

Airspace Modernisation

Introduction to Design Principle Development



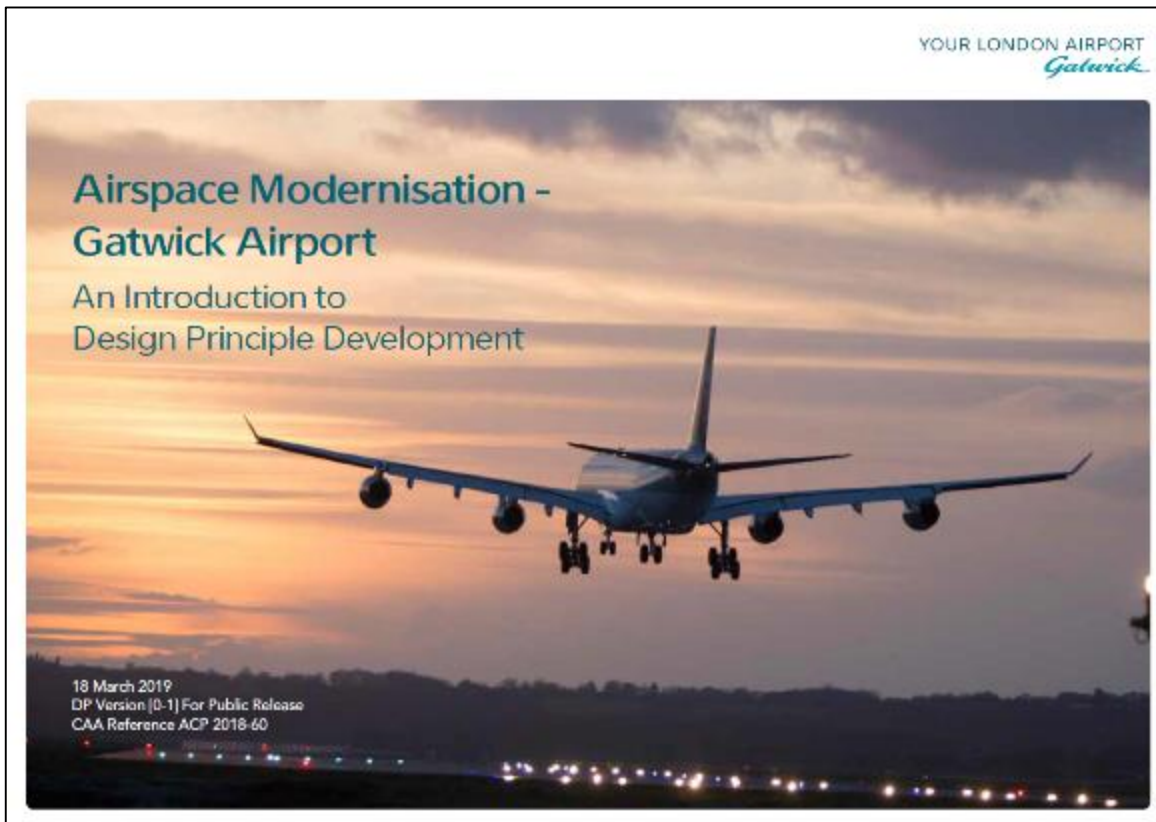
Topics

Item	Topic	Duration
1	Introduction to Programme & Process of Airspace Change	25
2	Q&A	10
3	Design Principle Introduction	25
4	How & When to give us your Feedback	
5	Q&A	30



Design Principle Introduction

An introduction to a vital programme of airspace change critical to the long term effectiveness of an important aspect of our national infrastructure.



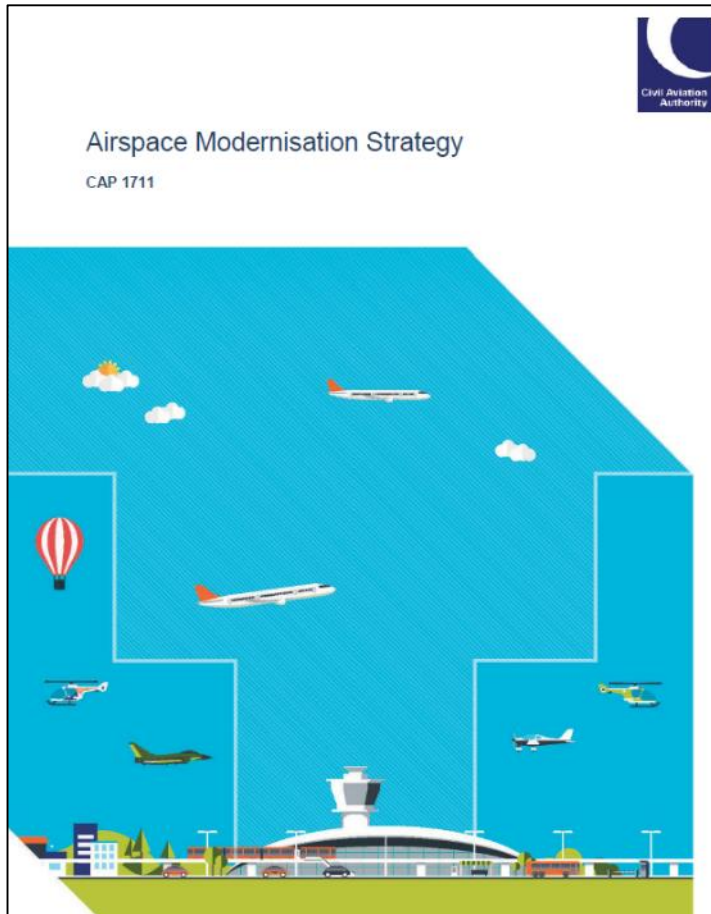
Gatwick's first task is to establish a suite of Design Principles

