LISTENING TO STAKEHOLDERS

Our Proposed Design Principles for Airspace Change

July 2020

London Stansted Airport
Future Airspace

MAG
London Stansted
Airport

Contents

Read more online:
stanstedairport.com/futureairspace

Version History	Report version 1 3 July 2020

Contact us at **futureairspace@stanstedairport.com**

1 Executive summary

Read more online:
CAP1616 Process document

Read more online:
airspacechange.caa.co.uk

The Future Airspace project at London Stansted Airport forms part of the UK Government's wider airspace modernisation strategy, which presents a once-in-a-lifetime opportunity to update the way millions of aircraft movements each year are managed across the country.

This document sets out the conclusions of the first stage in this process at London Stansted, and details the extensive dialogue that has been undertaken with stakeholders and local residents around the airport. It also describes how these conversations helped shape the 11 proposed Design Principles which were submitted to the Civil Aviation Authority (CAA) for review in July 2020.

This report also explains why change is needed to the way airspace around London Stansted is managed, how the airport identified those organisations and people that could be impacted, and the next steps in the airport's Future Airspace project. It also details the way London Stansted adjusted its engagement strategy in response to the current COVID-19 pandemic.

The need for change

In December 2018, London Stansted submitted a Statement of Need to the CAA that explained why the controlled airspace around the airport needed to be modernised, and the potential benefits this could bring to passengers, communities and the wider environment. It said:

"The Airport now seeks to make further use of the new technologies so that the operational efficiency and environmental benefits that modern aircraft offer can now be fully realised. In so doing, the optimised procedures that will be developed will integrate fully with other airports and the wider changes to the airspace system and remove the Airport's reliance on ground based navigational aids."

London Stansted sits in some of the busiest airspace in the world, and the way these flightpaths are managed has changed little since the 1950s. The Government's plans to modernise airspace will enable airports to make greater use of new technology to drive efficiencies, increase reliability and help to address issues such as noise and emissions.

Like many airports, London Stansted has ambitious plans for the future, but the airport has been clear that the Future Airspace project is independent of any plans to grow passenger numbers at the airport. It is also worth noting that, while the immediate impacts of the COVID-19 pandemic are not yet fully understood, the need for airspace modernisation remains as strong as ever to facilitate future operation and growth of the sector as the global economy recovers.

Changes to London Stansted's airspace need to be coordinated with other airports across the south of the country, and so it is a member of the Future Airspace Strategy Implementation Group South (FASI-S). It will also work with the Airspace Change Organisation Group (ACOG) set up by the Government and the CAA to coordinate changes at a national level.

A two-way conversation

The CAA's CAP1616 guidance document sets out the stages that any airport needs to go through if it wishes to make changes to its airspace. Once a Statement of Need has been approved by the CAA, the first of these stages is to develop a set of Design Principles that will help shape the Future Airspace project as it progresses through the seven stages of the CAP1616 process. The Design Principles will be used to provide guidance and instruction to the airport's airspace designers to ensure that future flight paths can deliver the changes needed by the airport whilst taking into account the priorities of stakeholders and communities in the local area.

London Stansted has undertaken a thorough engagement exercise in order to identify, listen to and understand in detail the views, priorities and concerns of stakeholders when it comes to the routes flown by aircraft using the airport; enabling a two-way conversation about the choices people would like to see London Stansted make when developing future flight paths.

In the first phase of engagement, 11 questions were published and, via a series of focus groups and an online portal, stakeholders were asked to share their views on what mattered most to them. The portal was widely promoted by London Stansted, both among identified stakeholders and local communities. Stakeholders' responses to these questions provided the airport with vital insights that were used to shape the initial set of draft Design Principles.

A second phase of engagement was then carried out to seek the views of a range of stakeholders on the emerging draft Design Principles. Due to the outbreak of the COVID-19 pandemic, this phase of engagement was conducted online and by telephone, which actually presented a number of advantages in terms of real time, verbatim feedback and easier access for participants. Details of the adjustments made in response to the COVID-19 pandemic are explained on page 16. This engagement was designed to test the emerging draft Design Principles as initially drafted. Did they reflect earlier conversations? Did they demonstrate the right balance of priorities? Did they create a framework for future engagement that meets everyone's needs?

Following this second phase of engagement, the emerging draft Design Principles were amended and refined in line with stakeholder feedback, resulting in a final set of proposed Design Principles for submission to the CAA.

Throughout this first stage of the CAP1616 process, London Stansted has sought advice and assurance from The Consultation Institute (tCI) to ensure stakeholder engagement followed best practice, and that the proposed Design Principles submitted to the CAA were the result of a two-way conversation with stakeholders. The airport has also worked with YouGov to facilitate its engagement and sought expert advice as part of this process.

Next steps

Following the submission of the proposed Design Principles in July 2020, they will be reviewed by the CAA to ensure they comply with CAP1616 requirements. Subject to the CAA's approval, London Stansted anticipates being able to move onto Stage 2 of the CAP1616 process – the early development and assessment of flight paths.

During Stage 2, London Stansted's appointed airspace designers will develop a longlist of possible flight path options, taking into account the Design Principles set out in this document. Views will then be sought from stakeholders, to help the airport assess each option and develop a shortlist of flight paths that will be taken forward to public consultation in Stage 3.

Our Step 1B engagement

STAKEHOLDER IDENTIFICATION

GIS Mapping

Desk-based Research

Local Knowledge

Identified 781 relevant stakeholders

ORGANISED INTO CAP1616 PRIORITY GROUPS

1. Directly affected local aviation
2. Members of National Air Traffic Management Advisory Committee
3. Relevant national organisations
4. Communities affected by potential impacts

PHASE 1 – WE ASKED, WE HEARD...

ENGAGEMENT MATERIALS

Information Booklet

Factual tool for two-way conversation

also featured on

Detailed Information and FAQ Sections on dedicated web page

STEP 1B ENGAGEMENT

Independently facilitated by YouGov

9x FOCUS GROUPS

- 2x General Public
- 1x Business Representatives
- 1x Community Representatives
- 1x Special Interest
- 2x Elected Representatives
- 2x Aviation Representatives

Telephone interviews = 5 stakeholder and 3 general public (under 24)

Feedback from participants = 80% felt it was a useful exercise & 94% felt it was important to be involved

WE DID...

STEP 1B ENGAGEMENT

Direct Engagement

2,707 email invitations and reminders sent to stakeholders

Online Questionnaire

115 responses and 9 responses via email and post

COMMUNICATION

Media and Social Media

Shared with 177,200 followers on Facebook and Twitter as well as published in print and online news outlets

Internal Communications

6,516 airport community app users + internal communication platform MAGnet

COVID-19

Adapted our plans in response to COVID-19 pandemic

Regular Meetings

Internal and external stakeholders including ALT, UEG and STACC

Insights Analysed

38 potential Design Principles

Draft Design Principles

11 shortlisted for further feedback

Stakeholder Reference Group

Independent group to shadow Stansted's engagement throughout CAP1616, commenting on process

PHASE 2 – WE ASKED, WE HEARD...

3 ONLINE WORKSHOPS

Draft Design Principles tested to ensure accurate representation of views from:

Group 1

General Public

Group 2

National Organisations

Community Groups

Business Representatives

Special Interest

Group 3

Aviation Representatives

Elected Representatives

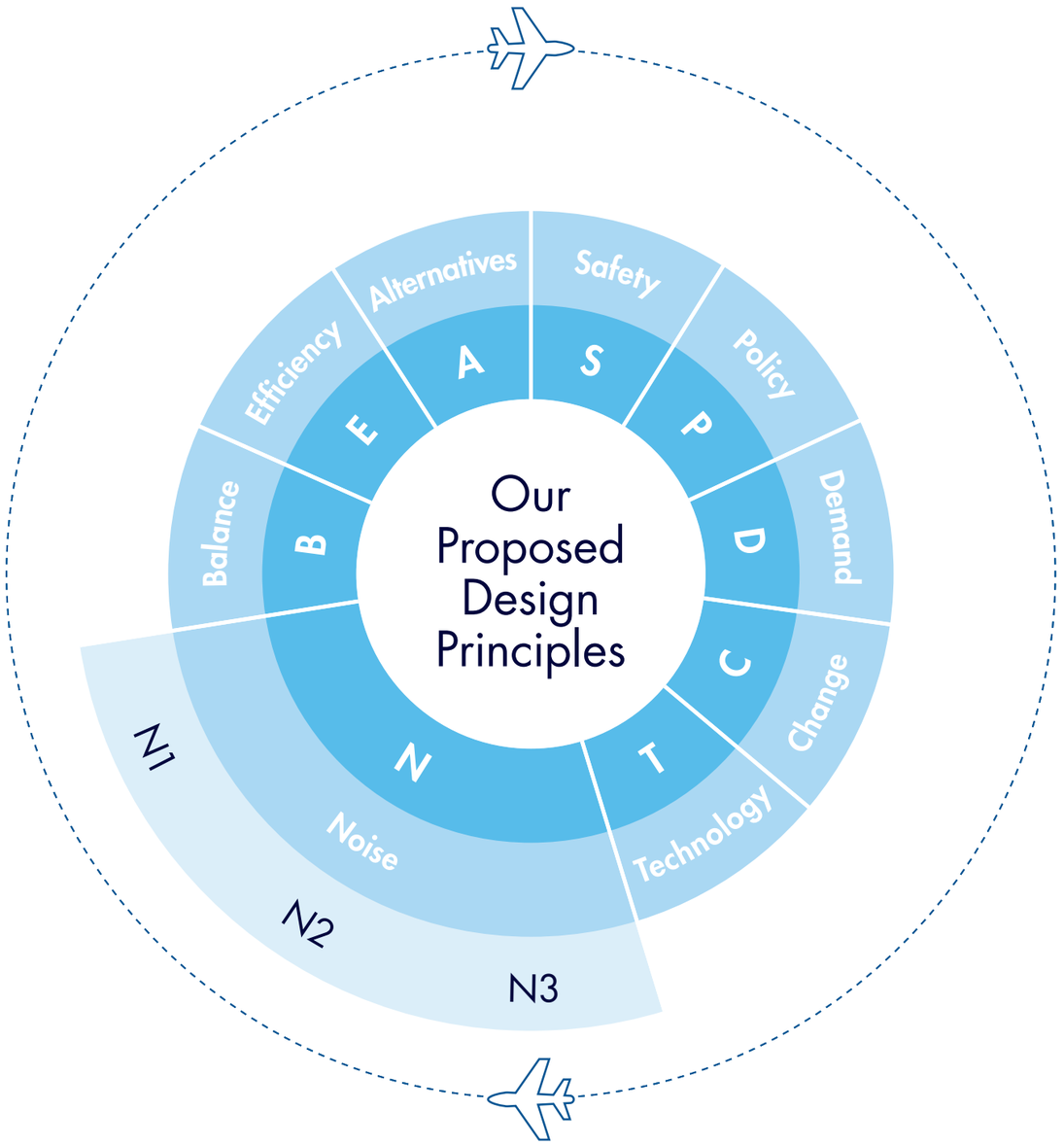
WE DID...

