

Design Principles Engagement Workshop

September 2019



Welcome

Agenda

Element
Welcome
Introduction to airspace modernisation
Introduction to engagement workshop
Questions
Discussion of airspace change in small groups
BREAK
Discussion of each design principles theme in small groups
Feedback as a full group
Individuals priority exercise
Wrap-up and next steps

Workshop Airspace Modernisation Introduction

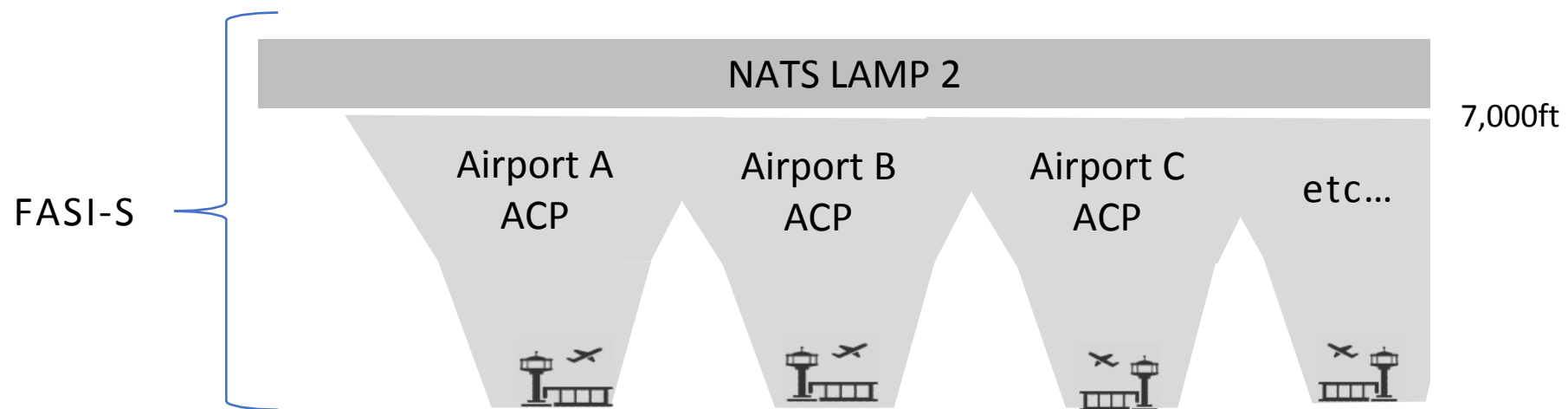
September 2019

[Redacted] (NATS)

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Airspace Modernisation

- The London Airspace Modernisation Project (LAMP) 2 is an Airspace Change Proposal (ACP) that aims to modernise the airspace network above and surrounding London.
- It is part of a wider programme called the Future Airspace Strategy Implementation South (FASI-S) established by the CAA/ DfT; which will modernise the whole network.
- ACPs below 7,000ft are led by individual airports.



Bristol Airport Ltd. Airspace Change Proposal

- Bristol Airport Ltd is planning to submit an Airspace Change Proposal (ACP) to modernise the airport's arrival routes, departure routes and associated airspace structures.
- The Future Airspace Strategy Implementation South (FASI-S) has been established by the CAA/ DfT and 15 key airports, including Bristol, to coordinate a series of Airspace Change Proposals.
- Alongside this, LAMP 2 will introduce additional airspace capacity in coordination with the airport Airspace Change Proposals.
- The redesign of Bristol Airport's arrival and departure routes will utilise satellite navigation standards allowing the airport to:
 - Minimise and mitigate the noise effects of flight paths;
 - Reduce emissions;
 - Optimise the main Hold and borders of Controlled Airspace.
- This Airspace Change Proposal will follow the Civil Aviation Authority's (CAA) CAP1616 process.

CAP1616 Airspace Change Process

Stage 1 Define

Step 1A: Assessment Requirement

Step 1B: Design Principles

Stage 2 Develop and Assess

Step 2A: Options Development

Step 2B: Options Appraisal

Stage 3 Consult

Step 3A: Consultation Preparation

Step 3B: Consultation Validation

Step 3C: Commence Consultation

Step 3D: Collate and Review Responses

Stage 4 Update and Submit

Step 4A: Update Design

Step 4B: Submit Proposal to CAA

Stage 5 Decide

Stage 6 Implement

Stage 7 PIR



1A: Statement of Need

1A: Assessment Meeting between Bristol/ Civil Aviation Authority (CAA)