Your feedback please by 5 April



Airspace Modernisation

The Government and CAA are co-sponsoring the Airspace Modernisation Programme. Fifteen integrated initiatives to be delivered by the end of 2024.

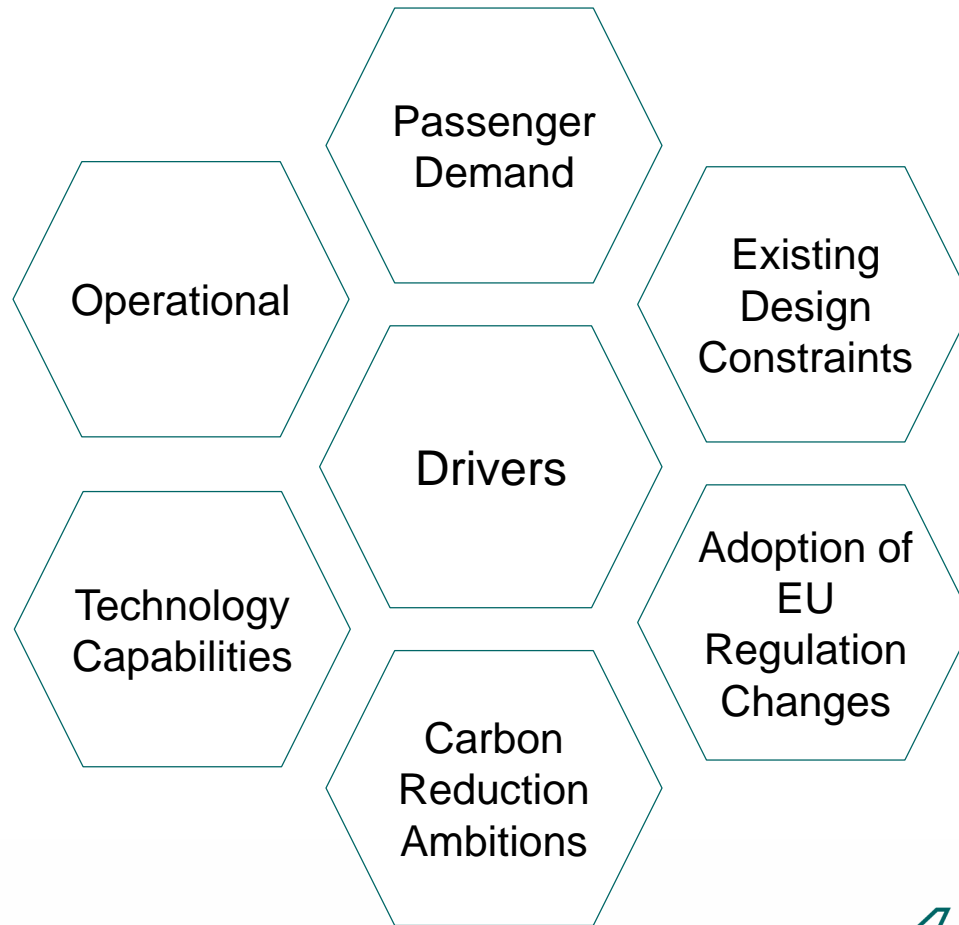


Its ambition is to deliver quicker, quieter and cleaner journeys and offer more capacity for the benefit of those who use and are affected by UK airspace