Insights Analysed → Proposed Design Principles

PROPOSED DESIGN PRINCIPLES

See pages 8–9

Our proposed Design Principles at a glance



S | Safety

Safety is our highest priority; our routes must be safe for airspace users and communities on the ground, and must comply with national and international industry standards and regulations.

P | Policy

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

D | Demand

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

C | Change

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

T | Technology

Routes should be designed to make use of the latest widely available aircraft navigation technology and facilitate continuous climb and descent to/from both ends of the runway.

N | Noise

N1 In order to address the effects of aircraft noise, each route should seek to minimise the number of people overflown.

N2 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.

N3 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.

B | Balance

Our designs will consider both noise and emissions, 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.

E | Efficiency

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.

A | Alternatives

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

Our proposed Design Principles summary

	Proposed Design Principle	Summary
S (Safety)	Safety is our highest priority, our routes must be safe for airspace users and communities on the ground, and must comply with national and international industry standards and regulations.	Safety is central to all operations at Stansted Airport and was seen as the top priority when designing new routes. All stakeholders agreed the importance of ensuring the airspace must be safe for all airspace users, for airport operations and for communities on the ground.
P (Policy)	Any changes must be consistent with CAA's Airspace Modernisation Strategy and the FASI-S programme, taking into account the needs of other change sponsors and airspace users.	All stakeholders were supportive of a collaborative approach and recognised the need to fit into the wider FASI-S programme. Acknowledging the integration with other airports and the wider changes to the airspace system is also an objective in our Statement of Need. It was recognised that a clear compromise between all stakeholders will be necessary.
D (Demand)	The airspace design must provide for the utilisation of aircraft movements permitted by planning permissions and within statutory limits in force at the airport.	Many stakeholders support the role of Stansted in the local community and felt that it was important for the airport to continue the services offered today. Continuing to meet demand for the services offered is also consistent with the Government's policy to make best use of available runway capacity[1]. Most stakeholders were reassured by the inclusion of this as they felt it underlines the CAA's advice that planning controls are the most appropriate way to control airport movements. Reference to permitted movements is intended to make clear that the airspace design process will consider the planning permission in force at the time that a final submission is made to the CAA.
C (Change)	Where we choose routes that fly over new areas there will have to be a clear and objective benefit in doing so.	Stakeholders felt our focus should be on designing the best routes with a fresh approach taken. However, it was widely felt that changes should only be considered where they are justified or have a clear demonstrable benefit.
T (Technology)	Routes should be designed to make use of the latest widely available aircraft navigation technology and facilitate continuous climb and descent to/ from both ends of the runway.	Stansted Airport seeks to create a modern airspace that allows aircraft to use the latest available technology to improve operational efficiency and deliver environmental benefits. This was widely accepted by stakeholders as they cited the importance of keeping up to date with new development in technology.
N1 (Noise 1)	In order to address the effects of aircraft noise, each route should seek to minimise the number of people overflown.	This principle seeks to respond to stakeholders' comments on noise impacts by ensuring the minimum number of people are overflown. We note stakeholder concerns that adopting this principle might be to the detriment of other factors including environmental impacts such as emissions and noise, on areas more sensitive to aircraft noise. We feel this is addressed by our proposed Design Principles B (Balance) and N3 (Noise 3).
N2 (Noise 2)	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.	This principle takes into account the feedback highlighting potential means of respite for consideration, for example using balanced runway mode where operationally viable. The majority of stakeholders supported this Design Principle and agreed with the benefits it may bring.
N3 (Noise 3)	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.	Stakeholders understood the rationale for including this principle and could see that it responds to concerns raised about sensitive sites. Stakeholders recognised that it would not be possible to avoid a large number of specific sites or locations, and that to attempt to do so may impact the desired benefits from our Future Airspace project. Therefore, the use of 'where practical' is intended to make clear that the Design Principle does not envisage that every noise-sensitive receptor/site will be avoided.
B (Balance)	Our designs will consider both noise and emissions, 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.	Some stakeholders expressed a preference for flying the most direct routes in order to minimise emissions but others prioritised noise impacts, even if this increased emissions. Given the balance of feedback, this principle has been drafted in line with Government policy, which emphasises minimising noise below 7,000 feet.
E (Efficiency)	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.	Stakeholders generally felt this principle was clear and reflective of the conversation in phase 1 of our engagement. They stated a strong preference for efficiency and sustainability of routes and understood the advantages of releasing controlled airspace for greater access by others. All stakeholders emphasised that priority must be given to emergency services.
A (Alternatives)	Where the adoption of modern navigation standards and/or flight profiles mean that some aircraft cannot fly the new routes, we will seek to minimise the environmental impacts from those aircraft.	There was an understanding from most stakeholders that efficiency and new technology should be prioritised even if this negatively impacts older and smaller aircraft. It was seen as a fair option to consider alternative routes for these aircraft.

1 https://www.gov.uk/government/publications/aviation-strategy-making-best-use-of-existing-runways

2 Introduction

Airspace is a critical part of the UK's infrastructure. Like our road and rail network, it plays a vital role in enabling the movement of people and products quickly and efficiently, enabling connectivity and driving economic growth, as well as supporting crucial services such as medical provision.

Although the UK has some of the most congested and complex airspace in the world, the way it is managed has changed little since the 1950s. In 2017, the UK Government established a national programme through the CAA to modernise UK airspace and to make better use of the technology which is available on today's aircraft, enabling UK aviation to meet future challenges and opportunities.

This has the potential to bring a number of benefits, including reduced delays, greater reliability, more efficient operations and the chance to build on the UK's already world-class aviation safety record. In addition, it presents an opportunity to address some of the wider impacts of aviation such as noise and emissions.

As the national regulator, all changes to airspace must be approved by the CAA. In December 2017, the CAA published its Airspace Modernisation Strategy and created a change process called *CAP1616: Guidance on the regulatory process for changing the notified airspace design and planned and permanent redistribution of air traffic, and on providing airspace information.*

CAP1616 was subsequently updated in January 2020. It sets out the stages that the CAA requires airports to complete in order to carry out modernisation of their airspace, including detailed guidance on the involvement of stakeholders, including local communities, when developing change proposals. This process would usually take around two years to complete, although the current COVID-19 pandemic may have an impact on these timescales.

In 2019, London Stansted was the UK's fourth busiest airport and it sits in the most congested corner of UK airspace, which is itself the busiest in the world. In common with the rest of the aviation sector, London Stansted's short-term passenger numbers have been significantly affected by the current COVID-19 pandemic. However, the airport typically handles around 200,000 air traffic movements per year and plays a major role in the life of the UK and regional economy. In 2018 the airport served around 28 million passengers and contributed almost £1bn to the economy.[1] In addition to its passenger operations, London Stansted has a busy cargo operation, bringing in vital supplies and supporting the export of UK goods.

London Stansted and the planning system

London Stansted's existing airspace is already capable of accommodating the best use of the airport's runway, in accordance with the Government's policy of Making best use of existing runways. Our airspace currently supports the full use of the existing limits placed on aircraft movements by conditions attached to planning permissions. It is also worth noting that future growth in passenger numbers, including the proposed growth to 43mppa, does not rely on any alteration of aircraft movement limits at London Stansted – it is not necessary to undertake airspace modernisation to enable this to take place.

Because existing planning conditions control the number of movements by aircraft at London Stansted, any increases to those operational limits require new planning permissions. CAP1616 is clear that the land-use planning system is the appropriate mechanism for managing air traffic limits, and that the airspace design and the change process is not intended to specify or limit volumes of air traffic using airspace.[2] Therefore, changes in the number of aircraft movements and any variation of limits imposed by planning conditions attached to existing permissions and the maximum number of movements are not within the scope of the Stansted Future Airspace project.

> With advances in technology and attitudes, I believe to truly modernise the airspace you should start from a 'clean sheet'.
>
> – Online portal respondent

London Stansted's location in the South East of England means effective coordination with other airports in the region is essential when redesigning airspace. Working together, the Government and the CAA have created the Airspace Change Organisation Group (ACOG) to coordinate the airspace change requirements of UK airports. ACOG is leading a national campaign to explain the case for change, and is developing a masterplan that will enable it to oversee the programme of different airspace changes effectively. The aim of this exercise is to ensure that individual airports and their flight path designs work together to create the best national airspace system. For the purposes of this exercise, London Stansted forms part of the Future Airspace Implementation South (FASI-S) group.

In January 2019, the CAA agreed that London Stansted's change request is likely to be classed as a Level 1 change, which will be confirmed at the end of Step 1B. This means the CAP1616 guidance would need to be followed in full when developing any proposed changes to airspace around the airport (up to 7,000 feet). Following this confirmation, this report marks the conclusion of Step 1B for London Stansted and includes details of 11 proposed Design Principles, which will set the framework against which the airport is required to assess its airspace designs. It also includes details of the conversations the airport has had with stakeholders throughout this process, the steps taken to ensure all interested parties have had the opportunity to contribute their views and how these views have influenced the development of the proposed Design Principles.

