



GLASGOW AIRPORT

PROUD TO SERVE SCOTLAND

Airspace Change Proposal Assessment Brief

CAA, Aviation House, 18/06/2019

Version 1.0

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2. Statement of need, discussion and review

Overview

Glasgow Airport Limited (GAL) are sponsoring an ACP to upgrade the airport's arrival and departure routes from the ground to 7000ft. and the associated controlled airspace.

Current situation

- GAL handled 9.7m passengers in 2018, travelling with 30 airlines to 120 destinations, including major hubs like London Heathrow, Amsterdam, Dubai, Frankfurt, Munich and Dublin.
- The airport also handles 16,000 tons of freight per year (a 4-fold increase in the past decade), supported by 57 logistics carriers.
- The activities and connectivity provided by GLA is estimated to support 30,000 jobs and contribute £1.4bn to the Scottish GDP.
- The airport is one of fastest growing in Europe. Forecasts indicate the GLA will grow to serve 17m passengers by 2040.
- A £1bn long-term development strategy has recently been prepared to enable the forecast growth at the airport.
- Previous ACP halted due to the introduction of CAP1616.

2. Statement of need, discussion and review

Policy and legislative drivers for airspace change

An ACP is needed at GLA to upgrade the airport's arrival and departure procedures in line with the requirements of UK and European policy and legislation to modernise the airspace.

- The Single European Sky (SES) programme has established legislation that requires aviation stakeholders in all States to ensure key components of airspace modernisation are delivered by 2024.
- The UK Government has set out its policy objectives for airspace modernisation in its Aviation Strategy Green Paper.
- The CAA's Airspace Modernisation Strategy (AMS) responds to the UK/European requirements by setting out the detailed initiatives that the stakeholders must deliver to meet current policy and legislation.
- One of the main objectives of the AMS is to modernise the airspace structure and route network to add the capacity to accommodate forecast growth in demand for aviation in a sustainable way.

2. Statement of need, discussion and review

Implementing key AMS initiatives

GLA's ACP is being conducted in response to two important AMS initiatives that must be delivered by 2024.

- **Initiative #5: A fundamental redesign of the terminal airspace in northern England and Scotland (FASI North) that is based on the widespread adoption of satellite navigation procedures.**

and

- **Initiative #8: The deployment by airports of new arrival and departure routes from the ground to 7000ft. designed using satellite navigation procedures.**

In addition, the existing ground-based NAVAID, to which the routes at Glasgow are currently attached, is being withdrawn by December 2022 as part of the AMS implementation programme, requiring the procedures to be upgraded to a satellite navigation standard.

3. Issues and opportunities arising from the proposed change

Opportunities An ACP to upgrade GLA's arrival and departure routes offers the opportunity to:

- **Enhance safety:** The potential to reduce (and possibly remove) safety risk factors from the current operation.
- **Better manage the impact of aircraft noise:** The potential to deploy more precise and flexible routes that optimise aircraft performance, avoid noise sensitive areas and offer communities with more predictable relief.
- **Increase flight efficiency:** The potential to tackle inefficiencies in the current route structure that lead to aircraft flying longer tracks and sub-optimal climb and descent profiles, creating more fuel burn / emissions.
- **Improve network performance:** The potential to integrate GLA's routes with those of adjacent airports and the wider Scottish TMA network.
- **Optimise the use of local airspace:** The potential to reduce the number of departure procedures (18, down to c.10) and controlled airspace.
- **Strengthen resilience:** The potential to introduce additional airspace capacity for redundancy in the event of disruption.
- **Optimise the performance of existing infrastructure** by configuring the airspace to deliver runway capacity improvements.

3. Issues and opportunities arising from the proposed change

Key issues

There are several important issues that GLA will need to manage closely during the development of the ACP, including:

- **Safety risk management:** The deployment of a new airspace structure and arrival/departure routes has the potential to introduce new safety risks that will be managed holistically via GAL's SMS*.
- **Redistribution of aircraft noise:** The ACP creates the potential for the redistribution of noise that may create new, more frequent or more concentrated impacts.
- **Alignment of consultation:** Aviation stakeholders and local communities will be consulted about multiple co-dependent FASI North ACPs with potentially overlapping impacts that must be closely aligned to enable respondents to understand the cumulative effects.
- **Transition Altitude:** There is the potential for the UK Transition Altitude to be harmonized at a higher level during the ACP timeframe.
- **Aircraft equipage / approvals** to fly advanced procedures.
- **Stakeholder confusion / legacy tensions:** linked to the original CAP725 ACP.