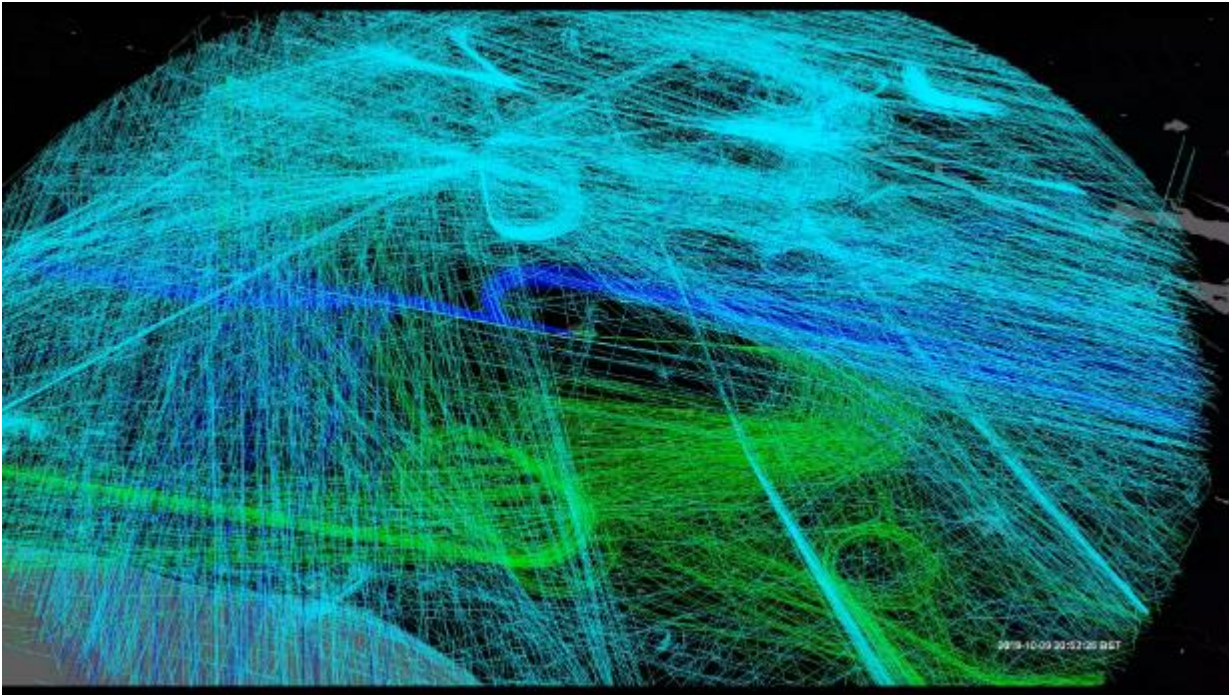
Drivers of Modernisation

There are at least 6 aspects that are helping to create a compelling reason to modernise UK airspace



Coordinated Programme

The airspace over London and the South East is some of the busiest in the world. The scope and scale of the envisaged change requires a high level of coordination and control.



NATS to coordinate the efforts of airports

CAA to provide oversight and regulatory authority for change



Responsibility & Integration

NATS will be the airspace designer above 7000 feet; this is where the majority of new capacity will be created. Airports will review and redesign procedures and set the entry and exit points at 7000 feet.



7000 feet



Surface



Image Source: OpenStreet



Potential Future Design Features

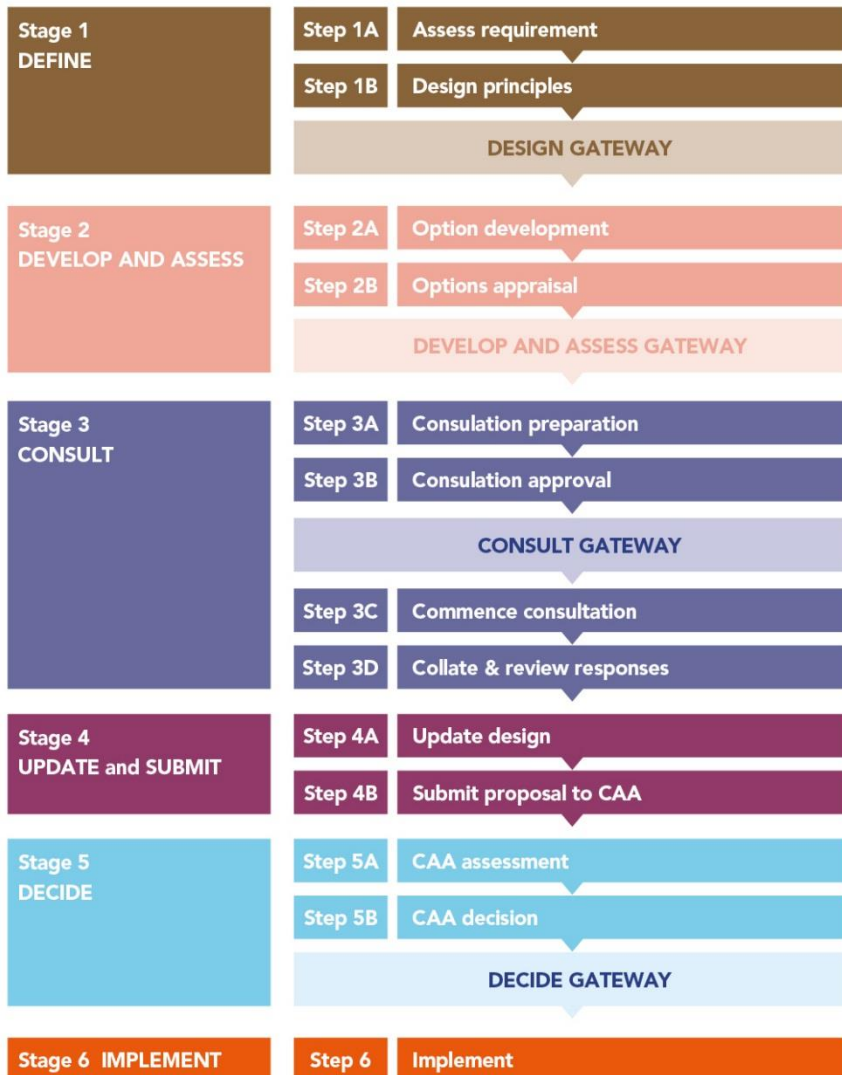
Using modern airspace design standards, combined with better integration of navigation systems and tools, there are a range of design features that could be integrated into an airspace design more befitting 21st Century