There will be further opportunity for more detailed conversation with stakeholders, including full public consultation at Stage 3, as the project progresses through the subsequent stages of the CAP1616 process (see timeline on pages 12-13). Any lessons from these conversations with stakeholders will be taken into account at each stage, in line with the requirements of CAP1616.

As part of Manchester Airports Group (MAG), the team at London Stansted has worked with colleagues at Manchester and East Midlands Airports to learn lessons from their experiences of the CAP1616 process. This has helped to ensure we have comprehensively identified stakeholder groups and maximised our engagement with them throughout Step 1B.

1 Economic Impact of the MAG Airports, CSR Update 2019 – York Aviation, June 2019
2 CAP1616 guidance, page 7, paragraph 6

The CAP 1616 airspace change process

Read more online:
CAP1616 Process document

Read more online:
airspacechange.caa.co.uk

CAP1616 in detail

The CAP1616 process has been designed by the CAA for airports to follow when making any changes to the way they manage their airspace. It sets out clearly the steps that airports must take to ensure the views of local stakeholders and other interested parties are taken into account when developing proposals, and includes four 'gateways' at which the CAA will assess the work undertaken before allowing airports to move on to the next stage of the process.

In December 2018, London Stansted completed the first stage of this process by submitting a Statement of Need to the CAA , setting out why it believed it required an airspace change. This included seizing the opportunity to "make further use of… new technologies so that the operational efficiency and environmental benefits that modern aircraft offer can now be fully realised."

The CAA agreed that London Stansted should initiate an airspace change, and indicated that this change would likely be classed as a Level 1 change, which will be confirmed at the end of Step 1B. This means London Stansted is required to follow the full CAP1616 process. This initial approval of the Statement of Need marked London Stansted's completion of Step 1A of the CAP1616 process and the airport's progression to Step 1B, as shown in the timeline set out below.

Please note these timescales are based on assumptions made before the onset of the COVID-19 pandemic, which may impact on the future timetable of London Stansted's Future Airspace project.

We are here

2020

Stage 1
Define

Step 1A
In December 2018 we sent the CAA our Statement of Need, which was approved and provisionally classed as a Level 1 change.

Step 1B
We will gather views on Design Principles during early 2020, and send those principles to the CAA for approval in summer 2020.

2020/2021

Stage 2
Development and assessment

Using the Design Principles produced during Stage 1 as a framework to evaluate different design options, we will develop and assess options for any airspace change. We will send details of those design options to the CAA for approval.

2021

Stage 3
Full public consultation

We will prepare to consult the public on these options. Once we have approval from the CAA to proceed, a formal consultation will take place in 2021.

2022

Stage 4
Update and submission of proposals

We will update our airspace change proposal, taking stakeholders' feedback into account, before sending it to the CAA in 2022.

Early 2023

Stage 5
Decision

We expect the CAA's decision on whether to approve any airspace change in early 2023.

Late 2023

Stage 6
Implementation

If approved, any airspace changes could be put in place in late 2023.

2024 onwards

Stage 7
Post-implementation review

The CAP1616 process gives the CAA and airports 12 months to review any change that has been made to airspace.

The CAP 1616 airspace change process

Read more online:
airspacechange.caa.co.uk

Objectives for Step 1B

The objective of Step 1B is to establish a set of Design Principles that are approved by the CAA and consistent with London Stansted's Statement of Need.

These Design Principles will then inform any consideration of the design options available, and will be the basis of any subsequent discussions about proposed changes to airspace around the airport up to 7,000 feet.

As previously highlighted, these Design Principles are informed by input from stakeholders, so London Stansted's objectives for Step 1B are also to:

- Successfully complete all elements of the CAP1616 gateway, and receive the CAA's approval to proceed to Stage 2;
- Engage stakeholders over and above the minimum requirements set out in CAP1616 in order to establish a robust framework of stakeholder engagement for subsequent stages of the process, ensuring stakeholders' priorities inform our later choices;
- Ensure London Stansted's Design Principles take account of Government policy and any local criteria such as planning permissions and local plans;
- Explain the need for change and setting out London Stansted's approach to the process in a clear and simple way; and
- Ensure that London Stansted's Design Principles support the airport's operational requirements and allow the airport to make the best use of its capacity and to operate safely.

Assurance

Throughout this process, London Stansted has been working with two independent organisations to ensure the process is carried out fairly and accurately, and that stakeholder views are captured and applied in a robust and transparent way. This includes receiving expert advice from YouGov on obtaining stakeholder views, including revising plans to mitigate the impact of COVID-19, plus endorsement from tCI on the process followed throughout this period (see pages 60-61).

YouGov®

Leading market research agency YouGov has been appointed as a delivery partner and commissioned to complete independent, detailed qualitative research on behalf of London Stansted. YouGov specialises in market research and opinion polling and is the UK's most widely used and quoted market research organisation.

The Consultation Institute

The Consultation Institute (tCI) has been appointed as an external assurance partner to provide advice and guidance throughout the process. tCI is widely acknowledged as the UK's leading voice on consultation and engagement activities and has worked with national and local government, as well as a range of private sector organisations.

3 Methodology

“I believe your first priority should be to engage with the local community and its representatives and from there engage in a strategy that is fair to all parties.”

– Online portal respondent

COVID-19

The COVID-19 (Coronavirus) pandemic, which has had a significant impact in the UK since March 2020, meant that London Stansted had to modify some of its plans for stakeholder engagement to ensure that views were appropriately tested and discussed, while working within unexpected constraints, such as a ban on face-to-face engagement.

All the focus groups which formed part of the first phase of engagement bar one (see pages 22-23) were able to be safely completed before restrictions were imposed. Nevertheless, the airport took a number of steps to ensure stakeholders had the opportunity to contribute their views, including extending the deadline for comments, sending reminder emails to stakeholders and further promotion of the online portal through local media, social media and the airport’s internal communications.

Proposals for the second phase of stakeholder engagement had to be more fundamentally reconsidered in light of the pandemic. The airport worked with YouGov to replace the planned face-to-face workshops with a programme of online engagement with stakeholders. This is explained in more detail on pages 44-45.

The airport tested this revised approach with its Stakeholder Reference Group (SRG) to ensure plans that were put in place for capturing stakeholders’ views were at least as comprehensive and robust as those proposed before restrictions were in place. The role of the SRG is set out on page 19.

Following the CAA’s acceptance of London Stansted’s Statement of Need in January 2019, work began to identify the best way to engage stakeholders in the development of a set of proposed Design Principles.

These proposed Design Principles should encompass the five safety, environmental and operational requirements established during the first phase of engagement (see page 20), as well as the strategic objectives London Stansted wishes to achieve through this process in terms of integration with the wider air traffic system in the South East. Once approved by the CAA, the Design Principles will form the framework for the evaluation of our proposed design options for the airspace around London Stansted (up to 7,000 feet) and how any changes would be implemented.

The CAP1616 guidance is clear about the need for transparent and meaningful engagement with stakeholders through the airspace change process, including at Step 1B. While there is no requirement for full public consultation at Step 1B (that comes later at Stage 3), it has nonetheless been necessary to seek and capture a range of views from stakeholders, including local communities, at this stage to ensure their views are taken into account as we develop our proposed Design Principles.

CAP1616 sets out the broad requirements for stakeholder engagement, including identifying the right audiences, understanding their situation and setting out how they will be engaged. London Stansted sought advice from tCI while developing its approach to engagement and before embarking on the engagement process. The strategy included two phases to ensure stakeholder views were taken into account throughout and that there was a meaningful two-way conversation with stakeholders as required by CAP1616.

Phase one – understanding views

This is explained in more detail on page 20, but in summary consisted of:

- In-depth engagement through a series of focus groups with key stakeholders (e.g. general public, aviation, business, local government – full table on pages 22-23) to understand their views and priorities.
- Broader direct engagement with a larger pool of invited stakeholders through email invitations, direct conversations and an online portal to provide feedback.
- An awareness campaign through local media and on social media, explaining how members of the public can find out more and submit their views.
- A programme of internal engagement across the airport to engage colleagues and business partners in the process and encourage responses to the online portal.

Phase two – testing the draft Design Principles

The purpose of this phase was to test whether London Stansted had correctly interpreted stakeholder insights to develop a set of proposed Design Principles that addressed local priorities.

This was originally anticipated to have been achieved through a series of face-to-face stakeholder workshops. However, the restrictions on place due to the COVID-19 pandemic meant London Stansted had to work with YouGov to develop an alternative approach, which was tested with the Stakeholder Reference Group (SRG, see page 19). This is set out in more detail on pages 44-45, but centred around online workshops, which enabled detailed engagement with the same stakeholders as would have been invited to the face-to-face sessions.

Taken together, the two phases of stakeholder engagement meant that a mix of methods were used to ensure a representative sample of stakeholders from across the region and wider industry was engaged. The use of a two-stage strategy also reflects the requirement for Step 1B to be a two-way conversation with stakeholders.

