

# APPENDIX 13

# ADDITIONAL ENGAGEMENT MATERIAL

Part A – Respondent Profiles

Part B – Animation Link

Part C – Presentation used during phase one (focus groups)

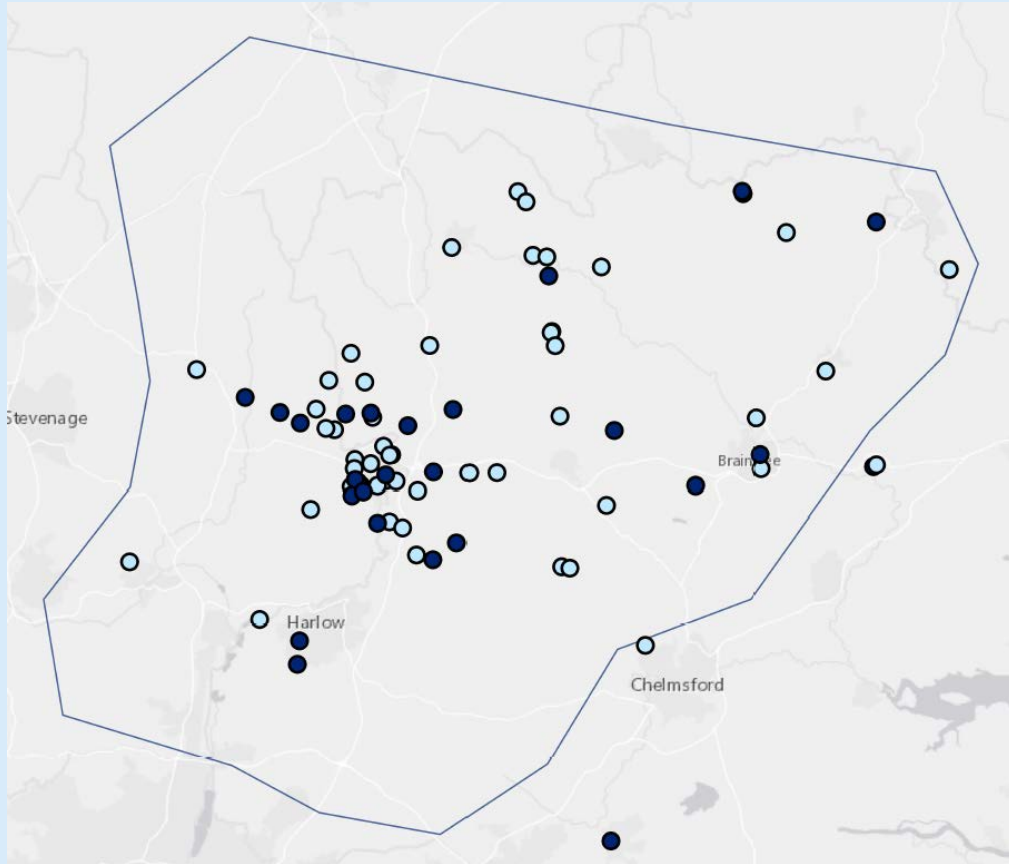
Part D – Presentation used during phase two (online workshops)

# APPENDIX 13

## Part A – Respondent Profiles

# Future Airspace Programme

## Overview



- ^ Online portal – respondent locations
- Invited participant (received an email)
- Member of the general public

- Stansted completed two different types of engagement; focus groups (with top up interviews) and online portal.
- Our online portal was available from 2nd March and closed on the 20<sup>th</sup> April.
- We received 115 responses to our online portal of which 44 were invited respondents and 71 were members of the general public.
- This report provides an analysis of the responses received via our online portal.

# Future Airspace Programme

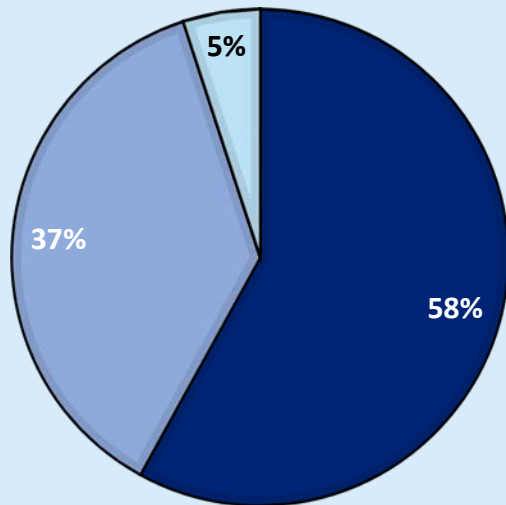
Respondent characteristics from focus groups, top up interviews and online portal

## GENDER

■ Male

■ Female

■ Prefer not to say



## AGE

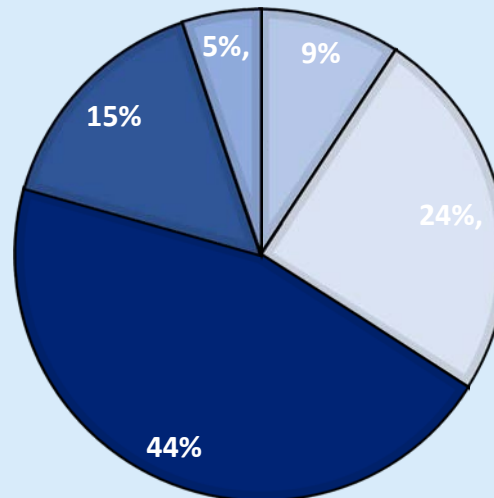
■ 0-24

■ 25-44

■ 45-64

■ 65-75

■ 75+



## ETHNIC GROUP

■ Eng / Wls / Scot / Nir / British

■ Prefer not to say

■ Any other White background

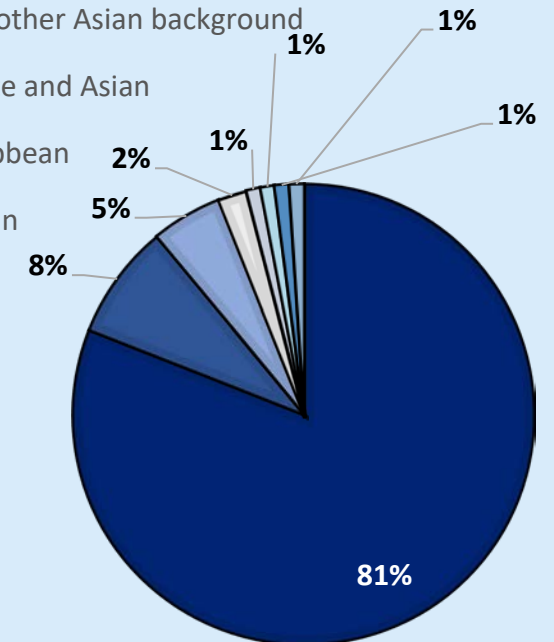
■ Any other Mixed / Multiple ethnic background

■ Any other Asian background

■ White and Asian

■ Caribbean

■ Indian



# APPENDIX 13

## Part B – Animation Link

## Future Airspace at London Stansted Airport

# APPENDIX 13

Part C - Presentation used  
during phase one (focus  
groups)

# About London Stansted Airport

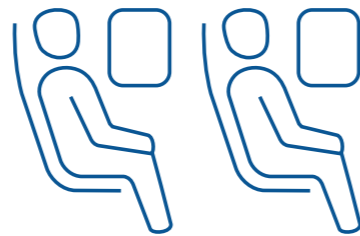


3rd

largest airport  
in London  
(4th in UK)

28m

passengers per year



with the capability to serve  
up to 43m passengers

Top 25

busiest airports  
in Europe (2018)