<https://vimeo.com/185954571>



Airspace Change Process



The CAA's new airspace change process involves 6 stages and includes 3 gateways before a public consultation is authorised.

The CAA are explicitly looking to see how we have engaged with those we believe would be helpful in shaping designs.

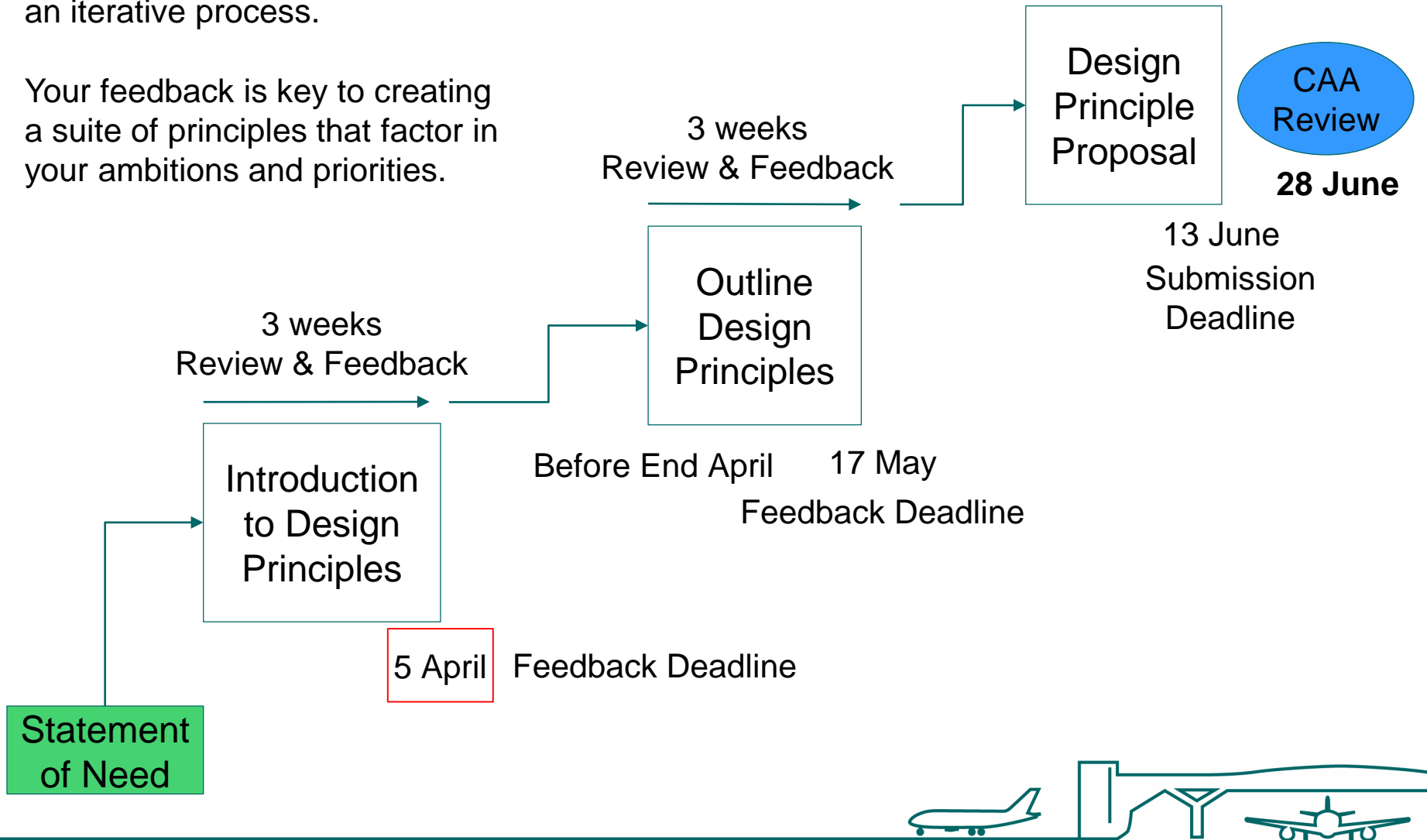
We need to support proposals with evidence of a 2-way discussion and our reflection on this engagement.