Methodology

Stakeholder identification

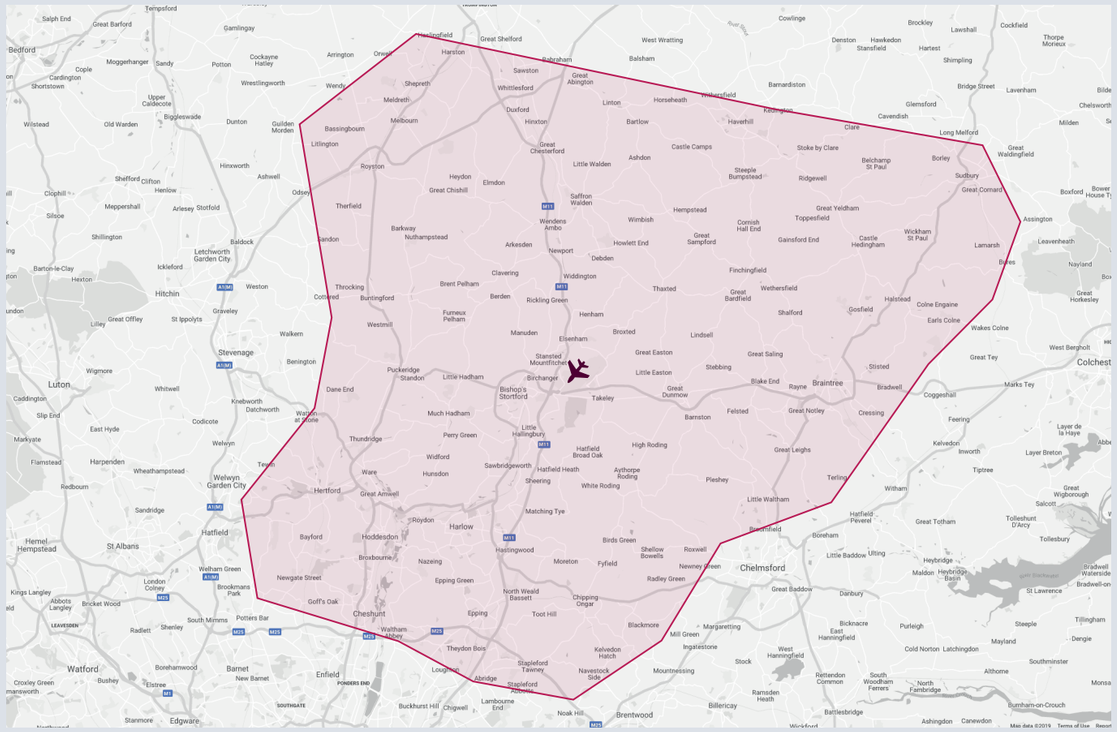
The CAP1616 guidance requires airports to focus on operations below 7,000 feet. In order to help identify relevant stakeholders for this stage of the process, the map below was developed to show the maximum area within which aircraft may fly below 7,000 feet when either departing from or arriving at London Stansted. The development of this map was informed by technical expertise within the airport, plus additional feedback from the SRG as outlined on page 19.

The area shaded red is referred to as the 'Area of Potential Impact'. As stakeholders located within this area could be potentially affected by a change, engagement was primarily focused on those stakeholders within this boundary. However, engagement was not restricted to this area and anybody who wished to submit views via the online portal was welcome to do so.

The stakeholder list was developed against the defined stakeholder groups set out in the CAP1616 guidance:

- Directly affected local aviation stakeholders;
- Members of the National Air Traffic Management Advisory Committee;
- Relevant national organisations; and
- Communities affected by potential impacts (such as noise or economic growth) associated with the change.

London Stansted Airport



The team at London Stansted, which comprised communications, community relations and technical expertise, undertook a thorough process of stakeholder identification, working in conjunction with tCI, to help identify those groups, organisations and individuals within the Area of Potential Impact. This included:

- Analysis of existing contacts/ relationships which included those who had previously requested to be updated in the process;
- Analysis of publicly available information about the organisations/elected representatives and other relevant stakeholders in the communities; and
- Analysis of Geographic Information System (GIS) data.

This resulted in a list of over 700 identified representative stakeholders with a variety of interests and priorities from across the Area of Potential Impact. The full list of stakeholders is included in Appendix 2. This list forms the foundation of London Stansted's stakeholder database for the Future Airspace project, and it will be reviewed and updated as the airport progresses through the CAP1616 process.

Stakeholder Reference Group

An independent Stakeholder Reference Group (SRG) was established by London Stansted to provide advice on the communication, engagement and subsequent consultation plans for the duration of the project.

The SRG is designed to be reflective (but not representative) of local businesses, community and voluntary groups, and other interests. It has an independent chair and is serviced independently by tCI, thereby offering additional safeguards as to the independent nature of its advice and guidance to the airport.

The SRG will meet regularly as London Stansted proceeds through the CAP1616 process to consider and comment on the suitability of the approach it is adopting, including reviewing the accessibility of any materials being produced. It has no decision-making role and its remit is confined to the process of engagement and consultation being adopted by London Stansted, rather than the merits of any particular airspace change proposals under consideration. However, members may act as consultees separately from their SRG role and submit views through the usual channels if they wish.

The SRG has already met twice and its insight has been taken on board in the completion of Step 1B. This included extending the boundary of the Area of Potential Impact, to encompass a large proposed housing development to the northwest that may potentially be affected in the future. London Stansted also took this opportunity to further redefine the boundary, encompassing another urban area that was just outside of the original boundary (to the northeast).

The SRG also held a special meeting to review the plans for the phase two engagement, given the onset of the global COVID-19 pandemic, and approved the approach described on pages 44-45 of this report. In addition, it offered advice on measures to deepen community engagement, such as greater emphasis on younger audiences, which was taken into account through the addition of a number of telephone interviews with younger members of the public.

The SRG will remain central to the development and monitoring of a full consultation plan for subsequent stages of the project.

Methodology

Engagement materials

The questions we asked

Before embarking on Step 1B, London Stansted developed a set of questions that sought to stimulate discussion and debate with stakeholders about the possible choices that could be made in order to modernise airspace around London Stansted in line with its Statement of Need.

The questions also gave stakeholders the opportunity to raise any other issues relevant to them, or to those they represented, and which London Stansted may not have considered. These questions formed the basis of discussion at the phase one focus groups and the online public engagement carried out during this period. The full question set can be found in the *Be Part of the Conversation* booklet which is available at Appendix 1.

In summary, the themes covered were:

1. Avoid change or fly over new areas
2. Concentrating or spreading out flight paths
3. Flying over built-up areas
4. Balancing noise and emissions
5. Taking account of current arrangements and agreements
6. Other airspace users
7. Aircraft types
8. Multiple flight paths in the same area
9. Areas that we should avoid flying over

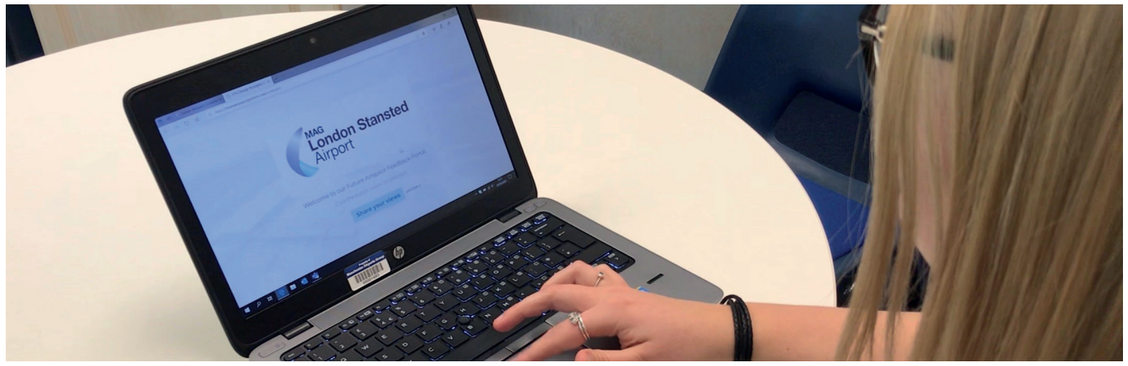
In addition to the themes covered in the questions, stakeholders were asked whether London Stansted had identified the correct requirements that any future airspace design must meet; the five requirements are:

- Safety
- Industry standards and regulation
- Consistent with the national system of aircraft routes
- Maintaining and improving our airport
- Keeping to Government policy

Open-ended questions were also asked throughout so stakeholders felt able to contribute any other views not covered in the question set.

Generally, the questions were designed to seek a preference between two options, while allowing stakeholders the opportunity to suggest an alternative if they felt this was better. All of the questions also gave stakeholders the opportunity to raise any other points they wished to be noted at this stage.

The questions – along with the *Be Part of the Conversation* booklet – were assessed by Plain English and received the recognised Crystal Mark for readability. The questions are repeated in full on pages 28-37.



Be Part of the Conversation – the engagement booklet

In order to provide stakeholders with easily digestible information about the process and how to get involved, an information booklet was developed and published.

The document, *Be Part of the Conversation*, is available via the Future Airspace pages on the London Stansted website. This website has been developed to include information about the project, and also includes links to a number of other relevant pages, such as the CAA and DfT.

To maximise accessibility, full colour, as well as accessible black and white versions of the document were created.

The link to this website and a PDF copy of the engagement booklet were emailed directly to 781 stakeholders identified by London Stansted, inviting them to submit views either by email, letter or the online portal.

Be Part of the Conversation – the online portal

To make it as simple as possible for stakeholders to submit their views and for them to be easily analysed, an online portal was developed. This tool provided interested parties with easy access to information about the project, as well as a simple way to respond to the questions being asked and submit any other views.

Access to the portal was communicated in a number of ways, including via direct emails to identified stakeholders as well as public communications online and via social media. Further details on the broader public engagement are set out below.

The portal was live from 2nd March until 20th April 2020. As previously set out, the deadline was extended by one week in response to the COVID-19 pandemic. The extension to the deadline was communicated directly to the stakeholders on the database by email, as well as on the airport's social media channels and by alerting local media. Colleagues across the airport were also reminded that they had extra time to submit their views.

In total, 115 responses were submitted via the portal, 44 of which were from pre-identified stakeholders (including noise complainants) with 71 from members of the public. A further nine responses were received via email or in the post, and were incorporated into the analysis of responses. While the plan had originally been for London Stansted colleagues to analyse these responses themselves, following discussion with the SRG and to provide an extra layer of assurance and consistency, YouGov was commissioned to produce an analysis of the responses.

Methodology

Phase one engagement

Focus groups

For the first phase of engagement activities, London Stansted asked YouGov to develop and deliver a series of focus groups with targeted stakeholders to understand their views. YouGov was commissioned to do this work in order to provide independence and offer stakeholders a neutral environment in which to express their views.

In total, YouGov conducted nine focus groups, each lasting two hours. The table below sets out how stakeholders were grouped, and how each group was recruited.

