

**Airspace Change Organising Group**

# ACOG Advice to the CAA on the inclusion of the 2022 Farnborough Airport Airspace Change Proposal into the UK Airspace Change Masterplan

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**Introduction**

Farnborough Airport submitted a Statement of Need (SoN) in June 2022 to commence an Airspace Change Proposal (ACP) to optimise the arrival and departure routes that serve the operation between the ground and 7000ft. Farnborough intends for the ACP to be developed in line with the wider upgrades to the London Terminal (LTMA) airspace that are being progressed as part of the UK Airspace Change Masterplan (the masterplan). This paper sets out ACOG's advice to the Department for Transport and Civil Aviation Authority, in their role as co-sponsors of airspace modernisation, regarding the inclusion of the Farnborough ACP in the masterplan.

**ACOG Advice**

ACOG considers the Farnborough ACP to be strategically important in the context of the UK Airspace Modernisation Strategy (AMS) objective to deliver quicker, quieter, cleaner journeys and more capacity for the benefit of those who use and are affected by UK airspace. The existing structure of the LTMA airspace creates constraints on the performance of the Farnborough operation and its integration with the wider route network. An ACP to address these constraints as part of the masterplan to fundamentally redesign the LTMA airspace is expected to create the capacity for efficient growth in the Farnborough operation and progressively improve environmental performance by reducing aircraft track miles and increasing the volume of continuous climb and descent operations (CCO and CDO). The inclusion of the Farnborough ACP in the masterplan will support the system-wide modernisation of the LTMA airspace by optimising the route interactions that Farnborough traffic shares with flights to and from the other interdependent airports. The Farnborough ACP also offers strategically important opportunities to further enhance the integration of commercial traffic with General Aviation operations by ensuring safe and ready access to the airspace.

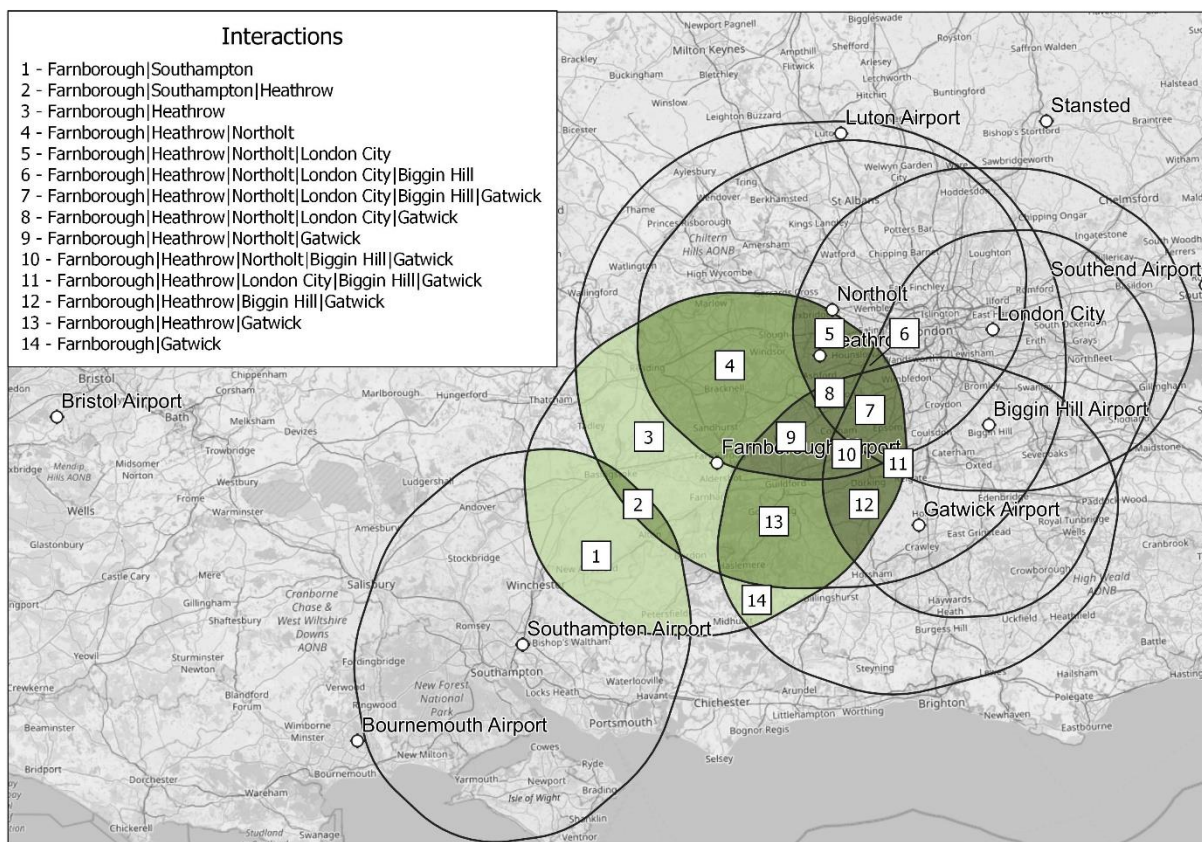
In February 2020, Farnborough Airport implemented a CAA-approved ACP into the existing LTMA airspace that included the introduction of Performance-based Navigation (PBN) routes and accompanying Controlled Airspace. Since the ACP was implemented, Farnborough has remained closely engaged in the development of the masterplan to understand the opportunities, impacts and interdependencies associated with system-wide airspace modernisation in the LTMA.