Design Principle Development

Design principle development is an iterative process.

Your feedback is key to creating a suite of principles that factor in your ambitions and priorities.



Organisation Engagement

We would like to actively engage with organisations and groups who can help us shape design principles and options. We have identified 3 groups.

Aviation Community

- Local Airfields & Airports (3)
- Emergency Services (2)
- Airlines (23), Air Traffic Control (2)
- Airports & MoD (12)
- Aviation Organisations (4)

Local Government

- County Councils (4)
- Borough & District Councils (19)

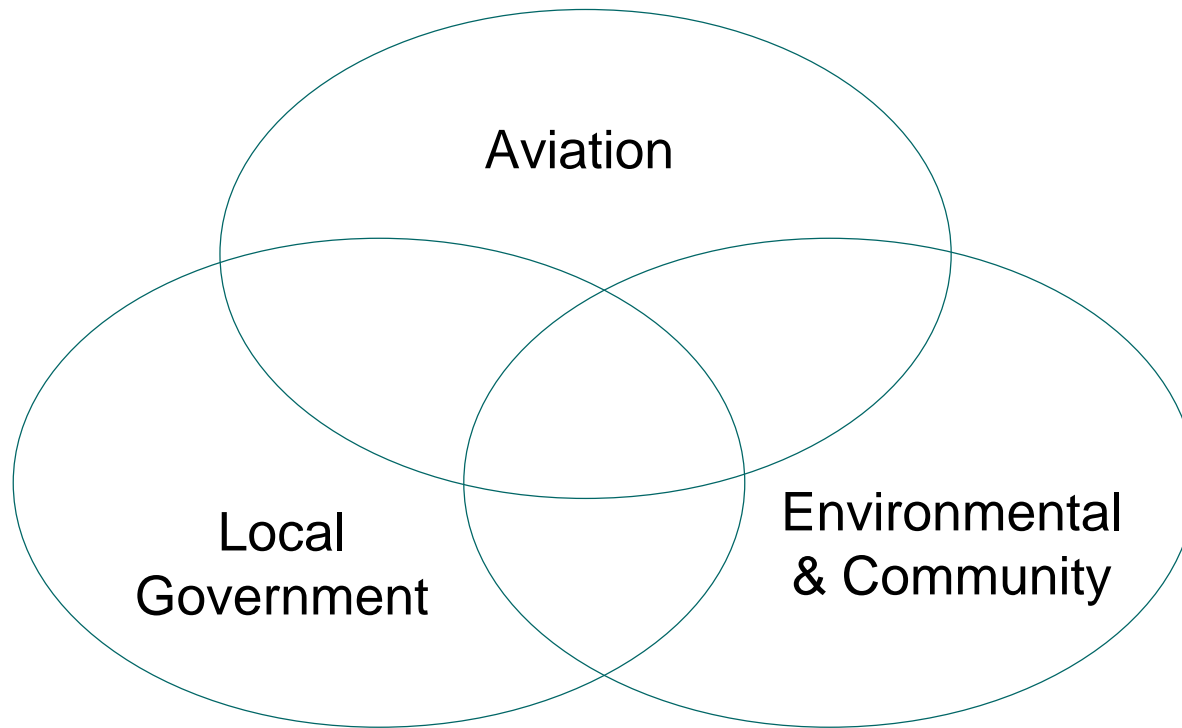
Environmental & Community

- Environmental Groups (4)
- NMB Groups (8)