Focus group category	Recruitment methods
General public (living close to London Stansted more affected by noise) **General public** (living close to London Stansted less affected by noise)	Participants were selected from YouGov's panel network[3] from within the Area of Potential Impact. A mix of respondents were then invited to participate, ensuring a mix of geographical area, perceptions of noise from the airport as well as a mix of age, social grades, ethnicities and genders.
Business On-site/off-site businesses and business bodies **Special interest** All members of regional special interest groups **Community reps** All representatives of local community **Elected reps (x2)** All members of district, local and parish councils **Aviation (x2)** Directly affected on and off-airport stakeholders	Recruitment for these groups was done in phases. A first wave of emails was sent by the London Stansted Future Airspace team to organisations and businesses on the stakeholder list. Each wave was selected by YouGov to ensure balance and impartiality. Those interested in participating were then screened by YouGov with a mix of stakeholders being invited to participate. Further waves of invitations were issued until a suitable number of participants had been recruited for each group.

3 Details of how this is recruited are available here: https://today.yougov.com/about/about-the-yougov-panel/

Members of the public were paid £50 to participate, with representatives from other stakeholder groups invited to select a charity to receive a £70 donation. These focus groups all followed the same format to ensure all participants were presented with the same information and given equal opportunity to contribute their views.

Before embarking on these sessions with stakeholders, a pilot focus group was held with colleagues from across the airport to ensure everyone was comfortable with the format and content of the sessions.

Each focus group was independently facilitated by a representative from YouGov, who also recorded each session and captured comments in real time. Each session was also attended by a representative from London Stansted to help address any specific technical questions if required.

The format for each focus group was as follows:

- Introduction and warm-up – welcoming attendees and explaining the purpose of the session;
- Perceptions of London Stansted – exploring with participants how the airport is viewed by stakeholders in the room and any perceived benefits/ challenges to the region;
- Introduction to London Stansted's Future Airspace project – putting the project into some national context and setting out the need for local change. This included showing participants an animation that had been produced by London Stansted. An explanation of the Government's broader objectives from airspace modernisation was also given and participants were invited to share any views at this stage;
- Introduction to the questions – A3 boards were used to illustrate each of the questions and provide supporting commentary. Stakeholder views were recorded on the general theme of each question, along with the options being suggested and any other points they wished to be considered;
- Summary and close – a recap on the discussion and any final comments/questions from respondents, before closing the session.

All focus groups were held at the Radisson Blu hotel at London Stansted Airport, as it represented an easily accessible and neutral venue with the correct facilities. These sessions took place between 2nd and 11th March 2020.

An additional focus group designed to top up responses from the 'on-site business' and 'national organisations' groups of stakeholders was planned for 17th March. The introduction of COVID-19 restrictions meant this had to be cancelled at short notice, so London Stansted arranged for YouGov to undertake a series of telephone interviews instead, to ensure these stakeholder voices were adequately reflected at this stage. These calls followed the same format as the focus groups to ensure consistency of feedback.

Methodology

Business-as-usual engagement

In addition to the dedicated engagement through focus groups outlined above, London Stansted colleagues continued to engage with stakeholders through the usual course of business, taking these opportunities to further promote the project and encourage the airport's wider community to submit views via the online portal.

In January 2020, members of the Stansted Airport Consultative Committee received a full briefing on the project, including an overview from representatives from the DfT. This also included information on the engagement approach being proposed and where to find further information.

Separate briefing sessions were also held with other groups, including:

- Noise & Track Keeping Working Group
- SAFE forum (for passengers with reduced mobility)
- The User Experience Group
- The Airport Leadership Team

Full details of all engagement carried out during this period, including both formal stakeholder engagement and business-as-usual activity, is detailed in Appendix 3.

Maximising awareness

London Stansted carried out a comprehensive programme of promotion to raise awareness of the process and ensure local residents and stakeholders were given maximum opportunity to engage in the process. This included:

- Issuing a press release to all media within and around the Area of Potential Impact (see page 18) publicising the process and signposting the website and portal;
- Targeted media engagement with more relevant outlets, including background briefing with the major local paper and main broadcast outlets;
- Posts on London Stansted's social media channels (in particular Twitter and Facebook) with a combined reach of over 177,000;
- Direct emails to all 781 stakeholders identified for this process;
- Communication to all MPs within the Area of Potential Impact, along with copies of the stakeholder emails and link to the online portal;
- The creation of an animation explaining the process and how to get involved in simple terms. This was widely shared online and on the airport's social media channels and distributed to local media;
- An internal communications campaign, including briefing with internal teams across London Stansted, stories in staff newsletters, on the intranet and Airport Community App which has over 6,500 users across companies based at the airport; and
- Emails to almost 100 local residents who have contacted the airport in the last six months with concerns about flightpaths and/or noise, as they have an ongoing interest in the airport's operations.

Further outreach was planned at routine community drop-in sessions, with the team expected to make Future Airspace materials available at three sessions which were already planned during the engagement period. Unfortunately, these events were cancelled following the COVID-19 outbreak and we would expect any local residents with strong views to have submitted these via other means (i.e. the online portal or designated mailbox). The measures listed above ensured that individuals and organisations with an interest in the project were able to locate the appropriate information and submit their views.

Similarly, it was not possible to hold a planned face-to-face workshop with students at Stansted Airport College due to the restrictions in place, so links to the online portal were emailed to those who were expected to take part in the workshop. Following a recommendation from the SRG, YouGov was commissioned to carry out telephone interviews with a number of younger residents in the local area to ensure their views were still captured as part of the process. In the end, a healthy proportion (11%) of online portal responses were aged under 24, but these additional telephone interviews gave added assurance that younger voices were considered.

4

Feedback from phase one

This section summarises the responses to the questions that were asked of focus groups and on the online portal during the first phase of engagement. Although this was predominantly a qualitative exercise to enable the airport to hear a diversity of views and opinions, for full transparency, a summary of the statistical data which emerged from this stage is also included.

Exact percentages have been rounded, while some respondents either declined to pick an option or chose to submit their own alternative. This means the figures may not total 100%. Full breakdowns, along with details of where participants chose to give their own option as an alternative, are available in the YouGov reports at Appendices 10 and 11.

Question 1

Avoid change or fly over new areas

Option 1

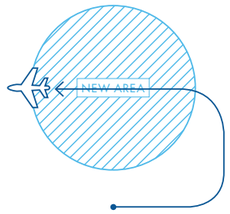
Avoid aircraft flying over new areas, unless there is a strong case to do so.

Focus groups 16%

Online portal 32%

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.



Focus groups 84%

Online portal 64%

Stakeholders' preferred option

General Public	National Organisation	Special Interest	Community	Business Representatives	Elected Representatives	Aviation Representatives
Option 2	Option 1 and Option 2	Option 1 and Option 2	Option 2	Option 2	Alternative Option 3	Option 2

The majority of stakeholders favoured a 'clean slate' approach and saw this as a good opportunity to design the best possible routes for noise, emissions and efficiency without constraint. Some felt that the current flightpaths were outdated and do not reflect the current landscape. A number of business and aviation stakeholders felt that technology would result in quieter and cleaner flights, so the impact on the ground would lessen in time. However, there were mixed opinions in responses from the online portal about the placement of new routes as some felt urban areas and higher concentrations of people should be avoided.

There was, however, concern about the impact on those potentially newly affected (primarily in terms of noise but also house value) and this was most significantly noted by local communities and elected representatives focus groups and on the online portal. Furthermore, some felt that those currently living under the flightpaths have become accustomed to any noise or pollution and new routes would offer no benefits to local residents. Some stakeholders also felt that more could be done to protect affected communities from the impact of noise.

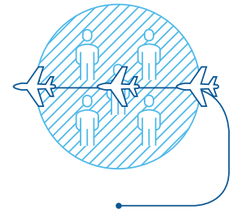
Overall, both focus groups and online portal responses included calls to evaluate existing routes on their merits alongside proposed new routes – i.e. change should deliver demonstrable benefit to be justified.

Question 2

Concentrating or spreading out flight paths

Option 1

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

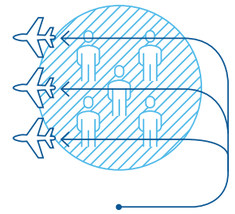


Focus groups 35%

Online portal 37%

Option 2

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



Focus groups 65%

Online portal 58%

Stakeholders' preferred option

General Public	National Organisation	Special Interest	Community	Business Representatives	Elected Representatives	Aviation Representatives
Option 1 and Option 2	Option 2	Option 2	Option 1	Option 2	Option 2	Option 1 and Option 2

Focus groups and online responses favoured spreading out flight paths. This was seen as the fairest option to share the impact of aircraft noise. Portal respondents highlighted the impact on health and the environment that concentrated emissions could have.

Respite was mentioned as being welcomed as a means of managing and diluting the impact on individual areas that are under the current routes. However, some recognised that those living close to the airport might not see this benefit and others mentioned that the impact will vary depending on the type of aircraft.

There were also calls for investigating the potential to fly over non-residential areas whilst others thought this was a risk to the countryside.

Those that chose option 1 favoured impacting the least amount of people and some felt this option offered the least change. However, there were also concerns that if the number of flights increased, this may cause health impacts and emissions to residents in a concentrated area.

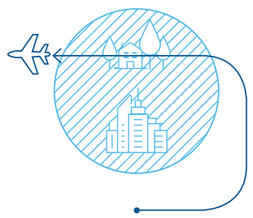
> "Don't change – the vast majority of people will have made a choice over the last 30 years as to whether they are prepared to live under a flight path or not."
>
> – Online portal respondent

Question 3

Flying over built-up areas

Option 1

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



Focus groups 31%

Online portal 36%

Option 2

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

Focus groups 69%

Online portal 61%

Stakeholders' preferred option

General Public	National Organisation	Special Interest	Community	Business Representatives	Elected Representatives	Aviation Representatives
Option 2	Option 1 and Option 2	Option 1 and Option 2	Option 2	Option 2	Option 2	Alternative Option 3

Responses to this question were fairly mixed, with the majority in focus groups and the online portal favouring flying over built-up areas.