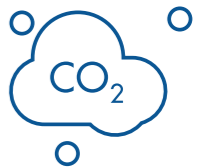
200

destinations



40

countries



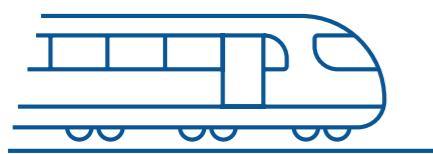
Carbon neutral

3+

airport achieved  
level 3+ accreditation  
for carbon neutrality  
in 2017

Best performing  
UK airport

50%+



of passengers using  
public transport

12,000

employees



across 200 companies

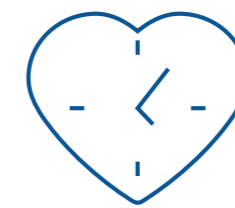
£11m

purpose built airport college



10,000

volunteering hours donated  
in 2019



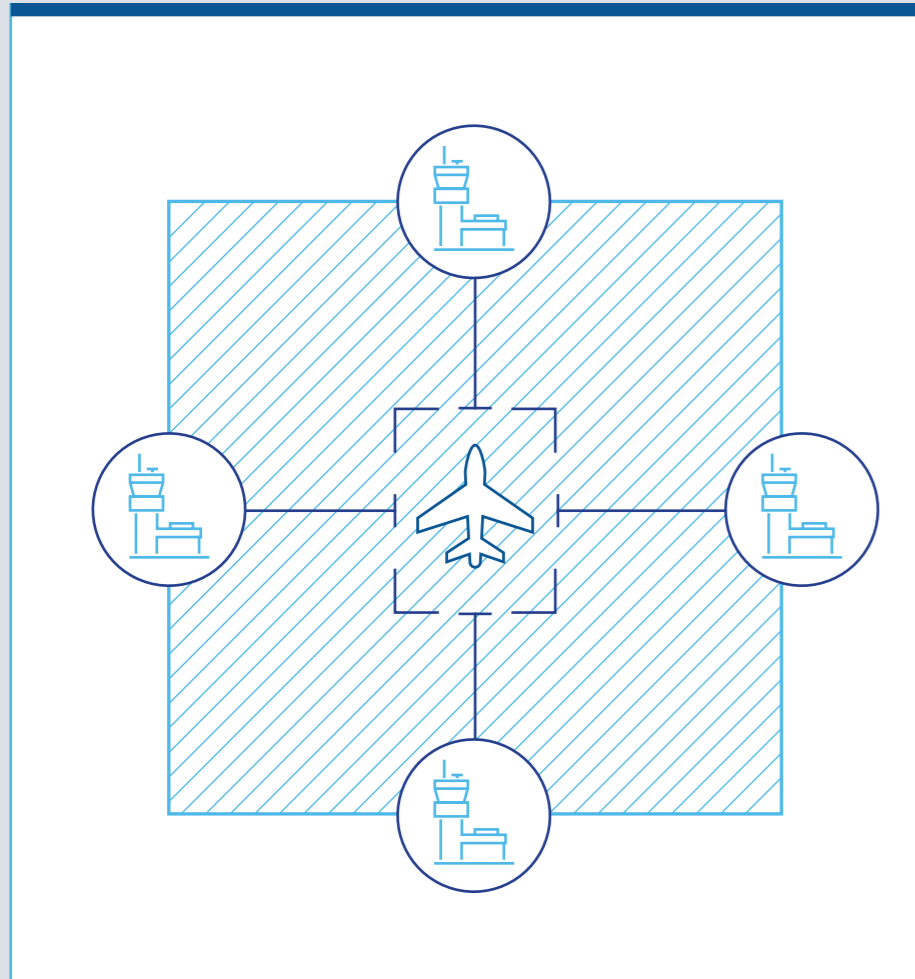
100%

waste diverted  
from landfill

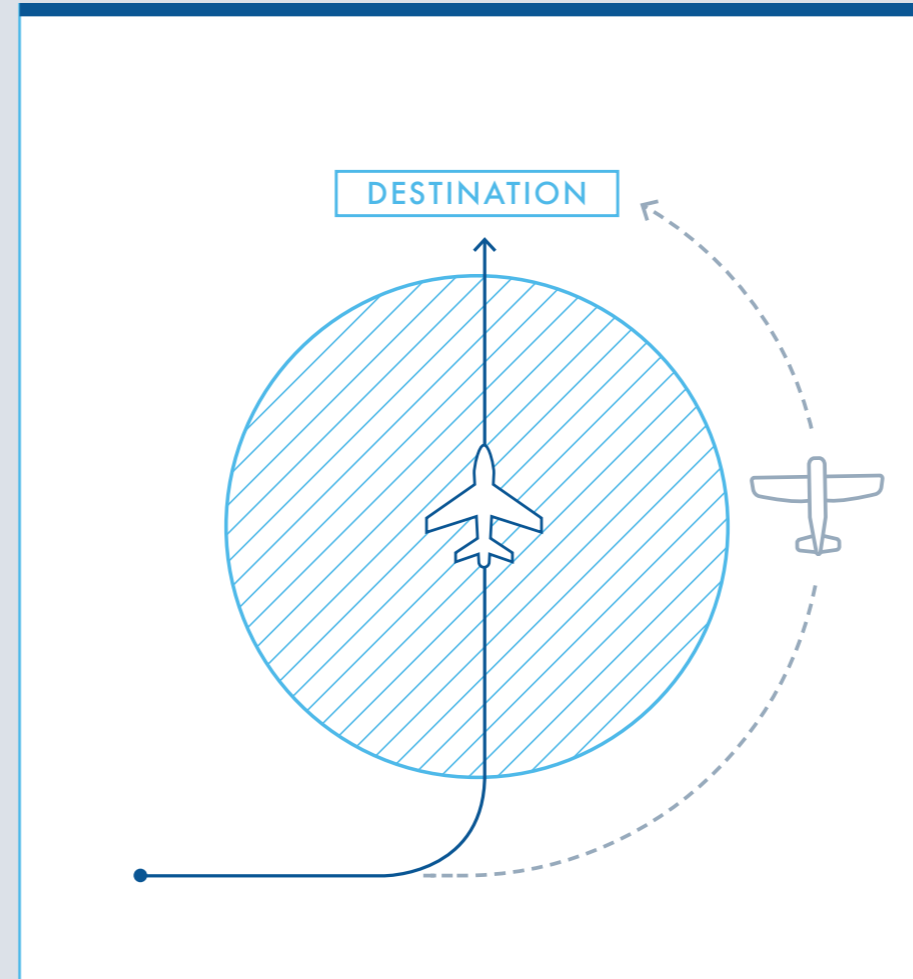




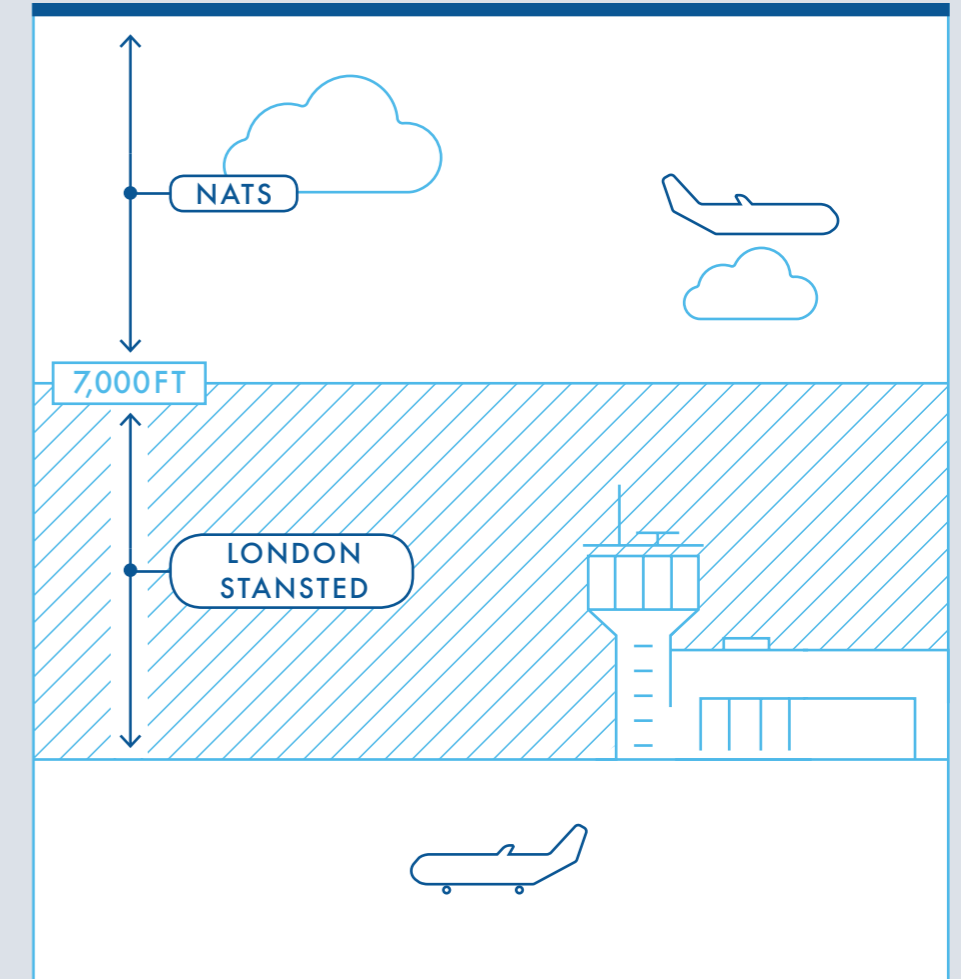
# What is the Future Airspace Programme?



The Government has set out a programme to modernise airspace across the whole of the UK. This requires the Civil Aviation Authority (CAA), NATS and all UK airports to work collectively to modernise UK airspace and make it more efficient.



Existing UK airspace was designed for a very different age, one where aircraft and navigation was much less sophisticated. Modernisation could bring significant benefits, including making journeys quicker, quieter and cleaner.



London Stansted, along with all other airports in the UK, will need to redesign the way aircraft arrive at and depart from the airport at heights of up to 7,000 feet. NATS will have responsibility for redesigning the airspace above 7,000 feet. Airspace in London and the South East is particularly complex. For this reason, Stansted will also need to coordinate its airspace with other airports in the region, particularly those nearby.