1A: CAA determines whether Airspace Change Proposal (ACP) is appropriate

1B: Engagement between Bristol/ stakeholders

1B: Design Principles

1B: Document summarising how the Design Principles were developed and influenced

2A: Airspace Change Design Options

2A: Further engagement with stakeholders on Options

2A: Design Principle evaluation

2B: Initial Options Appraisal

Bristol ACP High-Level Timeline

Stage 1 Define

Step 1A: Assessment Requirement

Step 1B: Design Principles

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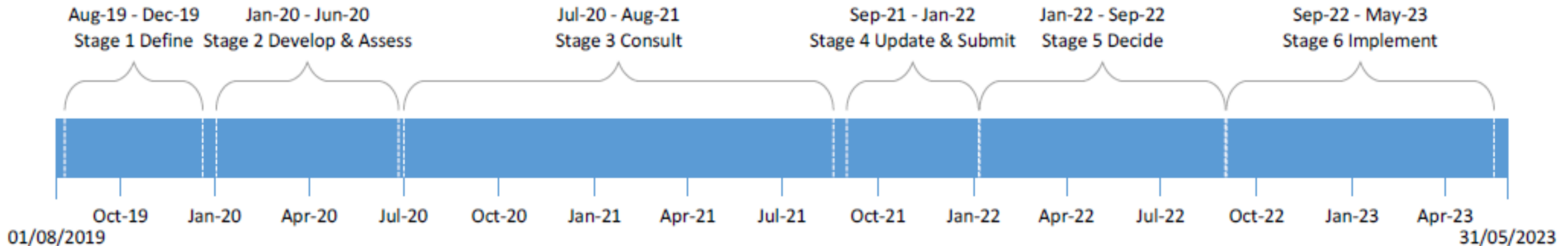
Step 3C: Commence Consultation

Step 3D: Collate and Review Responses

Stage 4 Update and Submit

Step 4A: Update Design

Step 4B: Submit Proposal to CAA



Design Principles Engagement Workshops

Why we need to modernise our
airspace

[REDACTED], Head of Airside Operations and Safety

Why we need to modernise our Airspace



- The UK's airspace structure was designed in the 1950s for a different generation of aircraft and at a time when air traffic was less than half of what it is today.
- The network of routes in the airspace above us is vital for moving people and goods around the world safely, securely, quickly and on time. Our airspace does not currently make best use of the vastly improved aircraft capabilities.
- **Martin Rolfe, CEO NATS** (Britain's main Air Navigation Service provider) has likened our skies to the road network in the UK. The UK road system of the 1960s simply would be unable to cope with today's road traffic levels and would cause an 'unsustainable' amount of delays.

The main objective is to deliver:

**“quicker, quieter and cleaner journeys
and more capacity for the benefit of
those who use and are affected by UK
airspace”**

[ref. Airspace Modernisation Strategy]

The Benefits of Modernisation

- **Safety enhancement**
 - Access to improved accuracy navigation techniques
 - More systemised route design to reduce ATC and pilot workload
- **Optimisation of arrival and departure procedures in collaboration with surrounding airspace users**
 - Make best use of the airspace to accommodate future needs for all users
 - Development of holding techniques to improve resilience (e.g. in bad weather or excess demand)
- **Implementation of noise mitigation procedures**
 - Continuous climb and descent profiles can reduce noise footprint (and reduce emissions)
 - Flexibility on routes or ATC techniques to limit impact on local communities
- **Reduction in emissions and delays**
 - More efficient routings that reduce fuel burn and CO2 emissions per aircraft
 - Designs coordinated as part of the network to minimise delays and cancellations

**If we do nothing it will
mean more noise,
emissions, delays and
cancellations.**

Design Principles

- The purpose of today is to develop Design Principles we should consider as part of our airspace change proposal.
- What is a Design Principle?
 - Design Principles form a framework against which airspace change design options will be developed and evaluated in the future stages of the CAP1616 process. They encompass **safety, regulatory, environmental** and **operational criteria** and **strategic policy objectives**.
- CAP1616 states that these should be drawn up through discussion with stakeholders. The aim is for Bristol Airport to have a good level of understanding what considerations are important to you.
- We will take the feedback thoughts and comments gathered from our workshops and put together a set of Draft Design Principles for you to review, comment on and prioritise.

Questions?

**Group discussion:
What's important to
consider as part of airspace
change?**

Now feed back

BREAK

**Group discussion:
What are your views on the
initial design principles?**

Safety

- How important is this area?
- What should our priorities be in this area?
- What should Bristol Airport's Airspace Change Process try to achieve in this area?

Operations, technical and policy

- How important is this area?
- What should our priorities be in this area?
- What should Bristol Airport's Airspace Change Process try to achieve in this area?

Environment

- How important is this area?
- What should our priorities be in this area?
- What should Bristol Airport's Airspace Change Process try to achieve in this area?

Noise

- How important is this area?
- What should our priorities be in this area?
- What should Bristol Airport's Airspace Change Process try to achieve in this area?

**A chance to feed back:
What are your views on the
initial design principles?**

Over to you

What's next?

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