

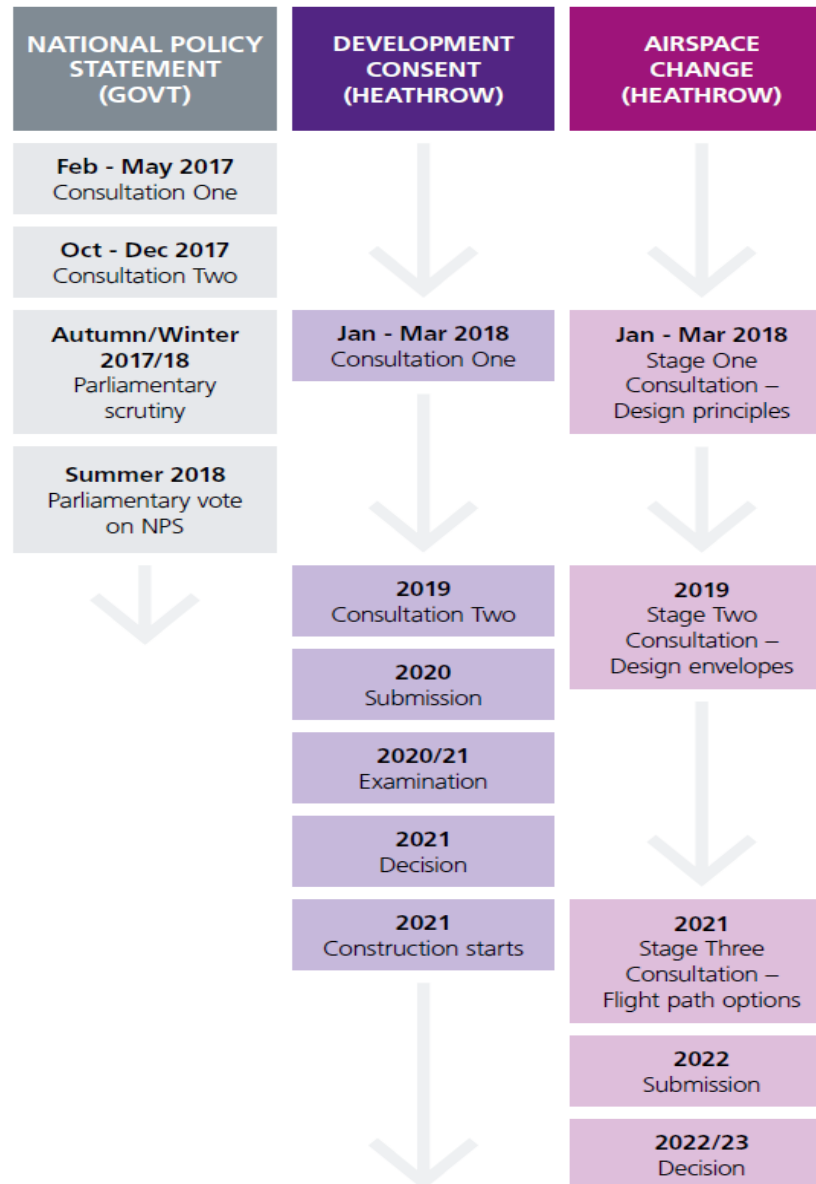


AIRSPACE PRINCIPLES CONSULTATION

24 JANUARY 2017

Heathrow
Building for the future

INDICATIVE TIMELINE





AIRSPACE PRINCIPLES CONSULTATION OVERVIEW

- Before we can begin to design our future airspace for an expanded Heathrow, we need to develop a set of principles or 'rules' to use when designing the new flight paths.
- We will also need to demonstrate that we have met all requirements set out in the Airports National Policy Statement (ANPS). The draft ANPS includes requirements such as:
 - a) Avoid significant adverse impacts on health and quality of life from noise;
 - b) Mitigate and minimise adverse impacts on health and quality of life from noise; and
 - c) Where possible, contribute to improvements to health and quality of life.
- However, beyond these core requirements, we expect to have a number of options and trade-offs to choose between when designing future flight paths.

AIRSPACE DESIGN PRINCIPLE 1: FLIGHT PATHS

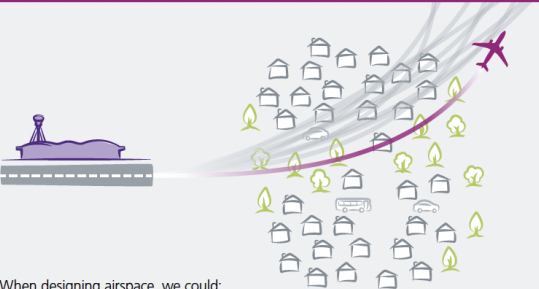
There are three options for the design principle we could apply when deciding where we choose to put our flight paths in relation to where they are today. A trade-off exists between these three options so we want your views on which should be given priority.