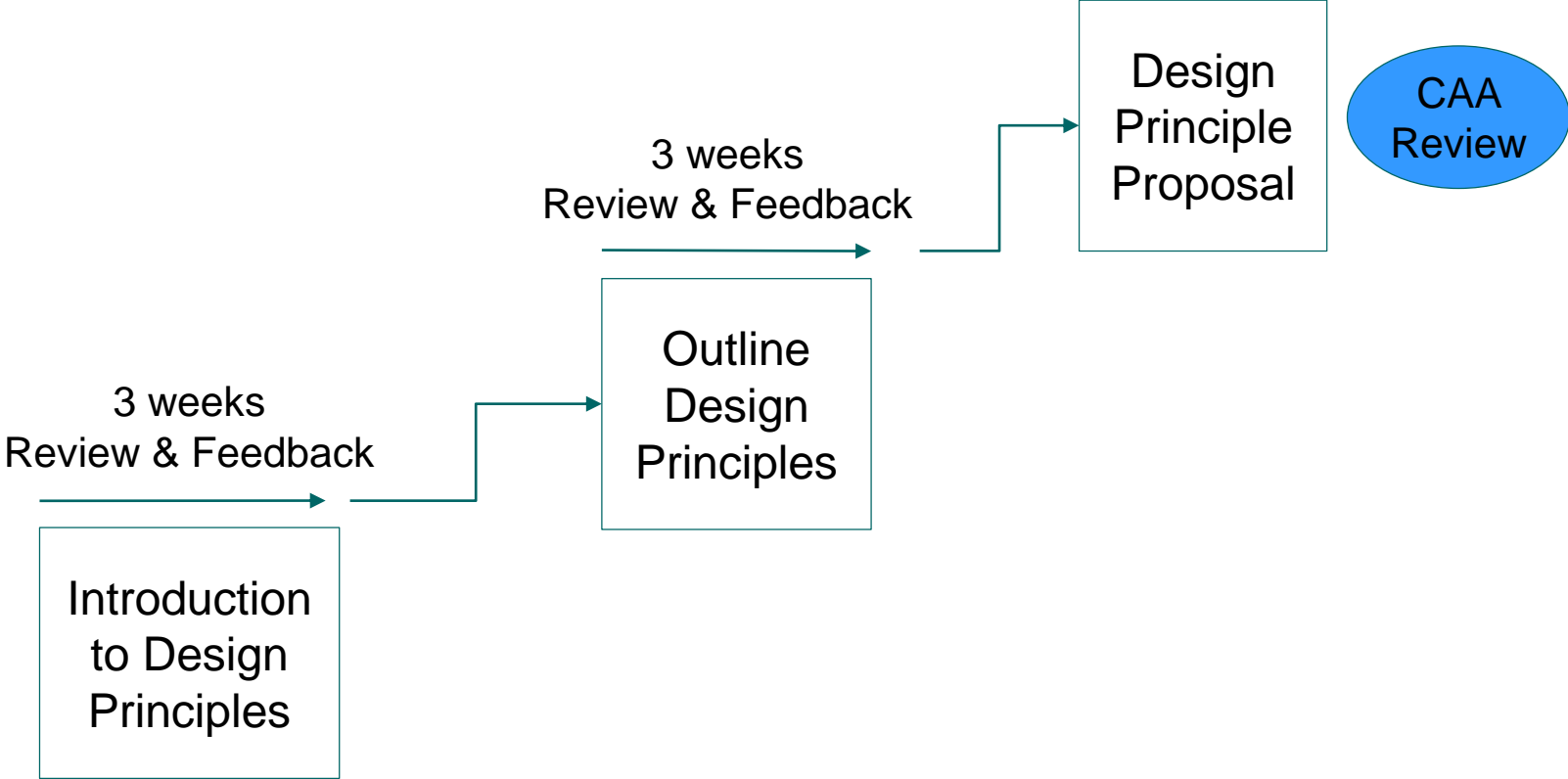


Future - Integrated Engagement

When we undertake engagement in stage 2, make up of the sessions we host will be determined by the topic and geography. We expect that many sessions will involve participants from more than one group.



Questions?