**Potential airspace design interdependencies - Farnborough**

Iteration 2 of the masterplan was accepted by the co-sponsors of airspace modernisation in January 2022. As part of the development of the masterplan, ACOG is required to show the potential airspace design interdependencies between the constituent ACPs and demonstrate that solutions are available to address the design conflicts that may arise. The interdependency analysis was based on the information available from the constituent ACPs at the time the Masterplan Iteration 2 was produced (Q3/Q4 2021) and did not include any data from Farnborough Airport because the new ACP had yet to be initiated.

Farnborough Airport engaged with ACOG during the development of Iteration 2 to discuss commencing a new ACP and highlighted the importance of alignment and integration with the existing LTMA proposals. ACOG envisaged that it would be necessary for a new Farnborough ACP to be coordinated with several interdependent airports and NERL. Following the submission of the SoN for the new ACP, ACOG updated the interdependency analysis conducted for Masterplan Iteration 2 to incorporate Farnborough. The updated analysis demonstrates that at this stage of the process, Farnborough Airport has potential design interdependencies in 14 specific areas of LTMA airspace below 7000ft. and, therefore, must coordinate the development of its new proposal with six of the existing LTMA ACPs (Heathrow, Gatwick, London City, Southampton, RAF Northolt and Biggin Hill). In addition, Farnborough will need to ensure ongoing coordination with the NERL-led LAMP network ACPs above 7000ft.

Chart 1 illustrates the sections of airspace below 7000ft. that are potentially in scope for the new Farnborough ACP and the areas where design interdependencies may arise with other LTMA airport-led proposals.



### Integration of ACP development timelines

ACOG has assessed the expected timeline for developing the new Farnborough ACP based on several planning assumptions and constraints used to create the current plans for delivering the LTMA clusters. This analysis shows that, due to the interdependency with the Heathrow and Gatwick ACPs in particular and the likely scale and complexity of integrating design options across the LTMA cluster, Farnborough can 'catch up' with the other proposals and align their development timeline with the interdependent ACPs ahead of the public consultation stage. As a result, there will be no delay to the overall airspace modernisation delivery timelines in the LTMA cluster by including the Farnborough ACP in the Programme.

ACOG recommends that the Farnborough ACP be treated consistently with the other constituent masterplan ACPs. As a result, the following regulatory processes should apply to ensure alignment with the broader Programme.

- **Step 1B: Airspace Design Principles**

The following AMS Design Principle should be adopted as part of the Farnborough ACP in Stage 1.

*Subject to the overriding design principle of maintaining a high standard of safety, the highest priority principle of this airspace change that cannot be discounted is that it accords with the CAA's published Airspace Modernisation Strategy (CAP 1711) and any current or future plans associated with it.*

- **Assessment of whether constituent ACPs align with the AMS and Iteration 2 of the masterplan**

CAA Airspace Regulation has a requirement to assure that the Stage 2 Develop & Assess Gateway submissions for airspace changes under the masterplan programme are aligned with Iteration 2 of the masterplan. The seven indicators that have been defined and against which CAA Airspace Regulation will review the Stage 2 Develop & Assess Gateway submissions have been shared with Farnborough Airport.

As part of ACOG's iterative approach to developing the masterplan, ACOG will update and further refine the interdependency analysis for the LTMA cluster of ACPs during the development of Iteration 3. This analysis will incorporate additional information drawn from the development of the Farnborough Airport ACP, providing further clarity on the size and nature of the interdependencies with other proposals, the likelihood of design conflicts and the potential solutions.