Key

-  Existing aircraft tracks
-  Potential new route

A

Flightpath option A



When designing airspace, we could:


A

Minimise the total number of people overflown, with routes designed to impact as few people as possible;

This option would minimise the total number of people overflown by directing flights over the areas of lowest population. This is likely to result in some routes over areas that don't currently experience overflight from aircraft using Heathrow. In addition, aircraft will be more concentrated on a route than they are today, meaning those affected people are likely to experience more aircraft overhead than those experienced by people overflown by aircraft today.

B

Flightpath option B




B

Minimise the number of people newly overflown, keeping routes close to where they are today, where possible;

This option would minimise the number of people newly overflown by keeping routes as close to today's flight paths as possible. This is likely to result in a concentration of aircraft over the areas overflown by aircraft using Heathrow today, meaning that these areas are likely to experience more aircraft overhead than they do currently.

C

Flightpath option C



C

Share routes over a wider area, which might increase the total number of people overflown but would reduce the total number of people significantly affected by the routes as the noise will be shared more equally.

This option would spread the routes over a wider area to share the impact of overflight and provide periods of relief from noise by alternating between the routes over different periods of time. This would result in a larger number of people being overflown, but each route would be flown less frequently than under option (a) or (b).

Should we aim to minimise the total number of people overflown

or

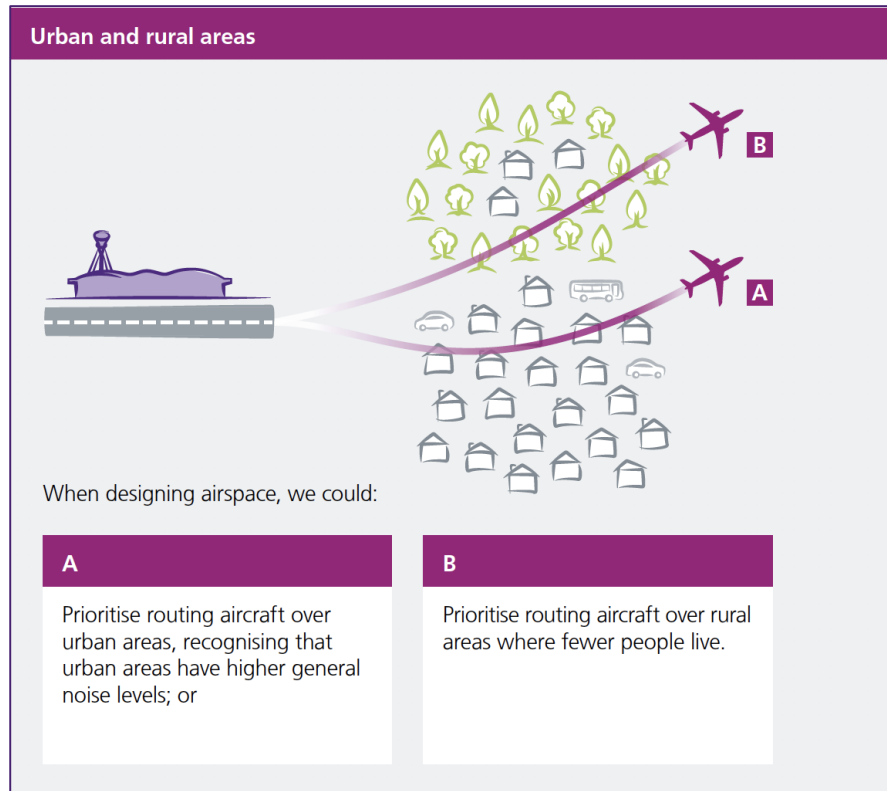
Should we aim to minimise the total number of people newly overflown

or

Should we aim to share routes over a wider area

AIRSPACE DESIGN PRINCIPLE 2: URBAN AND RURAL AREAS

Urban areas are more populated than rural areas so airspace designs that seek to minimise the number of people overflown are likely to position routes over rural areas or less densely populated urban areas. However, urban areas have higher general noise levels than rural areas and therefore the presence of aircraft noise might be less noticeable than in rural locations.