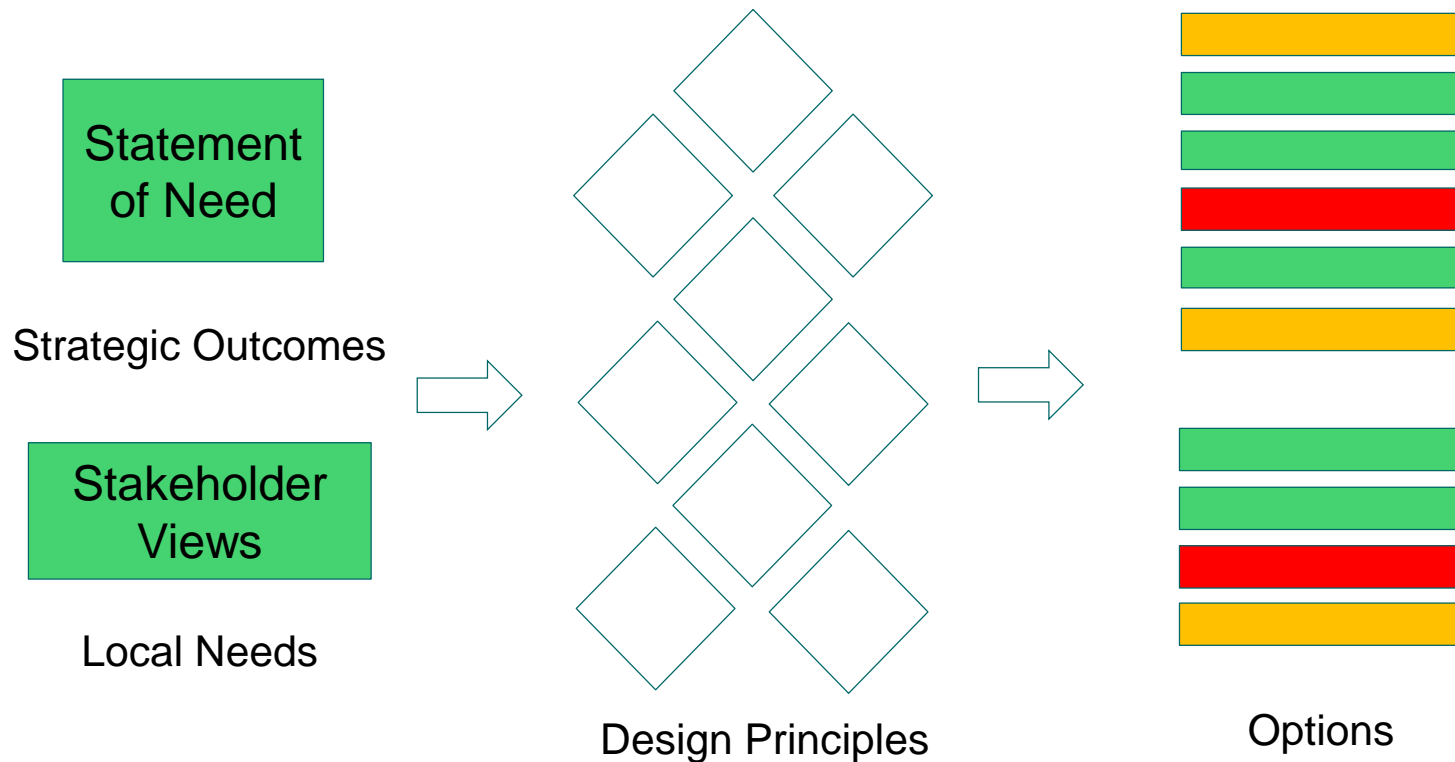


5 April Feedback Deadline



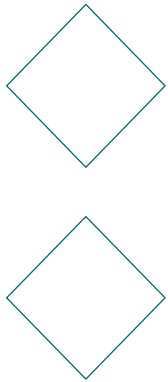
Design Principle Application

Design Principles form a **qualitative framework**, which is used to assess the suitability of airspace design options against the strategic outcomes.



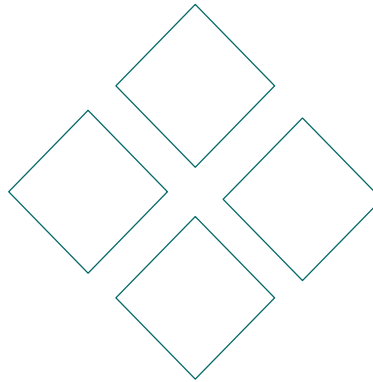
Design Principle Development

We have offered a range of areas in which design principles may be helpful to shape options.



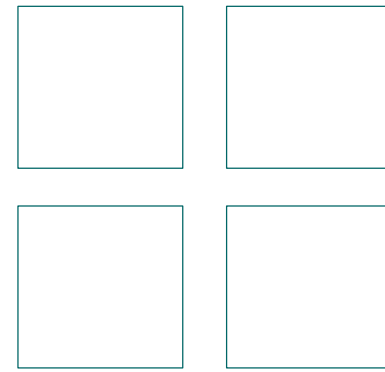
Core Principles

Aspects we believe are key foundation stones of a good airspace design



Potential Principles

Aspects that could have an influence on airspace design option analysis



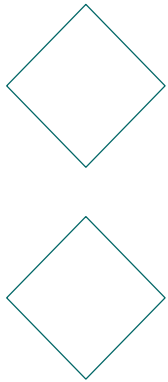
Areas for Consideration

Aspects that may have a range of multiple choices; this choice could form the basis for a design principle

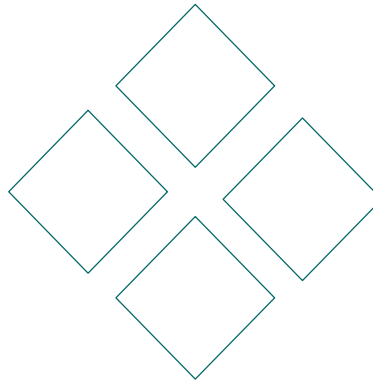
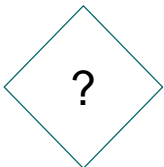


Design Principle Development

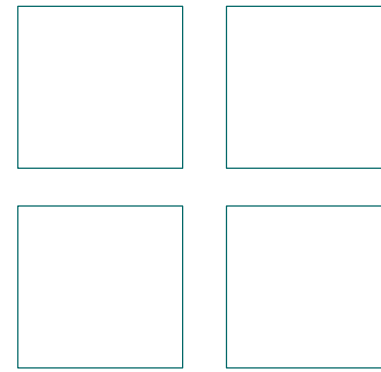
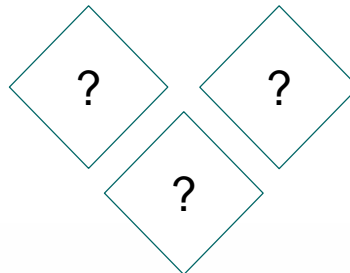
We have offered a range of areas in which design principles may be helpful to shape options. The relative priority needs to be determined.