# London Stansted Airport future airspace anticipated timetable

We are here

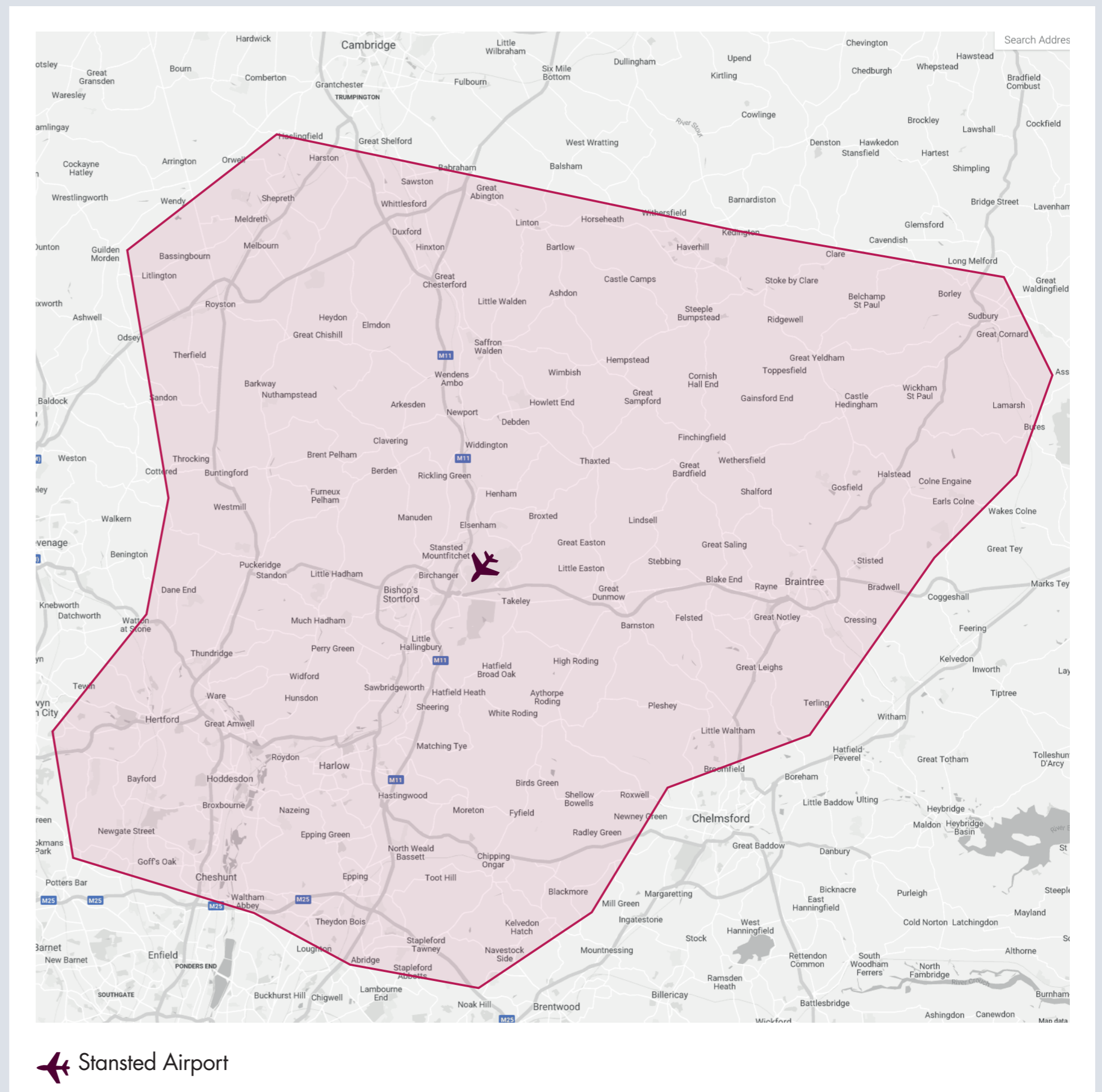


# London Stansted Airport area

The area in red on the map opposite shows the maximum area within which aircraft may fly below 7,000 feet as they depart from or fly into London Stansted.

This map will guide Stansted's approach to consulting interested parties for Step 1B, but it may reduce in size as we refine our proposals through the later stages of the process.

The map defines a clear area, but stakeholders outside of that boundary can take part in our discussions if they want to.



## Question 1

# Avoid change or fly over new areas

The Government introduced our flight paths after public consultation, and they have stayed the same for many years.

Some people have chosen to live close to or under flight paths, perhaps because they are less affected by or concerned about aircraft noise. On the other hand, some people may have chosen to live in areas away from flight paths as they don't want aircraft flying over or close to their homes.

### As we design our future flight paths, we need to consider whether to:

- prioritise keeping changes to a minimum to avoid flying over new areas (unless there is a strong reason to do so); or
- start with a 'clean sheet' and design new routes that might reduce the effect of aircraft noise, cut emissions and make better use of modern technology, but might fly over new areas as a result.

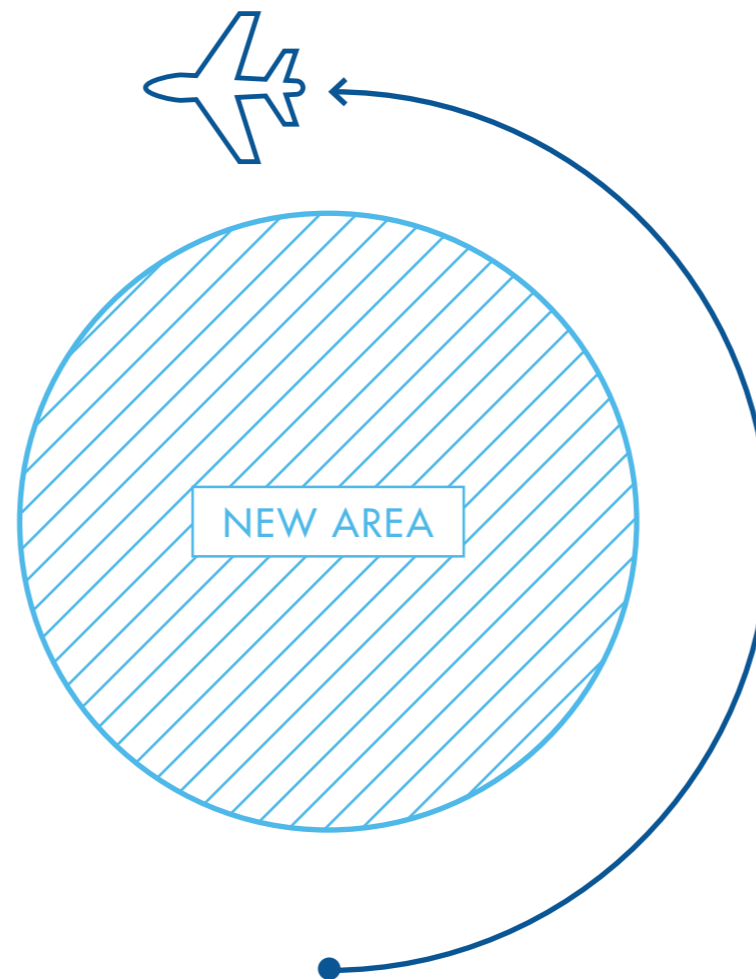
Remember you can also use the box below to give us a different view that reflects your specific priorities.

## Please indicate your preference below

When we design our flight paths, which option below do you prefer and why?

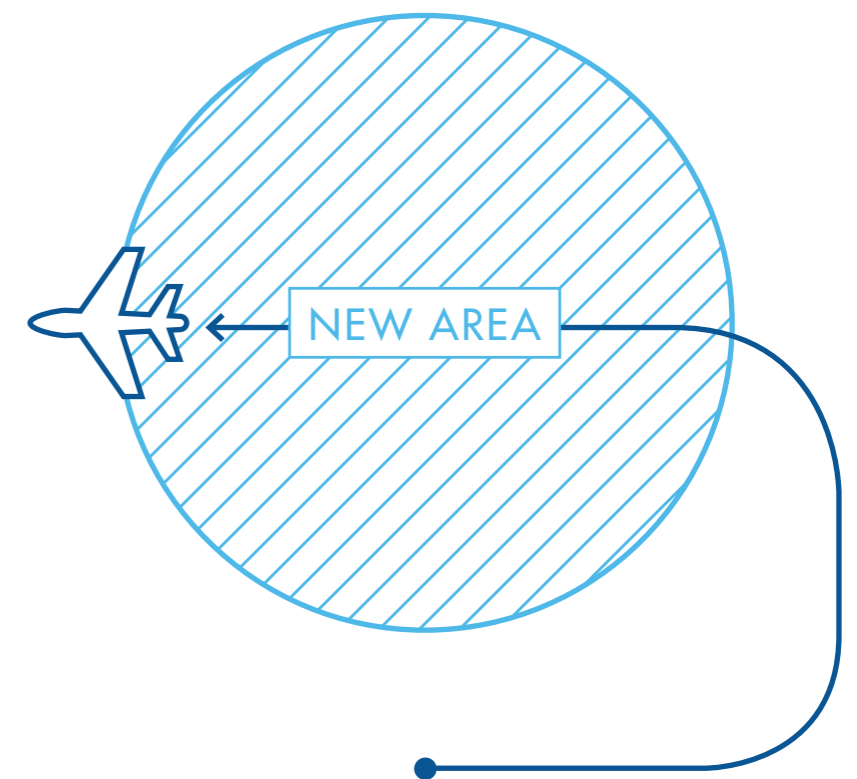
### Option 1

Avoid aircraft flying over new areas, unless there is a strong case to do so.



### Option 2

Design the best possible routes (taking account of noise, emissions, efficiency and other relevant factors), even if this means flying over new areas.



## Question 2

# Concentrating or spreading out flight paths

Modern aircraft can use satellite guidance to allow them to fly more accurately. This means flight paths can now concentrate aircraft so fewer people are overflowed and affected by aircraft noise. However, the people who are overflowed will be affected more than they previously were.

As an alternative, we can design flight paths that spread aircraft out over a wider area, perhaps using several alternative routes, and use varying flight paths on different days of the week or during different times of day or night to provide periods when there is less aircraft noise. If we take this approach, we will need to decide how long the periods of less aircraft noise last to create significant benefits.

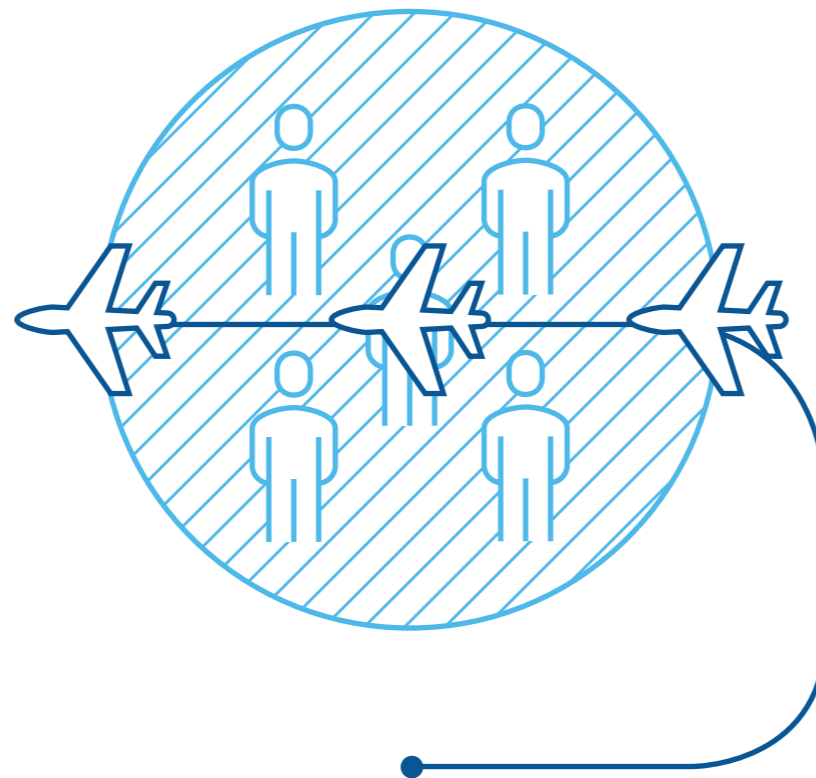
Remember you can also use the box below to give us a different view that reflects your specific priorities.

