisions and trade-offs, and the current absence of comprehensive mechanisms to ensure a strategy is delivered.

15. **Conflicts of interest** The CAA is the decision-maker in respect of airspace change proposals usually made by airport operators or NERL. In that role, the CAA must assess any proposal for airspace change against the requirements of section 70 of the Transport Act 2000. Were the CAA to take responsibility for designing a detailed airspace strategy and masterplan, it would not be possible for the CAA to discharge its decision-making role in respect of airspace change proposals independently and without at the very least an appearance of bias. This could increase both the likelihood of challenge to any airspace change decision and exacerbate the local community engagement challenge that currently exists.

16. **Regulators must work within a policy context established by parliament or the Government.** It is a well accepted principle and essential discipline that regulators who are unelected should not make key or strategic policy decisions. It would clearly not be appropriate for the CAA, as a technical and specialist regulator, to develop an airspace strategy that was inconsistent with the government's broader aviation strategy. The government is democratically accountable and best placed to determine the airspace strategy and airspace policy that serve the national interest, both in economic and environmental terms. For instance,

it would be unacceptable for the CAA to reach a view of the most efficient use or allocation of airspace, which had the effect of inhibiting the delivery of the Government's policy on airport expansion as expressed through a designated National Policy Statement.

17. **No comprehensive mechanisms are currently in place to require all the relevant parties to deliver.** Neither Parliament, through legislation, nor the Secretary of State, through Directions, have given the CAA a comprehensive suite of powers to require other parties to comply with any recommendations that the CAA might make in relation to airspace strategy. The Secretary of State has the power to issue environmental directions to air navigation service providers pursuant to section 39 of the Transport Act 2000. The CAA has no such power. Furthermore, the CAA cannot require stakeholders, such as airport operators, to bring forward individual airspace change proposals or to change their operating methods unless there is a significant safety consideration. In effect, this means that there is currently no mechanism whereby a coherent integrated airspace plan for the whole south-east of England can be devised and promulgated by any particular body.
18. The CAA strongly supports the publication of the Government's UK Airspace Policy consultation document in January 2017, which sets out the Government's role as being *"to set the policy framework that governs"* decisions relating to airspace changes. We will be responding to this consultation in due course.

The role of Government in facilitating improvements to the airspace

19. The Government has a leading role in the modernisation of UK airspace by setting key outcomes, the institutional framework and how trade-offs between different stakeholders groups should be resolved. Effectively, the Government needs to set out a holistic approach as a means of ensuring that the 'roads in the sky' fully reflect the scale and location of the facilities on the ground. The barriers to airspace modernisation that we will outline in this submission will require continued political leadership, a strong strategy, accountability and effective implementation.