*Safety management system

4. Provisional indication of the level and process requirements

Provisional level

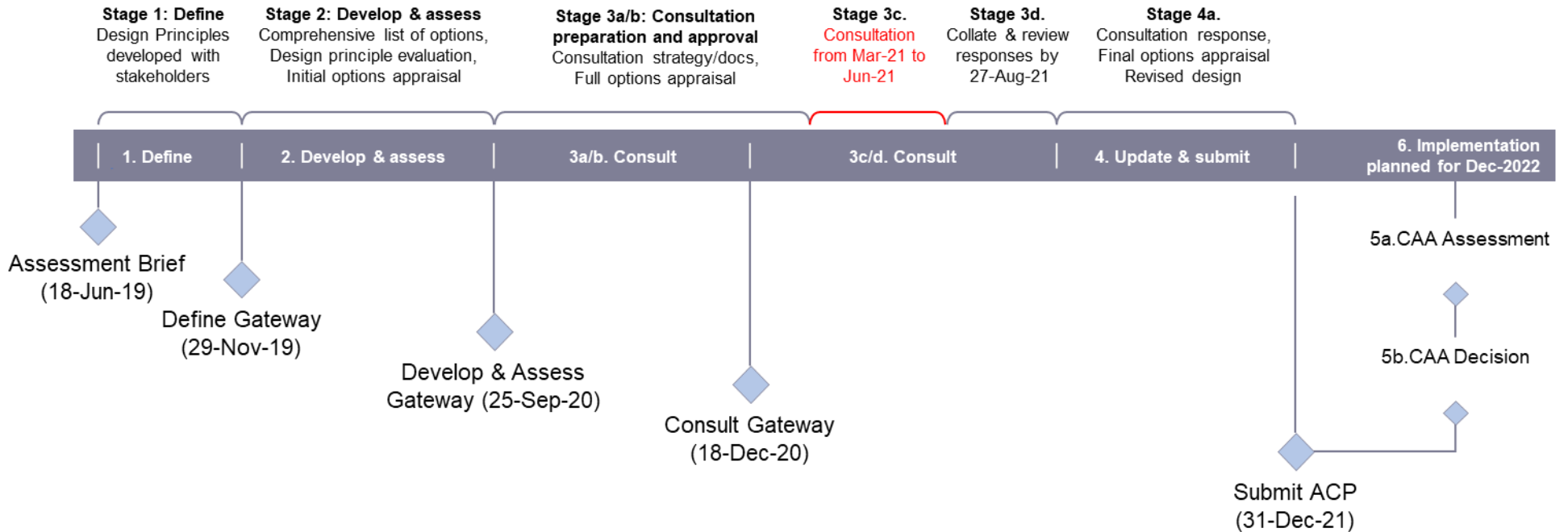
GLA understands that because the ACP has the potential to create noise impacts below 7000ft. the proposal is likely to be considered a level 1 change at the end of Stage 2 of the CAP1616 process.

5. Outline of intended approach

Approach

- **Level 1 change:** GLA intends to progress the ACP on the assumption that the proposal must meet all the requirements associated with a level 1 airspace change.
- **A runway capacity review** will be conducted in the early stages of the ACP to understand the potential for airspace development to strengthen resilience and optimise the performance of the existing infrastructure.
- **Extensive engagement:** GLA plans to engage proactively with all relevant stakeholders, including local communities and environmental representatives, from the outset and will conduct the change process based on the outputs of these two-way conversations.
- **Close alignment with co-dependent ACPs:** GLA intends to align the development of the ACP with the overall FASI North programme and will coordinate the schedule of airspace design, consultation and engagement, regulatory submission and implementation activities as appropriate with the other airports and NATS (enroute).
- **ACP outputs** will be submitted for regulatory gateway reviews at least 2 weeks prior to the meetings, with the objective 3 to 4 weeks where possible.
- Valuable feedback from the previous ACP will be used to shape the approach to engagement for the forthcoming process.

6. Provisional process timescale



7. Next steps and any other business