## Please indicate your preference below

### When we design our flight paths, which option below do you prefer and why?

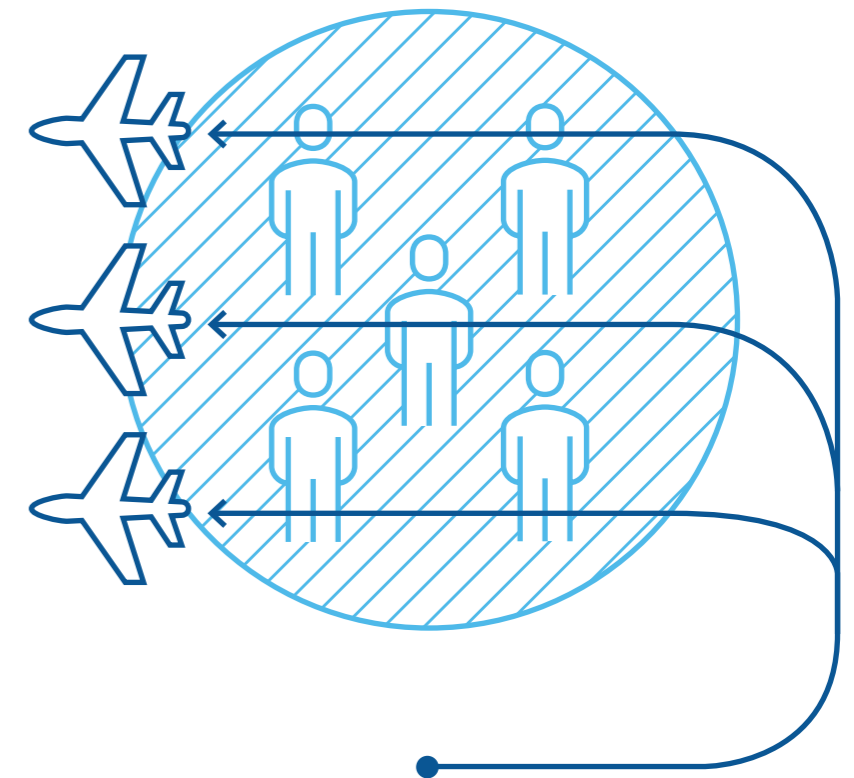
#### Option 1

Concentrate flight paths, which will affect fewer people but to a greater extent.



#### Option 2

Spread out flight paths, which will affect more people but to a lesser extent.



## Question 3

# Flying over built-up areas

When designing flight paths, we need to consider the local communities that will be flown over. To minimise the number of people affected by aircraft noise, our current routes were designed to avoid flying over built-up areas, where possible, as this was the advice from the Government at the time the flight paths were designed.

If we design future flight paths to avoid built-up areas, in order to minimise the number of people affected by aircraft noise, that would mean we could continue to avoid flying over local towns such as Bishops Stortford and that we minimise the number of flights over larger populated areas such as Harlow, Ware and Saffron Walden.

However, in areas with higher levels of noise from other sources, such as from cars, construction, crowds of people and so on, aircraft noise may be less noticeable so an alternative approach would be to consider flying over larger towns. This would substantially increase the number of people exposed to aircraft noise but might reduce its overall effect.

If we continue to avoid flying over built-up areas, this will reduce the number of people who are overflown. However, this may lead to aircraft flying over areas where the level of background noise may be lower, so aircraft noise may be more noticeable.

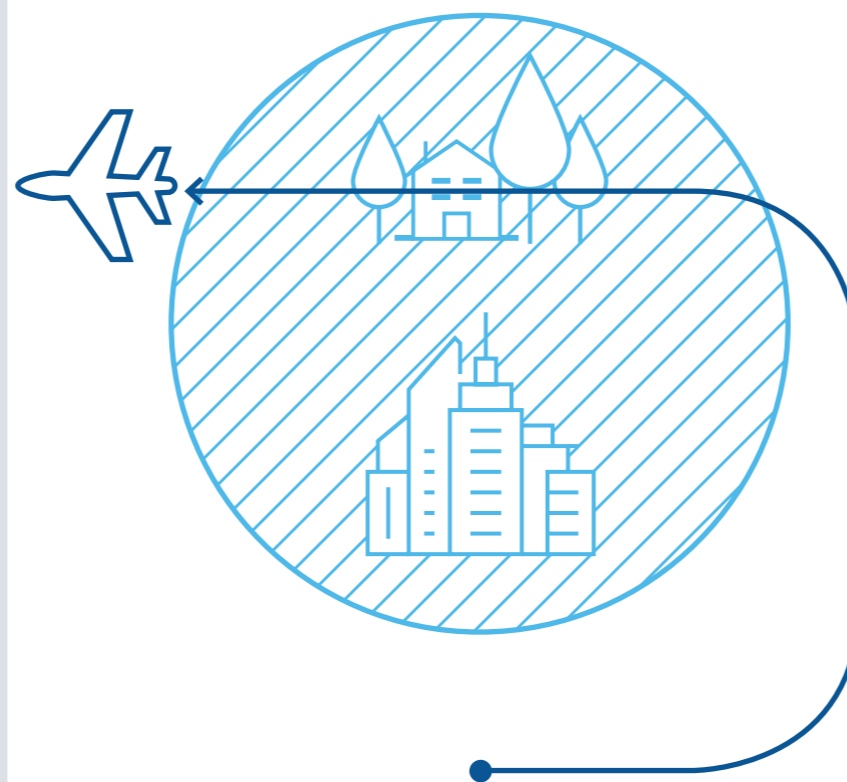
Given the nature of the towns and villages around Stansted Airport, when we design our flight paths, which option below do you prefer and why? Remember you can also use the box below to give us a different view that reflects your specific priorities.

## Please indicate your preference below

### When we design our flight paths, which option below do you prefer and why?

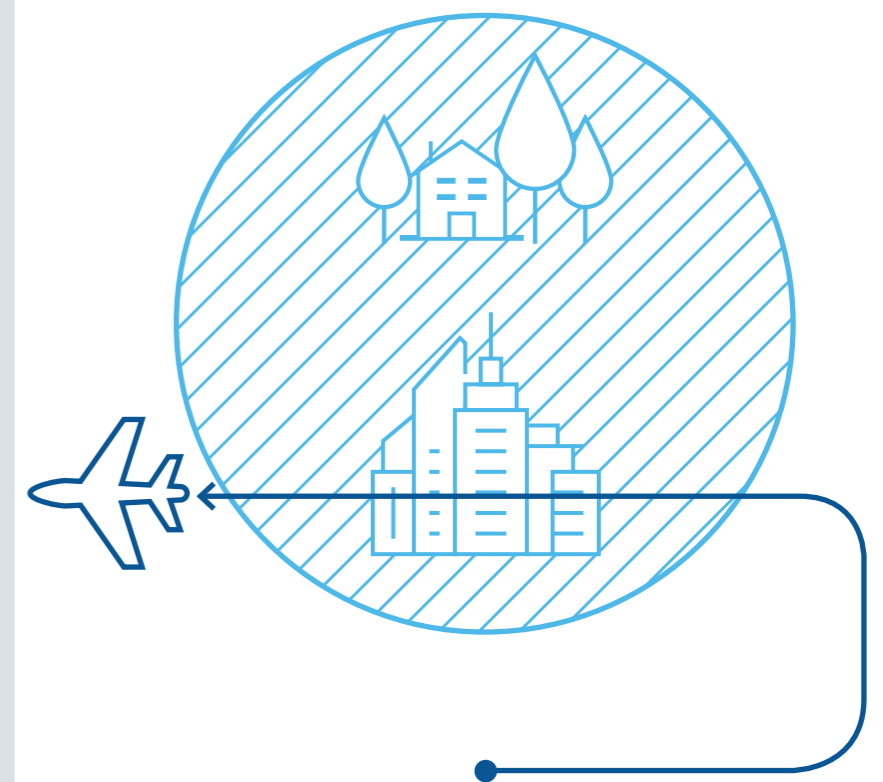
#### Option 1

Avoid flying over built-up areas, which will affect fewer people but to a greater extent.



#### Option 2

Avoid flying over areas with lower levels of background noise such as some villages and rural communities.



## Question 4

# Balancing noise and emissions

We can now design flight paths so that aircraft fly more direct routes, shortening the distance to their destinations and reducing CO<sub>2</sub> emissions. It can also make journey times a little shorter.

Sometimes, aircraft fly a little further to avoid flying over local communities. Shortening these routes so they fly more directly might, in some instances, lead to aircraft flying over more local communities, which could lead to more people being affected by aircraft noise.

We need to find the right balance between having more direct flights (to reduce emissions and journey times) and keeping local communities' exposure to aircraft noise to a minimum.