Within focus groups, many wished to preserve the tranquillity of the countryside and argued that flying over built-up areas is less impactful because of increased background noise. Portal respondents felt that those in built-up areas are used to a higher level of noise and those in rural areas chose to live there for tranquillity. A small group mentioned the impact that additional noise might have on livestock and crops.

However, safety was highlighted as a concern of flying over built-up areas by both portal and focus group respondents. Those that favoured avoiding built-up areas also argued that this affects fewer people and is therefore fairer. Some portal respondents also voiced concerns about newly affecting certain towns and felt established routes should be retained to maintain efficiency and reduce disturbance.

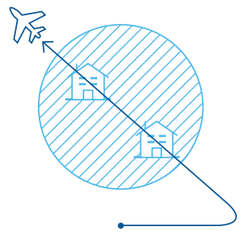
Within focus groups particularly, stakeholders raised the extensive new housing development in the area and queried whether this meant that areas that are not currently developed could be in the next two to three years.

Question 4

Balancing noise and emissions

Option 1

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



Focus groups 69%

Online portal 44%

Option 2

Avoid flying over communities so fewer people are affected by aircraft noise, even if this means higher CO_2 emissions.

Focus groups 31%

Online portal 50%

Stakeholders' preferred option

General Public	National Organisation	Special Interest	Community	Business Representatives	Elected Representatives	Aviation Representatives
Option 1	Option 2	Option 2	Option 1	Option 1	Option 1 and Option 2	Option 1

Among the focus groups, the majority (with some exceptions) felt that efficiency should be the priority to tackle emissions. Those that chose this argued emissions affect a larger amount of people and noise impacts are more temporary.

Responses via the online portal were more evenly balanced. Noise reduction was marginally felt to be the greater priority with respondents focusing on the health and wellbeing impacts of excessive noise. This was also reflected in some of the focus groups – primarily those directly impacted, or those representing communities affected, by aircraft noise.

There were some comments around whether there were significant emissions reductions to be made from option 1.

There were also some calls to combine the two options to allow both modern and older aircraft to operate.

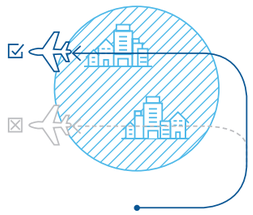
> "If avoiding built-up areas is possible, then a flight path should seek to achieve that, but unnecessarily extending flight paths to do so will have a major impact on an aircraft's carbon footprint. So more direct routes should be used."
>
> – Online portal respondent

Question 5

Taking account of current arrangements and agreements

Option 1

Continue with current arrangements and ways of operating.



Focus groups 11%

Online portal 24%

Option 2

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

Focus groups 89%

Online portal 69%

Stakeholders' preferred option

General Public	National Organisation	Special Interest	Community	Business Representatives	Elected Representatives	Aviation Representatives
Option 1 and Option 2	Option 1 and Option 2	Option 1 and Option 2	Option 2	Option 2	Option 2	Option 2

The majority of respondents in both focus groups and the online portal opted for option 2. The main reasoning tended to be around the desire to opt for a 'start from scratch' approach to achieve the most efficient and effective outcomes (in terms of noise and emissions reductions). It was also felt that it provided an opportunity to develop and modernise the current system. Portal respondents argued that new routes should avoid the largest number of people, while some felt that rural areas should be protected.

There were, however, calls from both focus groups and online portal respondents to consider existing arrangements within new routes with adjustments or mitigation, such as soundproofing, being considered for those newly affected.

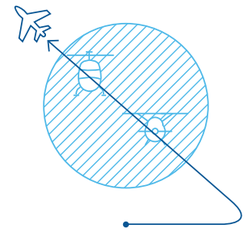
Online portal responses for keeping current arrangements were slightly higher compared to the focus groups. The main reasons given by these respondents were that people were used to the current paths and had built their lives around them, and any changes would disrupt this.

Question 6

Other airspace users

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.

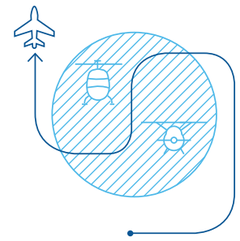


Focus groups 92%

Online portal 83%

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.



Focus groups 8%

Online portal 12%

Stakeholders' preferred option

General Public	National Organisation	Special Interest	Community	Business Representatives	Elected Representatives	Aviation Representatives
Option 1	Option 1	Option 1	Option 1	Option 1	Option 1	Alternative Option 3

A high proportion of respondents in both focus groups and the online portal favoured option 1, again on the basis of greater efficiency. A number of stakeholders cited that changes should be made with the local community in mind. Stakeholders in the top-up interviews and online portal argued that routes should be designed to prioritise the local airport and the commercial and cargo flights.

Emergency services and military operations were cited as the exception to this, with most respondents agreeing that they should retain priority status.

However, particularly in the aviation group, there were some concerns around safety aspects of option 1 on other users, as this option was seen to push other users into a smaller area. A minority of stakeholders felt that the airspace could not be owned by one user.

This being said, other respondents felt that operational efficiencies arising from modernisation could mean that other users could be more easily accommodated.

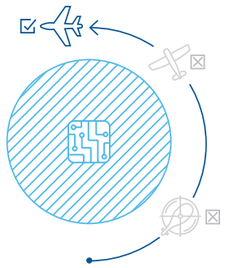
> "I think the airport needs to have the priority – it's running a business. The day-to-day flights should have priority."
>
> – Focus group participant

Question 7

Aircraft types

Option 1

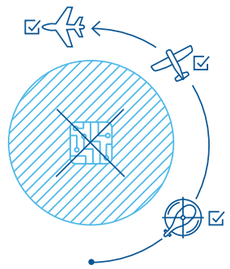
Take advantage of the latest technology and techniques, even if this makes flight paths more difficult for older and smaller aircraft.



Focus groups	Online portal
98%	84%

Option 2

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



Focus groups	Online portal
2%	10%

Stakeholders' preferred option

General Public	National Organisation	Special Interest	Community	Business Representatives	Elected Representatives	Aviation Representatives
Option 1	Option 1	Option 1	Option 1	Option 1	Option 1	Option 1

A high proportion of respondents in both focus groups and the online portal favoured option 1, again on the basis of greater efficiency and upholding the reputation of a modern airport.

There was a high level of support for harnessing new technology to drive improvements in noise and emissions which would also bring health benefits to the local community, whilst futureproofing the airport. Stakeholders from the top-up interviews cited the importance of pushing forward with using new technology.

Others felt this was a logical response on the basis that older aircraft will be phased out over time.

A handful of stakeholders chose to make flight paths suitable for all aircraft and called for bespoke routes for those that are unable to use new technology until they are phased out.

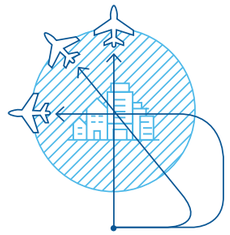
This question also prompted some specific operational comments via email, for example around the use of Performance-Based Navigation (PBN).

Question 8

Multiple flight paths in the same area

Option 1

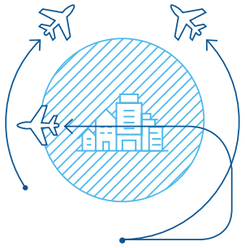
Make sure each route can achieve the best balance between reducing noise and keeping emissions low, even if this means some areas are overflown by several routes.



Focus groups	Online portal
81%	63%

Option 2

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



Focus groups	Online portal
19%	33%

Stakeholders' preferred option

General Public	National Organisation	Special Interest	Community	Business Representatives	Elected Representatives	Aviation Representatives
Option 1 and Option 2	Option 1	Option 1	Option 1	Option 1	Option 2	Option 1

Both focus group and portal respondents favoured option 1, again with the primary reason given being efficiency on the basis of overall noise and emissions benefits.

However, there were concerns about the impact this could have on areas that could be heavily overflown. There were therefore calls to plot the most efficient routes but evaluate the impact and adjust if certain areas would be too heavily burdened. Consideration of the impact on house prices was also raised.

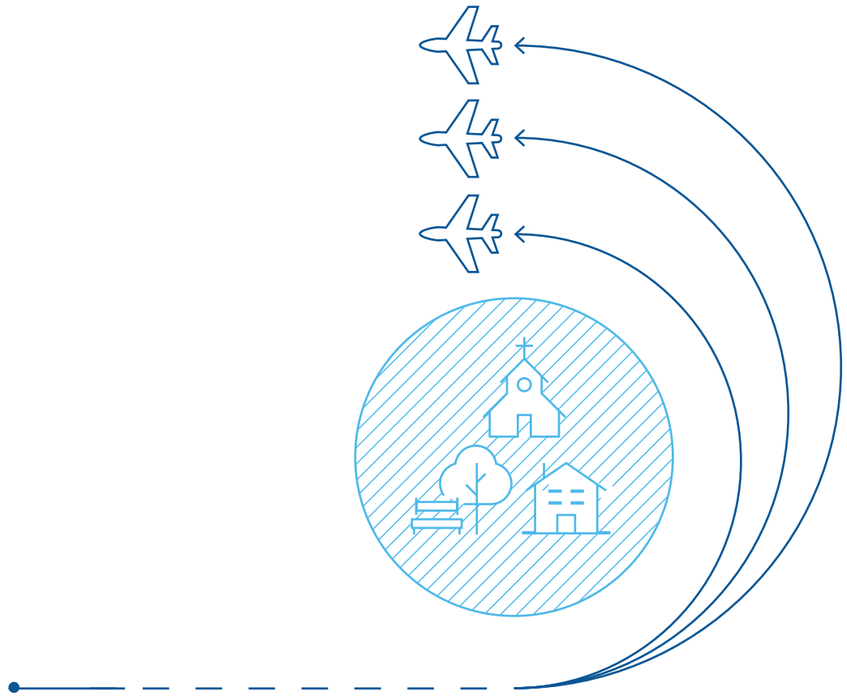
Mitigation was also mentioned by some in both sets of respondents, in terms of soundproofing and respite.