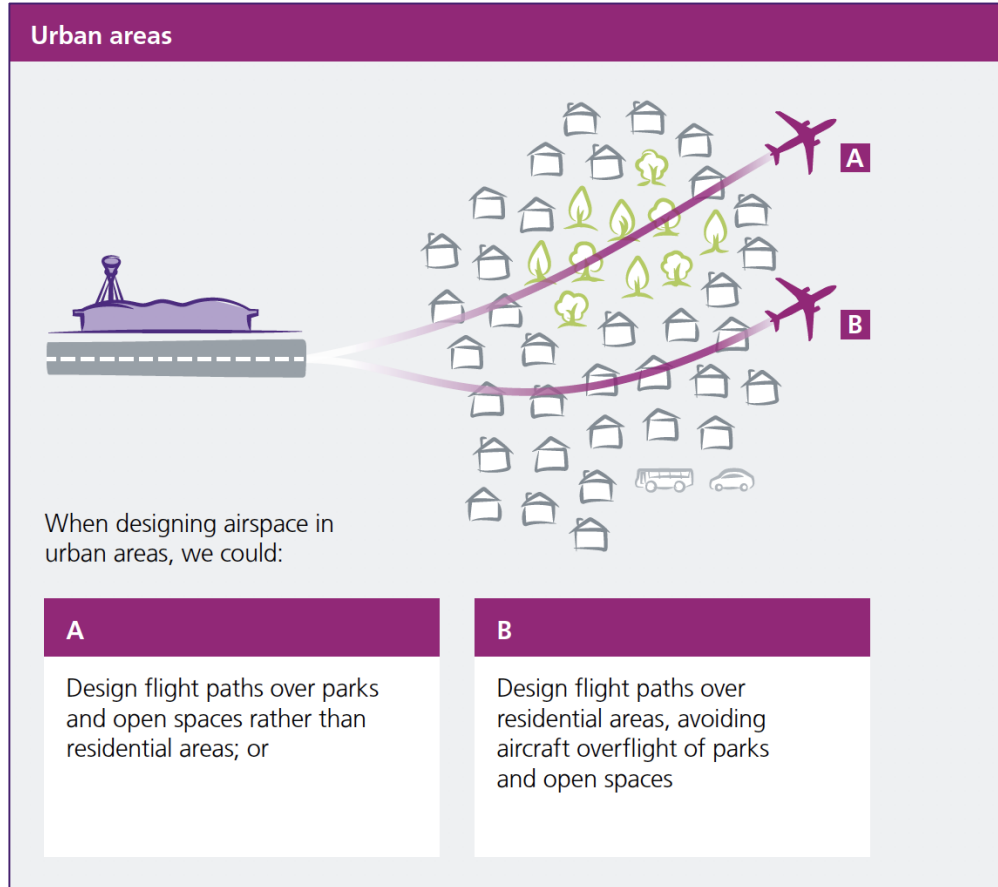
A. Should we aim to route aircraft over urban areas, recognising that urban areas have higher ambient noise levels

or

B. Should we aim to route aircraft over rural areas where fewer people live

AIRSPACE DESIGN PRINCIPLE 3: URBAN AREAS

Not all urban areas have the same general noise level, and parks and open spaces within urban areas may be especially valued for their tranquillity.