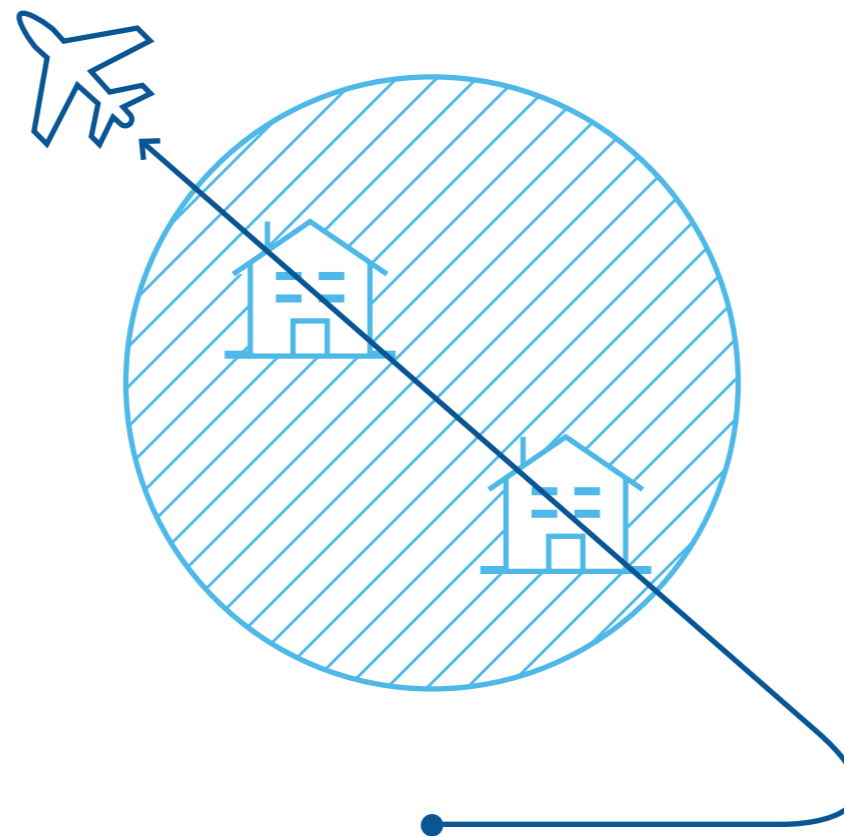
Remember you can also use the box below to give us a different view that reflects your specific priorities.

## Please indicate your preference below

### When we design our flight paths, which option below do you prefer and why?

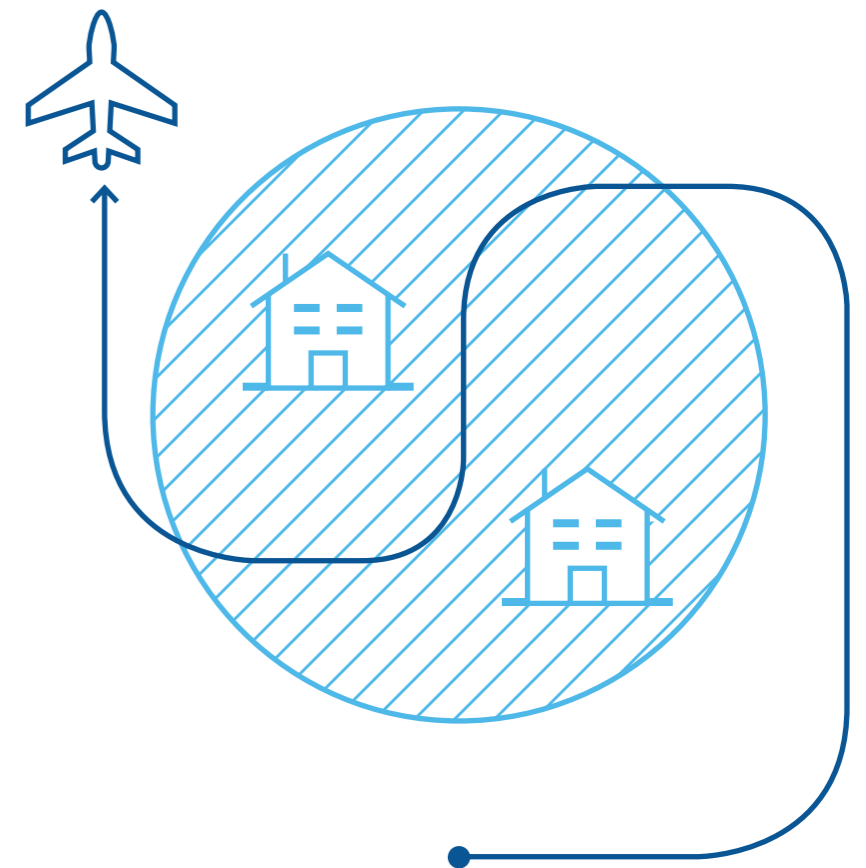
#### Option 1

Fly the most direct routes possible to reduce emissions, even if this means flying over more people.



#### Option 2

Avoid flying over communities so fewer people are affected by aircraft noise, even if this means higher CO<sub>2</sub> emissions.



## Question 5

# Taking account of current arrangements and agreements

We already operate in a way that limits the effect of aircraft noise. This includes the set of flight paths we have in place for departing aircraft (our noise preferential routes), using a 'continuous descent' approach for south westerly arrivals (so arriving aircraft are able to stay higher for longer) and using satellite guidance on some of our departure routes (so aircraft fly the route as accurately as possible).

We also have a number of agreed operational procedures (for example, the point an aircraft must be at for the final approach to the runway on arrival, and the arrangement to avoid flying directly over St Elizabeth's, a local residential care home for patients with epilepsy and other complex medical conditions).

As we design future flight paths, we need to consider whether to continue operating as we have previously agreed or whether we should design entirely new routes to achieve the best possible outcomes (taking account of factors such as noise, emissions, sensitive sites and the airport running efficiently to minimise delays to passengers).

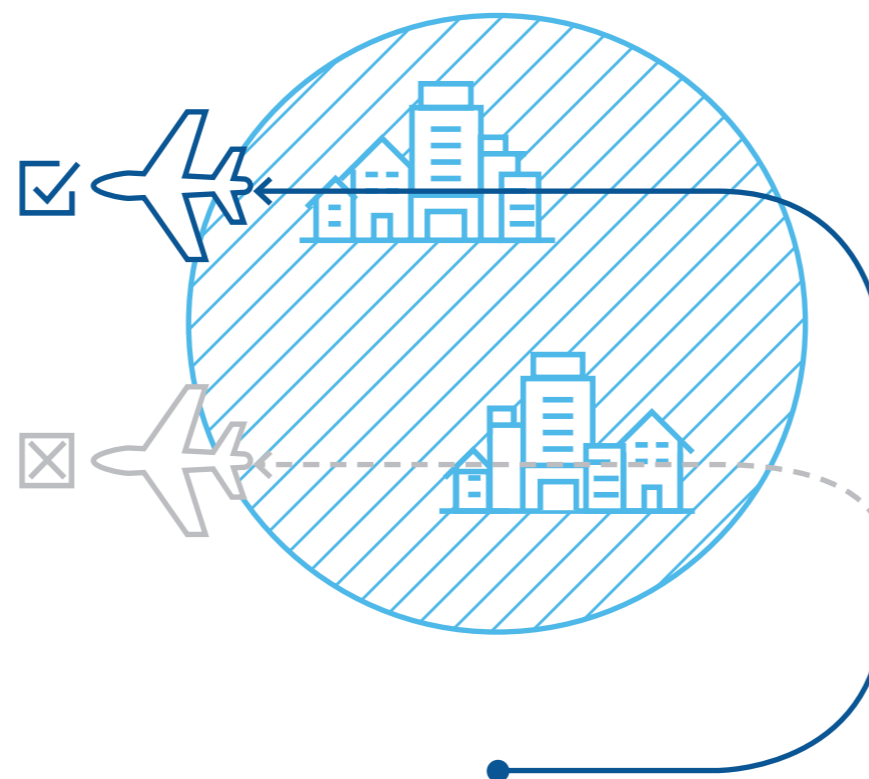
Remember you can also use the box below to give us a different view that reflects your specific priorities.

## Please indicate your preference below

### When we design our flight paths, which option below do you prefer and why?

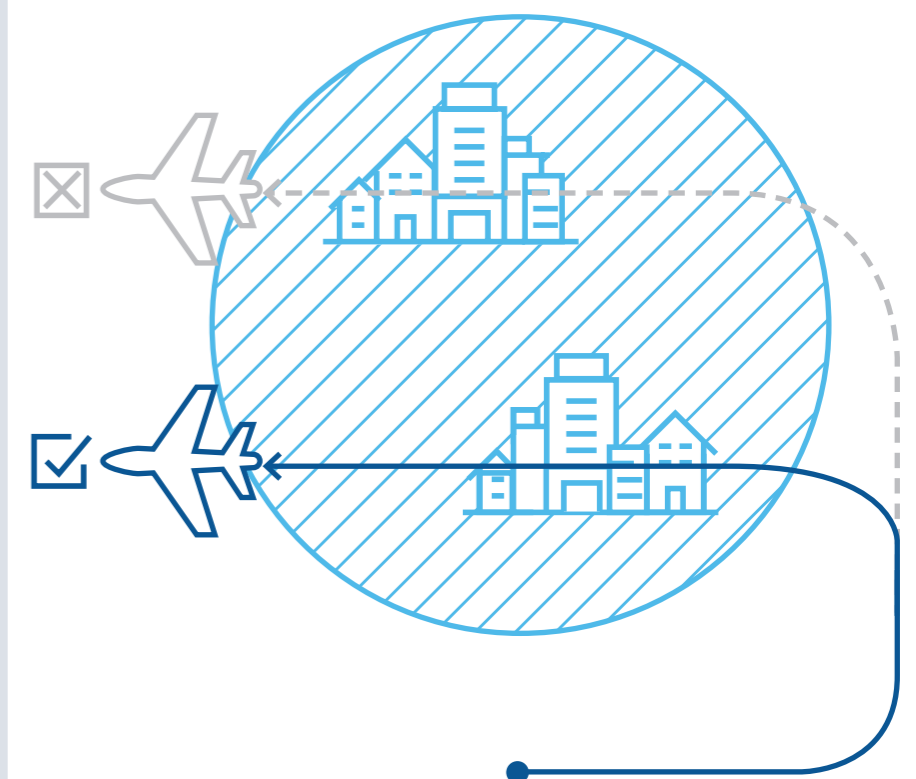
#### Option 1

Continue with current arrangements and ways of operating.