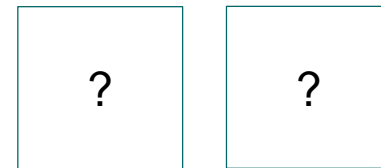
Core Principles



Potential Principles



Areas for Consideration



Core Principles

Some Design Principles may naturally command higher priorities than others, we commonly refer to these as core principles

**Safer by
Design**

We believe that it vital that a future design at least maintains, and ideally enhances aviation safety

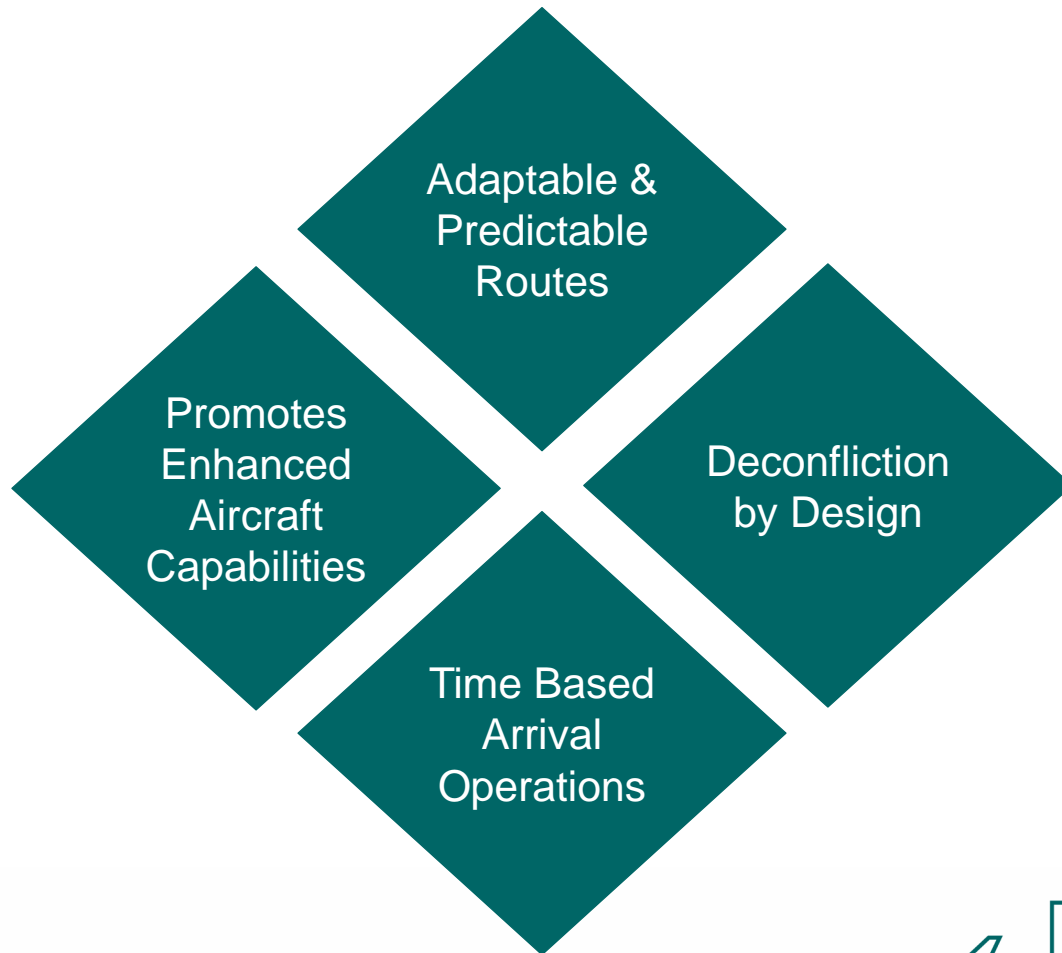
**Enhanced
Navigation
Standards**

We are required to provide departure and arrival routes built to enhanced navigation standards but the mandate does not state how or to what end



Potential Principles

We have offered 4 potential principles which we believe would be helpful in creating a design that could reduce some impacts and offer long term benefits.



Areas of Consideration

We have identified some areas of consideration and would welcome your views on where you think principles should be established?

Number of Routes?
Departure & Arrivals

How to Manage Impact
of Overflight?

Operational Efficiency
versus
Environmental Impact

Operational Resilience



Your Ideas, Feedback & Questions

Please provide your views and suggestions by 5 April

August 2018 arrivals and departures below 7,000ft shown against population

