## **Transport for London**



Via Email only

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Dear Jonathan.

I am writing in response to the consultation on your draft airspace modernisation strategy as set out in CAP 1690. Airspace modernisation, by allowing for more efficient use of airspace, offers the potential to support sustainable growth in aviation, minimise the economic impacts of flight delays and reduce emissions. At the same time, it is essential that no less weight is given to the potential for airspace modernisation to substantially reduce the noise impacts of aviation experienced by hundreds of thousands of people every day. Airspace modernisation must also prepare the UK for new technology – and the resulting business models that will emerge. A fundamental shift is required if these new technologies are to unlock benefit for UK cities while protecting citizens from its potential impacts.

This strategy is the successor to the Future Airspace Strategy (FAS) and in moving forward, the positives and limitations of the FAS should be taken into account. It is a weakness of CAP 1690 that it appears not to have included a full audit of the FAS, analysing the progress made and the lessons to be learnt.

The FAS recognised the value of the interaction with the airspace of neighbouring countries, with an emphasis on international interoperability underpinned by harmonisation of standards, in particular focused on our European partners. The importance of this deep European co-operation on airspace is a function of geography and is not diminished by the forthcoming exit of the UK from the European Union. This level of international integration must be embedded in the strategy if its full potential is to be realised.

On the other hand, it is implicit that the FAS was not successful in delivering many of the proposed projects within the original timeframe. The response of CAP 1690 appears to be to seek an approach which would deliver a faster pace of change. But this must not entail a process which seeks to circumvent the legitimate concerns of local communities about their exposure to noise. The practical implementation of CAP 1690 – including how trade-offs between efficiency, emissions and noise are made — will have a critical bearing on the extent of future noise impacts. CAP 1690 lacks the detail to provide reassurance that the interests of communities will be given sufficient weight in changes to airspace.

Airspace change is, from a technical perspective, necessarily complex and one change to airspace will often have direct consequences for another. If these airspace changes are taken forward in isolation, it risks skewing the trade-offs to be made and denying the public a holistic understanding of the changes. Multiple linked changes need to be consistent and effectively captured in such a way that their implications can be understood in the round and ensure informed decision-making.

The complexity of the airspace around London presents a particular challenge, supporting six international airports with a total of seven runways, not to mention several smaller airfields. CAP 1690 rightly recognises that a large number of co-dependent airspace changes will be required and that these will need to be co-ordinated effectively.



But it is also important that, as airspace changes at the London airports are co-ordinated, no one airport is given priority over the others. Indeed, the Mayor of London's Draft London Plan, published in December 2017, states in Policy T8F that "any changes to London's airspace must treat London's major airports equitably when airspace is allocated." The Government's Airports National Policy Statement confirms (in 1.39) support for growth at airports beyond Heathrow and CAP 1690 should reflect this.

## New technologies and low altitude urban airspace

The emergence and rapid development of new technologies applied in an aviation context are creating entirely new ways to access and use airspace. In particular, new technologies including (but not limited to) drones, are enabling low altitude urban airspace to be accessed in ways not previously possible. While this is currently limited to small unmanned aircraft (SUA), in the future a much broader range of aircraft types will need to access this space in a suitably controlled way. The impact of these technologies on communities will be significantly different from traditional aviation. CAP 1690 does not appear to give sufficient recognition to this emerging future and the fundamental implications for airspace management that it brings. We believe a more progressive, inclusive and anticipatory framework is required to address low altitude urban airspace if its use is to deliver the potential benefits, be publicly acceptable and protect communities.

Drones and other new types of aircraft are set to challenge the existing norms of aviation and airspace and are far less limited in the number and types of location from which they can take-off and land. It is not yet clear what impacts this will have on communities. Managing airspace in this context will require a fresh approach by the CAA, and extensive engagement with a broad range of stakeholders beyond the aviation industry. This will include a greater level of co-ordination between movement in the air and on the ground. The regulation of services in the air will need to reflect this convergence between ground and air transport. The regulation of ground-based aviation infrastructure will need to evolve to recognise the increase in landing points, most of which will not fall into current categories.

As different types of airspace become more accessible, the current approach, where the CAA regulate all airspace and NATS manage controlled airspace, may become increasingly inappropriate. There will be a need for local authorities and other local organisations to have a greater role in what happens in airspace that affects them. This is true of low altitude urban airspace and other types of airspace not accessible to the public. For example, consideration should be given to how fully contained airspace such as that in tunnels or other fully controlled environments is regulated and managed.

While current levels of drone use are low, demand is likely to increase significantly and the CAA will need to streamline its approach to deal with this demand. This will require working with local authorities and consideration of how SUAs are categorised. Such a categorisation should synchronise not just with what happens in the wider airspace but also what happens on the ground. For example, the CAA should consider how the proposed EASA categorisations of Open, Specific and Certified will be integrated into airspace management and how they relate to ground transport.

The current DfT consultation on drones emphasises the need to find new ways to manage, track and regulate SUA operations, yet this is not addressed by CAP 1690. Airspace modernisation will also need to consider larger examples of new unmanned aircraft which are likely to operate within and around cities and how they are regulated, managed and tracked. This will need to include consideration of Flight Information Notification Systems (FINS) and Unmanned Traffic Management (UTM) systems. Integration with manned aviation that currently relies on visual flight rules should also be addressed.

I welcome the engagement by the CAA on CAP 1690 and the more efficient use of airspace it could unlock. This must not overlook proper consideration of new technologies and the new types of airspace they will unlock. Ultimately, it is imperative that airspace modernisation works for local communities — because it is only with their buy-in that the benefits of modernisation benefits can be delivered.

Yours sincerely

Alex Williams

Director of City Planning