#### Option 2

Design new routes to achieve the best possible outcomes for reducing noise and emissions while increasing the efficiency of the airport.





## Question 6

### Other airspace users

While we control airspace around our airport, not all flights in our airspace are to and from the airport. We need to make our airspace available for other users, including private planes, helicopters, military flights, air ambulance, gliders, microlight aircraft, balloon flights and drones.

How we design our flight paths could allow other users to operate freely or might lead them to make lengthy detours and experience delays.

#### As we design future flight paths, we need to consider whether to:

- prioritise the best possible routes for aircraft flying to and from the airport, to minimise noise, emissions and inefficiencies in operations at our airport; or
- introduce flight paths that mean other airspace users are not significantly disadvantaged by changes, even if this means aircraft using the airport cause more noise or emissions.

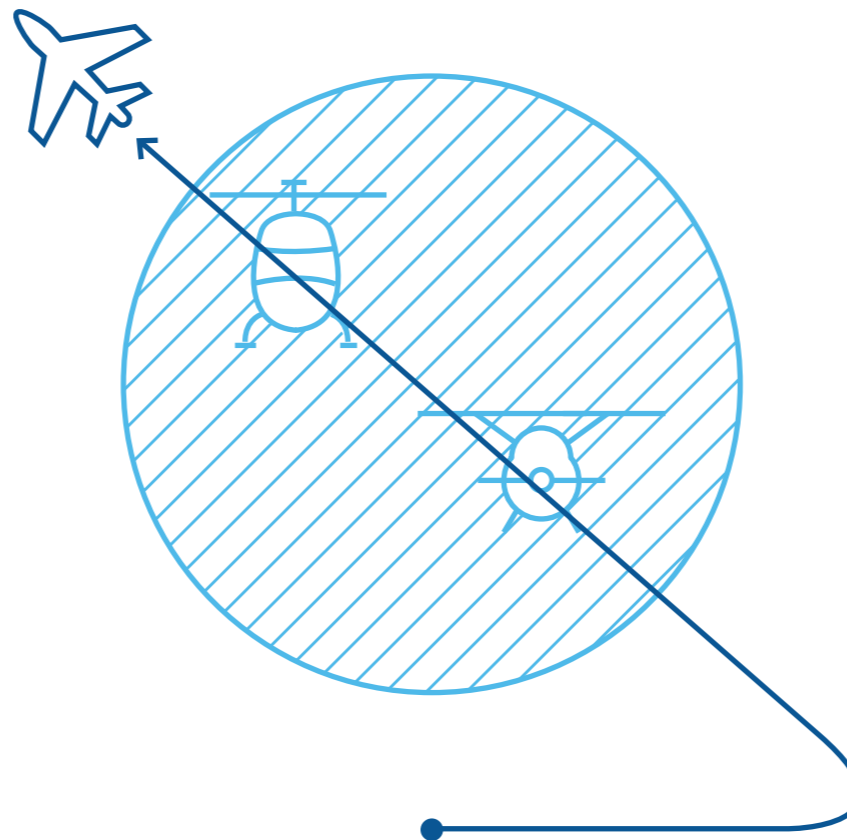
Remember you can also use the box below to give us a different view that reflects your specific priorities. When giving us your views, you may want to consider whether your views are the same as or different from the views of the different airspace users who may be affected.

## Please indicate your preference below

When we design our flight paths, which option below do you prefer and why?

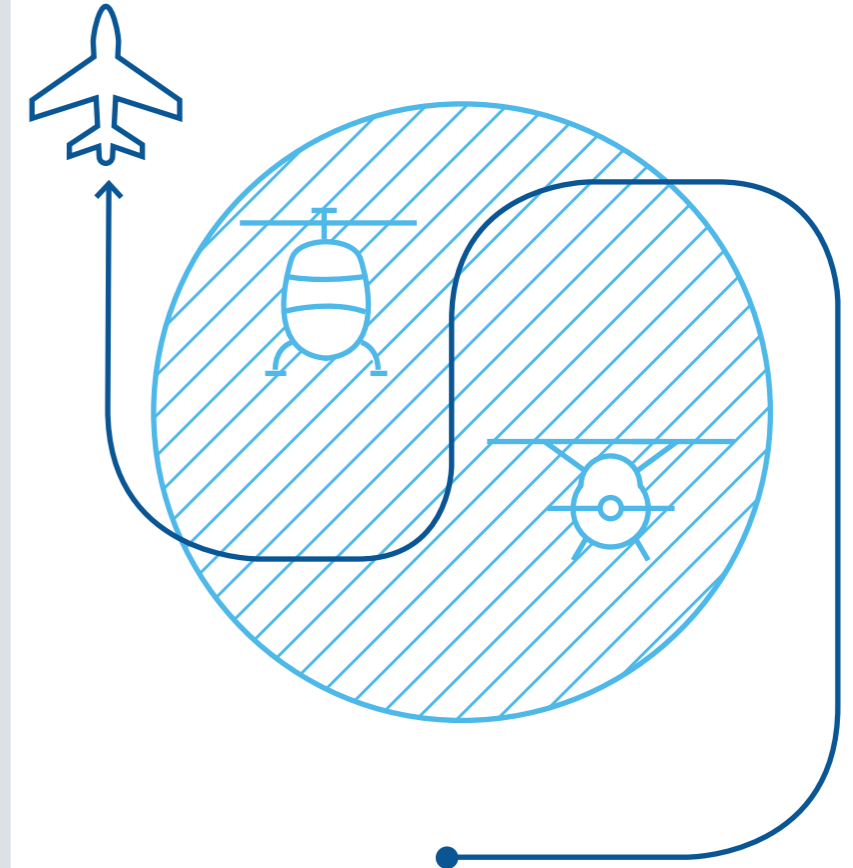
### Option 1

Design the best possible routes (for minimising noise, emissions and inefficiencies in operations at our airport) for aircraft flying to and from the airport, even if this disadvantages other airspace users.



### Option 2

Design routes that minimise the effect operations at the airport have on other airspace users, even if this means increased noise and emissions.



## Question 7

# Aircraft types

Some flight designs would require aircraft to have the very latest navigation equipment. If we design flight paths that require aircraft to use the latest equipment, it could make it difficult for some older or smaller aircraft to be used. This could reduce the frequency of some flights and potentially lead to delays. It may also result in aircraft without up-to-date technology having to fly slightly different flight paths, or flying less accurately, which could lead to them flying over local communities which are not currently flown over.

If we design flight paths that are suitable for all aircraft types, we may not be able to take full advantage of some of the latest equipment and techniques. This might mean, for example, that we can't minimise aircraft noise as effectively or that the airport operates less efficiently.

The number of older and smaller aircraft affected by any change we make is likely to reduce over time. In the meantime, we need to consider how we can take account of how and where these aircraft currently operate.

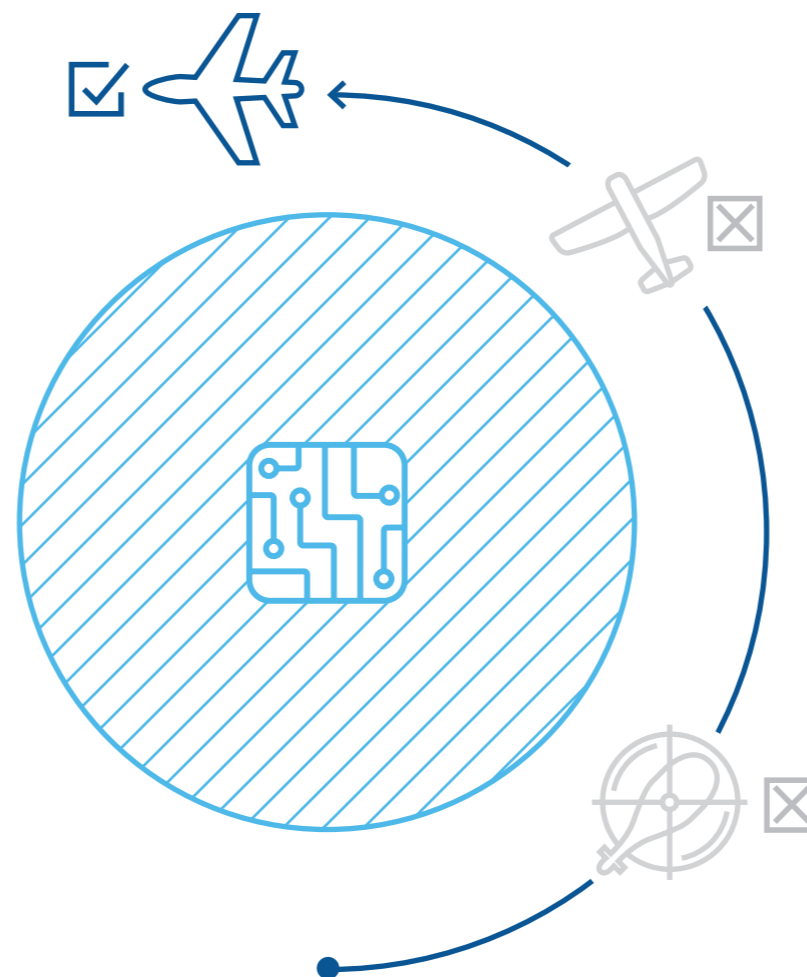
Remember you can also use the box below to give us a different view that reflects your specific priorities.