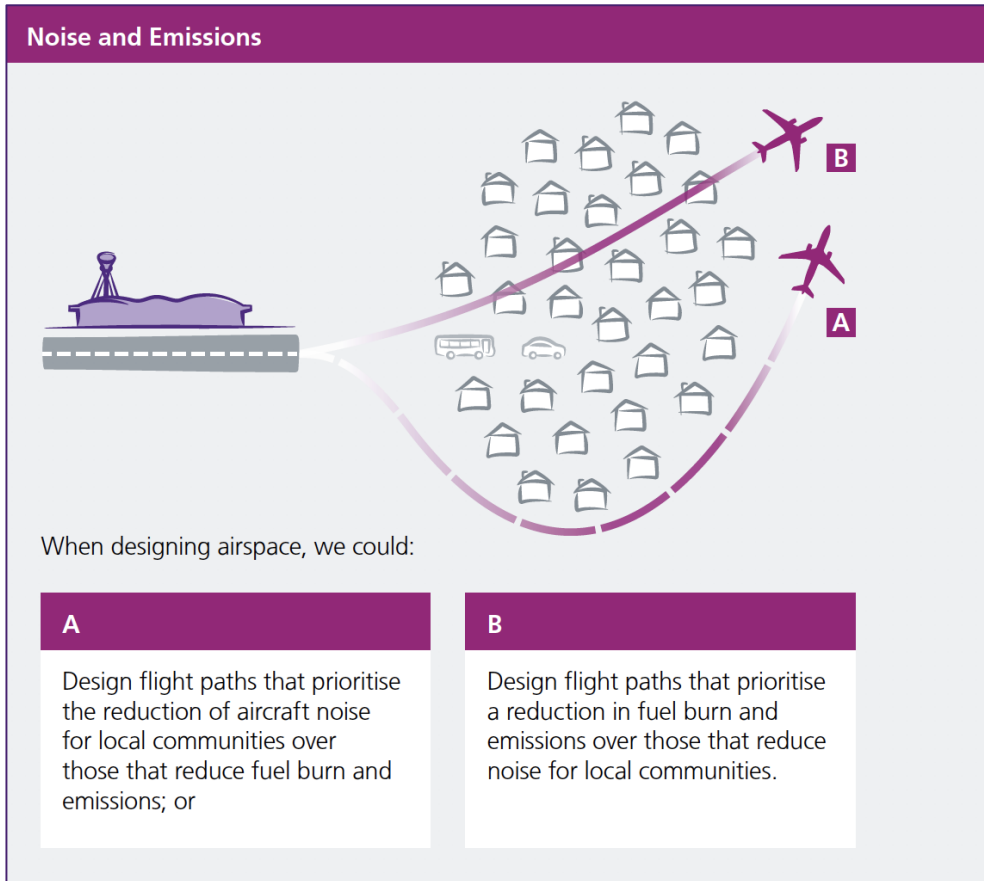
A. When flying over urban areas, should we aim to route aircraft over parks and open spaces where fewer people live

or

B. Should we aim to route aircraft over residential areas to avoid parks and open spaces

AIRSPACE DESIGN PRINCIPLE 4: NOISE VERSUS EMISSIONS

Avoiding overflight of local communities could result in a longer route, with aircraft burning more fuel and producing more emissions.



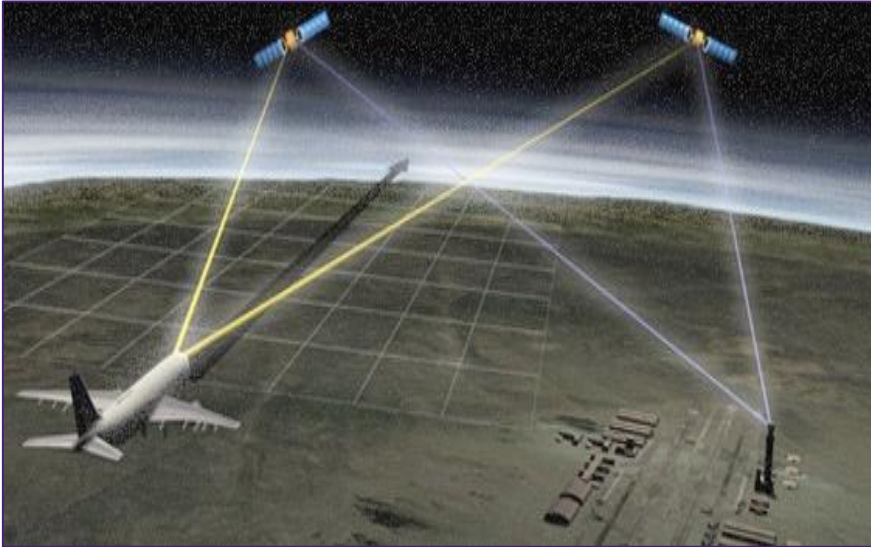
A. Should we aim to design flightpaths which prioritise the reduction of noise for local communities over those that reduce emissions

or

B. Should we aim to design flightpaths which prioritise the reduction of emissions over the reduction of noise for local communities

AIRSPACE DESIGN PRINCIPLE 5: TECHNOLOGY AND INNOVATION

This airspace redesign is a once in a generation opportunity to modernise the way our airspace is used. The airspace we design now needs to be efficient for the foreseeable future.



We are therefore proposing that one of our design principles is to base our airspace design around the latest navigation technology, even if this requires investment by airlines in some of the older aircraft at Heathrow to bring them up to these more modern capabilities.

AIRSPACE DESIGN PRINCIPLE 6: NIGHT FLIGHTS

Reducing the noise impacts of Heathrow, particularly at night, is a key focus for us – now and in the future.

For the small number of flights that can operate during the night period, we would like you to consider whether we should apply the same principles at night as we do in the day, or whether we should seek to apply them differently during the night period.



Questions?