Portal respondents also highlighted the importance of transparency within the decision process with the need for potentially affected communities to be suitably informed throughout the process.

> "If the overflown areas are suitably informed of the changes (in advance/regularly), and if the increase in aircraft is fairly split over these communities, you should be able to balance out the effects. Ultimately, efficiency should be the focus."
>
> – Online portal respondent

Question 9

Areas that we should avoid flying over



Within focus groups there was a broad understanding that it would be unfeasible to avoid large numbers of specific sites and areas. Focus groups highlighted mitigation (such as insulation) as an option where possible, instead of avoiding buildings such as care homes. However, there was some agreement that some specific areas should be avoided if possible, particularly tranquil areas such as Hatfield Forest and historic sites.

"Biggest concern is hospitals – they should take priority – it would be interesting to know how much of a burden it is, if at all, given sound proofing and triple glazing."

– Focus group participant

The online portal gathered around 70 comments on specific sites to consider avoiding. These included schools, hospitals and churches. AONBs, SSSIs and other countryside/tranquil areas were also mentioned, in particular Hatfield Forest SSSI and Patmore Heath SSSI. Other areas mentioned were specific villages and towns (in particular Bishop's Stortford) alongside some leisure facilities and individual postcodes.

"Patmore Heath (SSSI) and the surrounding area is a haven for wildlife. Noise pollution risks changing that and the biodiversity of the area. Many new species have returned during the reduced flying period of COVID-19."

– Online portal respondent

Question 10

Meeting requirements

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

Within the focus groups there was a broad understanding of the need to meet the outlined requirements. On the portal, 80% of respondents agreed that the five requirements (see page 20) should be met and those that disagreed questioned whether industry standards take into account local communities and unique areas.

Safety was highlighted as the priority by both focus groups, top-up interviews and online respondents. There were mixed views on point 4, with some within focus groups agreeing this was important, while others felt it could be seen as related to growth and potential airport expansion.

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

Those that disagreed felt that the requirements do not take into account community concerns, including an inclusive experience for all travellers, especially those with disabilities.

Those that felt there were other requirements to consider highlighted night noise, with suggestions put forward to mitigate its effects such as respite and reducing night operations. The other point highlighted was environmental policy.

"Safety is always going to be the important thing, and the rest of it has to click together."

– Focus group participant

Question 11

Other things we should consider

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

This question prompted a range of answers that primarily related to respondents' specific circumstances and priorities. For example, many reiterated concerns regarding their specific locations such as overflight/avoidance of specific areas and night noise and environmental concerns, primarily the need to reduce noise and emissions. Some stakeholders asked for consideration of flexible navigation systems and limiting some non-essential flights.

It was noted by some stakeholders that some tension might exist between Design Principles when being applied to any airspace change. While safety will always take priority, it was noted that there may need to be some trade off when designing any new routes.

Many of the portal comments were around their involvement in the process and assurance that their concerns would be considered and listened to as part of it.

5 Phase two – developing our proposed Design Principles

The first phase of engagement provided valuable and qualitative insight from 66 stakeholders and members of the public via the focus groups and 124 responses via the online portal, email and by post. Generally, there was a good demographic spread (detailed in Appendix 13), although YouGov conducted three additional telephone interviews with younger age groups.

All of this data was analysed by YouGov (see Appendices 10 and 11), and provided a good understanding of the range of views that exists among interested parties and, once combined with the focus group feedback, formed the basis of a list of themes for further consideration.

This list was then further refined by the team at London Stansted, supported by external advisors, to remove any duplication, consider any commonality and assign themes to each piece of feedback received. This resulted in a condensed list of 280 lines of summary feedback and 136 corresponding themes.

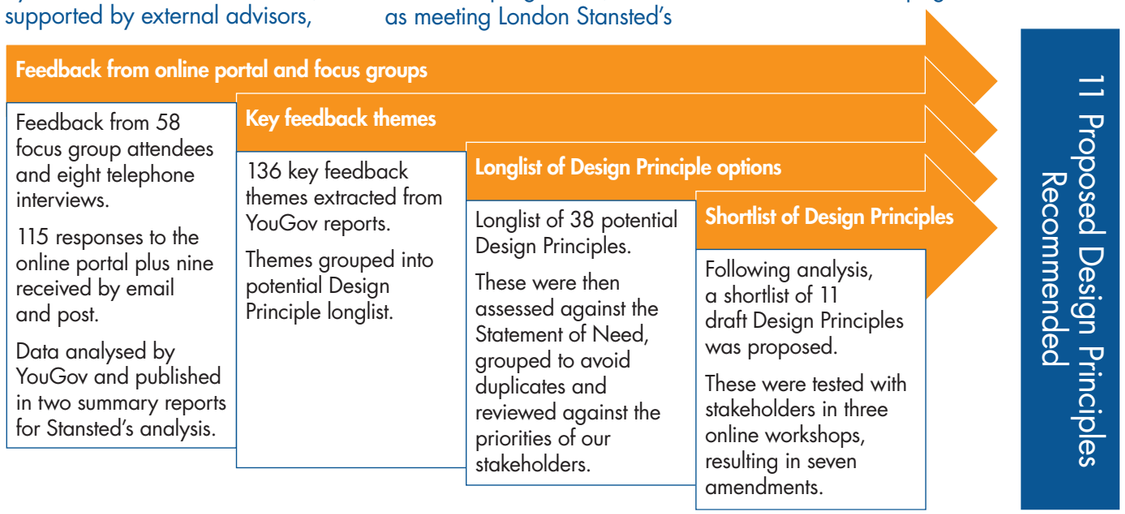
From these themes, the team were then able to generate a longlist of 38 potential Design Principles. This was then checked back against each feedback theme, assigning one of the longlisted potential Design Principles to each. In those cases where feedback was not taken forward into the longlist, an explanation was set out as to why this was the case.

The team also ensured that the list met the CAA's requirement for any airspace change to be compliant with both the Airspace Modernisation Strategy and the FASI-S programme, as well as meeting London Stansted's Statement of Need and integrating with other airports and the wider airspace system.

This list was then subject to further discussion with the airport's expert advisors and further condensed into a shortlist of 11 draft Design Principles, which collectively are considered to encompass all the important themes identified and reflect all of the initial 38 under consideration. This process is documented in Appendix 9.

Further views were then sought from stakeholders on the 11 draft Design Principles through a second phase of engagement, which is explained in more detail on pages 44-45.

Feedback that fell outside of the CAP1616 process, and themes that were not developed further, are set out on pages 42-43.



Draft Design Principles

The table below shows the shortlist of draft Design Principles developed following phase one engagement and the rationale for their selection.

Draft Design Principle	Rationale
Safety is our highest priority; our routes must be safe, and must comply with national and international industry standards and regulations.	All stakeholder groups were clear that safety has to be the most important factor in any airspace redesign. This was a clear priority in the feedback derived from all questions, but in particular responses to question 10 (meeting requirements). Therefore, all changes must minimise risk to aircraft and communities on the ground. Safety is central to all operations at our airport, and is expected of us by our passengers, the public and our regulator. All proposed routes will undergo a full safety assessment.
Any changes must be consistent with the CAA's strategy for Airspace Modernisation and the FASI-S programme, taking into account the needs of other change sponsors and airspace users.	There is strong support for the potential benefits offered by the Future Airspace project across all stakeholder groups. Overall, people welcomed the opportunity to take a fresh look at airspace design. There is also understanding that to fully realise the potential benefits, because airspace works together as a system, London Stansted airspace needs to integrate into the wider national network and, throughout the design process, work closely with neighbouring airports as part of the FASI-S programme to ensure overall efficiency. We are also mindful that our regulator, the CAA, requires that accordance with the strategy for Airspace Modernisation is included in our Design Principles.
The airspace design must provide for the utilisation of aircraft movements permitted by planning permissions and within statutory limits in force at the airport.	In general comments made throughout the engagement exercise, stakeholders and communities are supportive of London Stansted Airport and the valuable role the airport plays in the region. Through responses to question 10 (meeting requirements), all stakeholder groups strongly supported the need for the airport to be able to continue the services that it offers today and ensure that it is fit for any future demand. Some respondents raised concerns that the central purpose of the project was to facilitate growth. However, in line with our Statement of Need, which highlights the phasing out of ground-based navigational aids and the need for coordination with the FASI-S programme as the key drivers for airspace change, this is not the driving factor at London Stansted Airport. Further, this proposed Design Principle makes clear that any future growth will be within the limits that are imposed through other mechanisms, including the land-use planning system. (See information on Stansted and the planning system on page 10).