## Please indicate your preference below

### When we design our flight paths, which option below do you prefer?

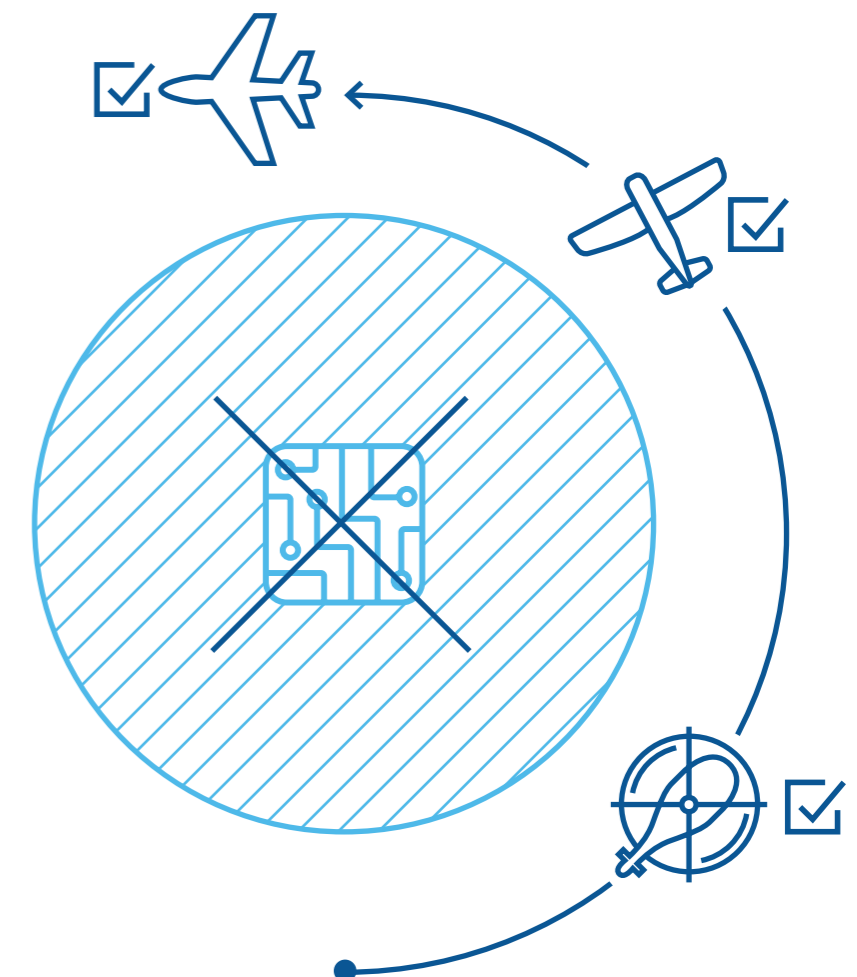
#### Option 1

Take advantage of the latest technology and techniques, even if this makes flight paths more difficult for older and smaller aircraft.



#### Option 2

Make flight paths suitable for all aircraft, even if this means new technologies and techniques cannot be used.



## Question 8

# Multiple flight paths in the same area

For safety reasons, aircraft must take off and land into the wind. This allows departing aircraft to climb faster and landing aircraft to stop more quickly.

The direction of take-off and landing changes when the direction of the wind changes. For this reason, we have two sets of flight paths, one for when the wind is from the south west (as is most often the case) and one for when the wind is from the north east.

From each runway there are alternative arrival and departure routes. This means that we have several flight paths, some of which overlap. If we design each new flight path on its own, we can make sure each route is the best it can be, so reducing noise and emissions, and allowing the airport to operate as efficiently as possible (improving travel time while reducing emissions). However, designing each flight path individually could mean that, when we put them all together, some areas are overflowed by several routes.

**When we design future flight paths, we need to find the best overall outcome and consider whether we should prioritise:**

- the efficiency of individual routes; or
- avoiding areas being overflowed by several routes.

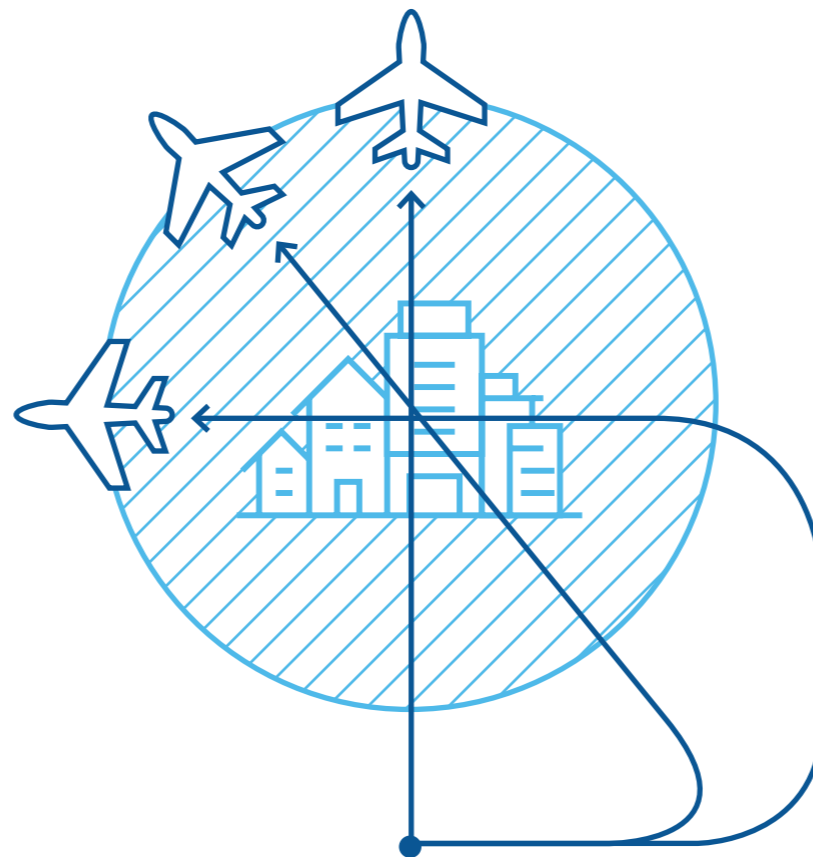
Remember you can also use the box below to give us a different view that reflects your specific priorities.

## Please indicate your preference below

### When we design our flight paths, which option below do you prefer?

#### Option 1

Make sure each route can achieve the best balance between reducing noise and keeping emissions low, even if this means some areas are overflowed by several routes.



#### Option 2

Avoid having areas overflowed by several routes, even if this limits our ability to minimise noise and emissions.



## Question 9

# Areas that we should avoid flying over

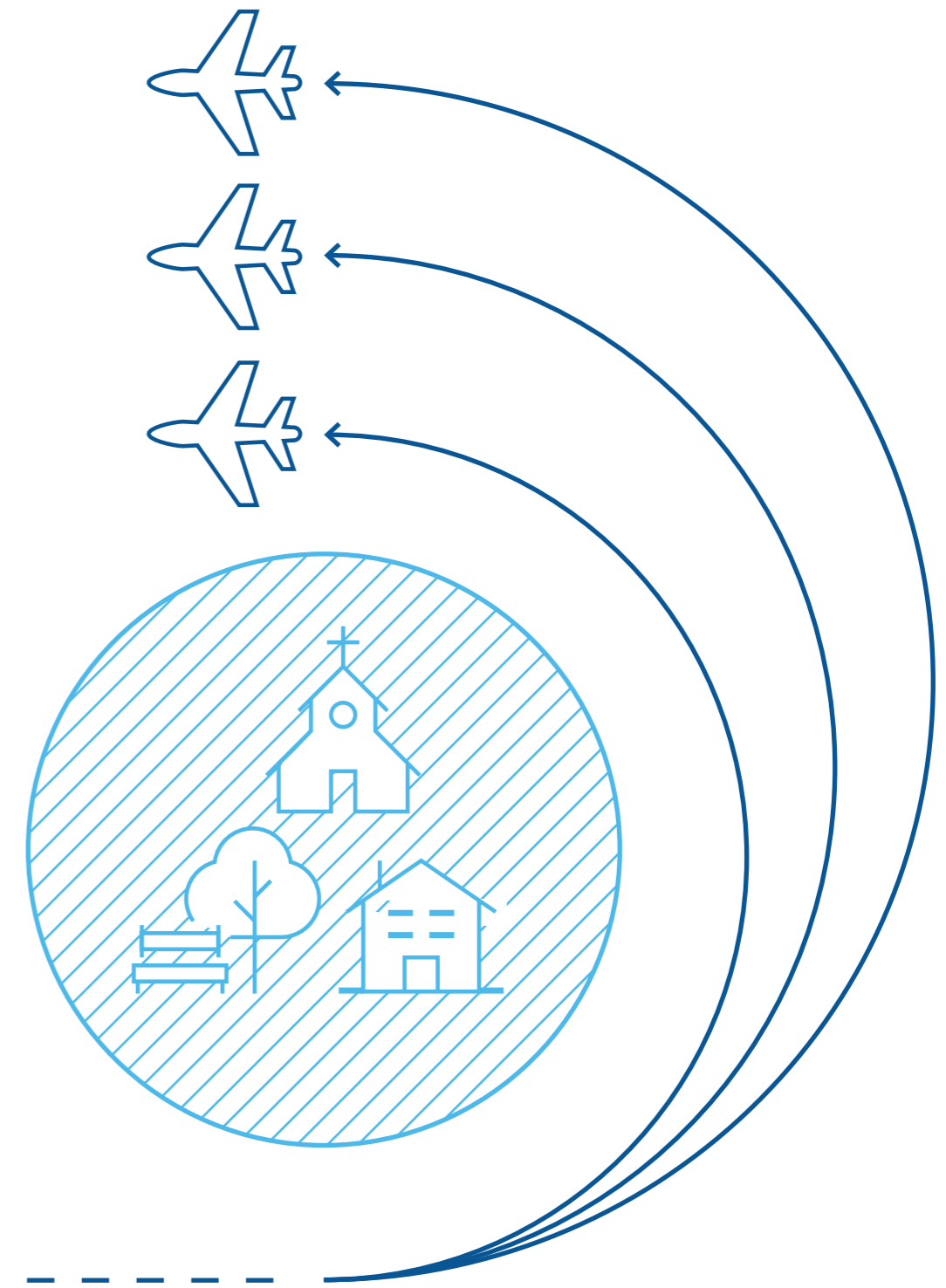
The flight paths we design will control aircraft flying at heights of up to 7,000 feet. The areas that might be overflown up to this height are shown in the diagram on page 13.

When designing flight paths, we need to consider areas that will be overflown, particularly at lower altitudes. It may be best to avoid some areas, such as parks, historic properties and nature reserves, because they are particularly tranquil or spaces where people go to relax. Certain buildings, such as schools, care homes and hospitals, can be particularly affected by noise.

It may also be inappropriate to fly over some areas, for example if they present a danger to aircraft because they are used for military training or have a large number of birds.

**When we design our flight paths, are there any areas or buildings that you think we should avoid flying over?**

If yes, please give the name of the building or area and where it is, explain why and when we should avoid it, and the potential consequences of flying over the particular site.



## Question 10

### Meeting requirements

As we design new flight paths, there will be certain national and international safety, regulatory, legal and operational requirements:

1. **Safety** – all flight paths must meet all required safety standards.
2. **Industry standards and regulations** – industry standards (usually set internationally) or regulations apply to some aspects of how aircraft fly. All new flight paths must meet these legal obligations.
3. **Consistent with the national system of aircraft routes** – our new flight paths will become part of a new national network of routes, so they must take account of flights to and from other airports. As our flight paths will only be designed to 7,000 feet, they will also need to join up with national aircraft routes at higher altitudes.
4. **Maintaining and improving our airport** – London Stansted Airport is a busy international airport which continues to grow to provide the services our customers need. In line with the Government's policy of 'making best use' of our nation's airports (<https://www.gov.uk/government/publications/aviation-strategy-making-best-use-of-existing-runways>), our flight paths must allow us to provide the services that we offer today and meet any future demand from customers (within the limits set by current or future planning conditions).

5. **Keeping to government policy** – UK airspace is amongst the busiest in the world. To tackle the issue of congestion, the Government instructed the CAA to develop an Airspace Modernisation Strategy (AMS (CAP1711)), which was published in December 2018. Our design principles must take account of government policy on aviation, and reflect the requirements of the Airspace Modernisation Strategy.

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**Do you agree that any design for future flight paths must meet the requirements shown opposite?**

**If no, please explain why.**

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**Do you think there are any other requirements that our new flight paths must meet?**

**We also ask you to explain your views and add anything you think we should consider.**

## Question 11

### Other things we should consider

In our questions we set out the important factors that we think we will need to consider when designing new flight paths.

As well as considering your answers to those important questions, we want to know if there are other things you think we should be taking account of.

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**If there is anything else we need to consider, or do you have any suggestions? If yes, please give details below.**

# APPENDIX 13

Part D – Presentation  
used during phase two  
(online workshops)

# Future Airspace Programme

## OVERVIEW

### What is the Future Airspace Programme?

- The Government is overseeing a nationwide programme that will bring together the Civil Aviation Authority (CAA), Department for Transport (DfT) and all UK airports to work collectively to modernise the airspace above this country and make it more efficient.
- Airspace is a crucial part of the UK's national infrastructure due to its importance for moving people and goods around the world safely and quickly by air. However, UK airspace is some of the most complex in the world and has not undergone significant change since the 1950s.
- The lack of previous modernisation is causing many air routes and air traffic management practices to not utilise the most modern technology available and aircrafts continue to use flightpaths that are outdated. These flightpaths can cause additional fuel burn and may not presently be optimised to reduce noise impact.
- In response the CAA undertook a review of the airspace change process. All airports proposing airspace change must now follow the process set out in CAP1616 Airspace Design.
- The process that London Stansted Airport (and others) have to follow is defined by the regulator, and airports have to follow it strictly. Stansted Airport embarked on a series of engagement exercises to collect the thoughts and options of a cross section of stakeholders regarding airspace changes.

# Future Airspace Programme

## PROCESS

We are here





# Future Airspace Programme

## FOCUS GROUPS

General  
Public

2x  
Focus Groups

Business Reps

1x  
Focus Groups

Community  
Reps

1x  
Focus Groups

Aviation Reps

2x  
Focus Groups

Elected Reps

2x  
Focus Groups

Special  
Interest

1x  
Focus Groups

Telephone Interviews

Aviation and Business

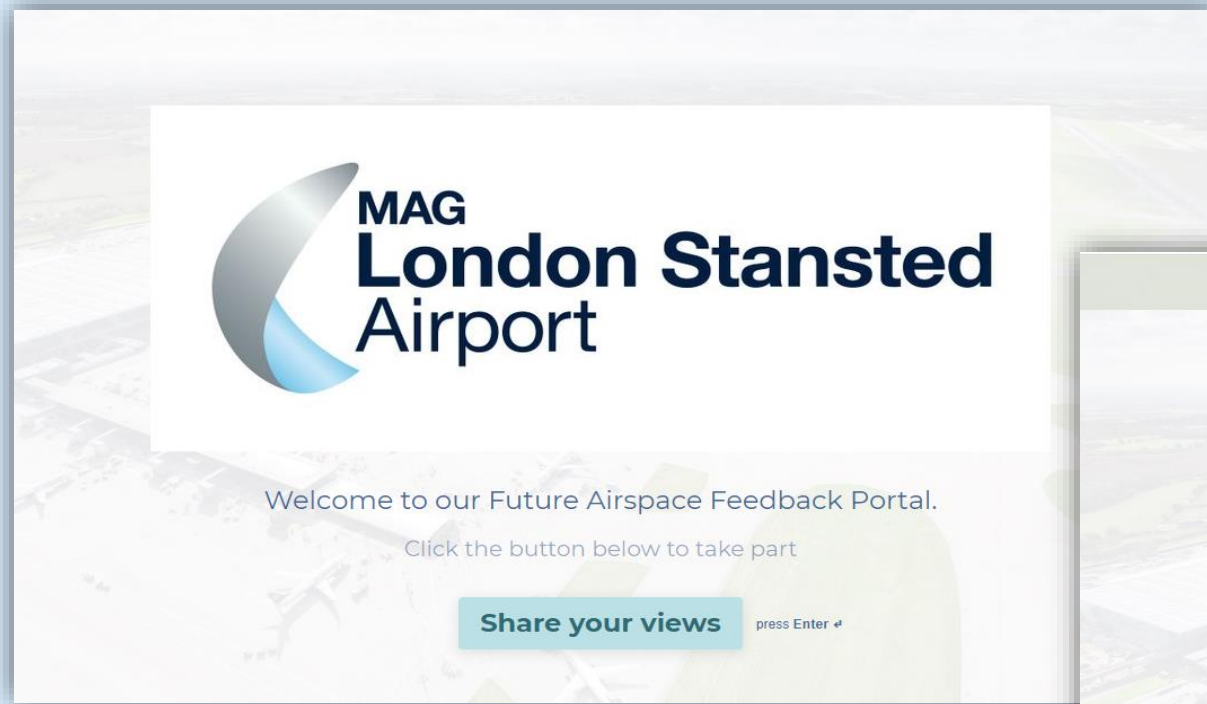
**YouGov**<sup>®</sup>  
What the world thinks

# Future Airspace Programme

## ONLINE FEEDBACK PORTAL

2nd March to 20th April 2020

An email inviting stakeholders to complete the online feedback portal was sent to over 800 stakeholders



8 → **Balancing Noise and Emissions** We can now design flight paths s...  
More people being affected by aircraft noise.

We need to find the right balance between having more direct flights (to reduce emissions and journey times) and keeping local communities' exposure to aircraft noise to a minimum.

When we design our flight paths, which option below do you prefer?



**A** Fly the most direct routes possible to reduce emissions, even if this means flying over more people.



**B** Avoid flying over communities so fewer people are affected by aircraft noise, even if this means higher carbon emissions.

115 Responses + 9 responses via email and post

## Future Airspace Programme

### DESIGN PRINCIPLE - SAFETY

Safety is our highest priority, our routes **must** be safe, and must comply with national and international industry standards and regulations

Any changes **must** be consistent with CAA's strategy for Airspace Modernisation and the FASI-S programme, taking into account the needs of other change sponsors and airspace users.

The airspace design **must** provide for the utilisation of aircraft movements permitted by planning permissions and within statutory limits in force at the airport.

Where we choose routes that fly over new areas there will have to be a clear benefit in doing so.

Routes should be designed using the latest widely available navigation technology and facilitate continuous climb and descent to both runways.

# Future Airspace Programme

## DESIGN PRINCIPLE - NOISE

In order to address the effects of aircraft noise, each route should seek to minimise the number of people overflown.



Where practical, the use of multiple routes and/or other forms of respite, such as different time periods and balanced runway mode when operationally viable, will be considered.

Where practical, our route designs should avoid, or minimise effects upon, noise sensitive receptors. These may include, designated sites and landscapes (such as SSSI and AONB), cultural or historic assets and sites providing care.

Our designs will consider both noise and emissions as well as other factors, and seek to strike the best balance. In so doing we will take account of the Government's altitude-based priorities, which emphasise minimising noise below 7,000 feet.

We will seek to minimise the amount of controlled airspace that we require, and our future route designs should ensure an efficient and systemised operation at Stansted, minimising interactions with other airports and maintaining priority access for Emergency Services.

Where the adoption of modern navigation standards and/or flying techniques mean that some aircraft cannot fly the new routes, we will seek to minimise environmental impacts from those aircraft.