Draft Design Principle	Rationale
Where we choose routes that fly over new areas, there will have to be a clear benefit in doing so.	There is very strong support across all stakeholder groups for a fresh approach to airspace design, and stakeholders' responses to question 1 (avoid change or fly over new areas) indicate that our focus should be on designing the best routes (in terms of efficiency, emissions and noise) and highlighted that current routes may be outdated. Responses to question 5 (taking account of current arrangements and agreements) indicated that to simply replicate current ways of working would hinder the ability for any benefits to be delivered as part of the airspace modernisation programme and, as such, a fresh approach should be taken. However, it was also widely felt across stakeholder groups that any changes should bring demonstrable benefit in order to be justified. It was noted that overflying new areas would impact those newly affected and that this must be balanced by ensuring the overall benefit of flying over a new area would be sufficient to justify any resulting impacts on those newly flown over.
Routes should be designed using the latest widely available navigation technology and facilitate continuous climb and descent to both runways.	The use of the latest technology was widely favoured by stakeholders in response to question 7 (aircraft types). Stakeholders highlighted the potential environmental benefits of embracing new technology and ways of flying, such as reducing fuel burn, emissions and noise. In order to address noise and emissions locally, stakeholders also highlighted the facilitation of continuous climb and descent to both runways as being of particular interest. This was seen as an option for addressing long-standing conflicts with neighbouring airports and local noise concerns about aircraft landing on runway 04. While some respondents queried whether utilising the latest technology is possible for all aircraft (particularly older aircraft), this feedback is addressed by draft Design Principle A (Alternatives).
In order to address the effects of aircraft noise, each route should seek to minimise the number of people overflown.	Responses to question 3 (flying over built-up areas), were mixed, with respondents highlighting the impacts on both rural and built-up areas. Stakeholders primarily highlighted the impact in terms of noise on those communities that are directly overflown. This principle seeks to ensure the minimum number of people are overflown. In practice, this approach is consistent with our earlier application of performance-based flying, which was supported during public consultation and has proven to be operationally effective and acceptable to local communities. When applying this approach, our draft Design Principle N3 (Noise 3) will ensure that we take account of local factors, avoiding the design of routes which pass over noise-sensitive receptors where it is practical to do so.
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.	This principle is derived from feedback to question 2 (concentrating or spreading out flightpaths) and question 8 (multiple flightpaths in the same area). Overall, most stakeholders felt that it is fairer to share noise impacts. The desirability of respite was raised by some stakeholders as a means of minimising the impact of noise on local communities, particularly at night, with ideas such as 'could paths be varied on different days to reduce impact?' and 'share the burden' put forward for how this might be achieved. This principle takes into account the feedback highlighting potential means of respite for consideration, by stating that other forms of respite will be considered, for example using balanced runway mode where operationally viable.

Draft Design Principle	Rationale
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.	Focus group respondents for the most part agreed that while desirable, it would not be practical to avoid a large number of specific sites or locations and to do so would impact on the overall efficiency of new routes and the desired noise and emissions benefits. However, both focus group and portal respondents put forward when answering question 9 (areas to avoid) a number of specific places that we should consider avoiding, where practical. Some of the most common of these categories of receptors, such as 'AONB', have been listed in our draft principle. This will also be captured through our ongoing engagement, including consultation at Stage 3 of the CAP1616 process, where we will find out more about any local characteristics or noise-sensitive receptors that we should consider.
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.	Responses to question 4 (balance noise and emissions) prompted a mixed response from stakeholders on which was considered to be the highest priority. Focus groups overall gave a preference for flying the most direct routes in order to minimise emissions as this would benefit a greater number of people. However, responses to our online portal prioritised noise impact as this is seen to have a more significant impact on the 'wellbeing of the population'. Given the balance of feedback, this principle has been drafted in line with Government policy, which emphasises 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.	Responses to question 6 (other airspace users) stated a strong preference for efficiency and sustainability of routes to take priority, even if they make routes more difficult for older or smaller aircraft, but there was agreement that airspace should be open for all. Some stakeholders felt that we should not reduce the amount of uncontrolled airspace available for general aviation. The boundary of our controlled airspace will be decided by flight paths that best deliver against our Design Principles. It is conceivable that this may need more controlled airspace in some areas, while the new route designs may allow us to release some controlled airspace in other areas. All stakeholders agreed very strongly that priority must be given to emergency services. While this is accounted for in the Design Principle, it should be noted that emergency aircraft are already afforded higher priority than commercial aircraft. There was also agreement from all stakeholder groups that airport traffic should be prioritised over leisure aircraft.
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.	The majority of stakeholders favoured utilising modern navigation standards and flying techniques to ensure that our routes are the most efficient and have the least impact on communities that are overflown. There was, however, understanding that some legacy aircraft may not be equipped with the necessary technology to enable this. Where this is the case, this principle considers alternative arrangements for the affected aircraft while prioritising the adoption of such techniques.

Themes that were not developed further

Response themes	Rationale
Plotting flight paths that avoid communities would be very challenging.	This feedback does not directly translate into a draft Design Principle. However, minimising the number of people overflown is covered by our shortlisted draft Design Principle N1 (Noise 1).
Changes on the ground could be made (e.g. soundproofing) to ease the burden.	We consider this feedback translates to mitigation and, in line with Government policy and other legal requirements, we will continue to offer support to those people living in the noisiest areas. In addition, as set out in CAP1616, all stakeholders will have the opportunity to participate in a full consultation during Stage 3 of this process.
Priority should be given to engaging with the local community.	Whilst this is not a design consideration, community engagement is a key part of the Future Airspace project and the importance of this element is covered within the CAP1616 process, with further engagement required at Stages 2 and 3.
Number of flights should be reduced.	Whilst we acknowledge this feedback, it was not taken forward as it relates to the permitted number of flights. We believe this has been adequately addressed in our shortlist draft Design Principle D (Demand).
Reduce short haul flights in favour of train journeys.	This feedback was not taken forward as a draft Design Principle, as the relative use of different transport modes is not within the scope of our Future Airspace project.
Decision-making process should be clear, transparent and supported by evidence.	This feedback was not taken forward as a draft Design Principle, as it relates to the decision-making process rather than a design consideration. The CAP1616 process provides a rigorous and transparent process, which is supported by evidence at each stage.
Local residents' concerns should be the priority.	The feedback was not seen to be a design consideration, and so was not taken forward as a draft Design Principle. As part of the CAP1616 process, stakeholders' views, including local communities, has been sought and fully considered in the development of our draft Design Principles. Further engagement will be undertaken at Stages 2 and 3 of the CAP1616 process.
Airspace Modernisation Strategy should not be used for growth/expansion at the airport, even if there are offsets.	The aim of our Future Airspace project is not to increase flights, and this is outlined in our Statement of Need and within CAP1616. However, this feedback is addressed in our shortlisted draft Design Principles P (Policy) and D (Demand).
Reduce the number of night flights.	Whilst we note this feedback, it was not taken forward as a draft Design Principle, as it relates to the permitted number of flights. However, with reference to night flights, this point is covered in our shortlisted draft Design Principle Noise (N2), which covers potential respite and use of multiple routes.
Consider limiting some non-essential flights.	This feedback was not taken forward as a draft Design Principle, as it relates to the permitted number of flights, which is outside of the remit of our Future Airspace project. We consider this has been adequately addressed in our shortlist draft Design Principle D (Demand).
Fine aircraft that do not stick to the centre line of the route.	London Stansted will continue to impose penalties as part of its Noise Action Plan and are addressed in our shortlisted draft Design Principle P (Policy).
Operators should be made to comply with regulations, using penalties.	Operators are already required to comply with regulations. Obligations are enforced by regulatory bodies, principally the CAA. With regard to aircraft noise, London Stansted imposes penalties in several instances where operators fail to comply with requirements. This is part of our Noise Action Plan. These measures are not within the scope of our Future Airspace project.

Testing our Design Principles in phase two engagement

In order to ensure the views of stakeholders had been accurately reflected in the development of the draft Design Principles, and to ensure the initial drafting was clearly understood, London Stansted commissioned YouGov to carry out a second phase of engagement.

As previously discussed, the COVID-19 pandemic meant initial proposals for face-to-face workshops had to be reconsidered. YouGov's extensive experience in conducting market research in a variety of formats meant it was possible to establish a series of online workshops where members of the public and stakeholders could debate the draft Design Principles and provide feedback. This approach was tested with the SRG at a special meeting convened to discuss the impact of COVID-19 on the second phase of engagement.

YouGov advised that this revised approach was at least as good as the planned face-to-face workshops and actually presented a number of advantages, with stakeholders likely to feel more able to freely contribute their views than they may have done if together in a room, and the ability to electronically capture comments verbatim. It also made it easier to maintain a sense of rapport among stakeholders across a geographically diverse area, while continuing to allow YouGov to facilitate the conversation and generate meaningful feedback on proposals. Another key benefit of the online workshops was their convenience and easy accessibility, enabling stakeholders to participate wherever they were based, rather than being expected to travel to a particular venue.

In total, three sessions were held, grouping stakeholders together as follows:

- Group 1 – general public (x12 with a mix of age, gender, social grade and how they are impacted by noise)
- Group 2 – business, national organisations, community groups, special interest groups (x13)
- Group 3 – elected representatives and aviation (x8)

Based on previous experience at East Midlands Airport and Manchester Airport, these groupings worked well, ensuring there was a mix of backgrounds and opinions within each group and providing participants the space to exchange different opinions and express their views. Previous experience also informed the decision to combine aviation stakeholders and elected representatives, as it enabled the latter to get a better understanding of the industry perspective, which they valued. The general public were also researched as a single group, as the advice from YouGov was that mixing stakeholders and general public can cause a shift in dynamic, with some general public members being reluctant to share their views surrounded by 'experts'.

Stakeholders who had participated in the phase one focus groups were invited to take part in these second phase workshops. In most cases, the same representative was able to attend, ensuring a continuation of the conversation that had been started with them previously and giving confidence that their views had been taken into account throughout the process. An additional benefit was the greater understanding of the process that the participants had gained through the previous phase. In some cases, stakeholders were joining the conversation for the first time, so the sessions began with a recap of the purpose of the project, the case for change and the work done to date.

The online sessions were text-based, with YouGov showing participants each draft Design Principle simultaneously and then facilitating a discussion, with respondents typing their comments in real time. Moderators were able to probe specific answers or seek further comments if necessary.

Colleagues from London Stansted were also able to observe the discussion and ask the moderator to follow up on particular comments if it was felt necessary.

To ensure all participants were able to contribute fully to the discussion – in particular those who may be slower at typing – each session was scheduled for two hours, rather than the 90 minutes which YouGov usually allocates for such workshops. Alternative engagement methods, such as phone interviews, were offered if respondents felt unable to participate by typing, although this offer was not taken up.

Participants were given the rationale for each draft Design Principle and asked to give their feedback on the benefits/challenges of each one, whether it made sense to include it and whether any further clarification or fine-tuning of the drafting was required.

These sessions were also observed by the Chair of the SRG and some of its members, along with representatives from tCI and London Stansted to ensure they were comfortable with the level of engagement carried out. Technical experts from London Stansted were also on hand to answer any detailed questions or provide additional clarity if needed.

While it was felt the language and content of the initial draft Design Principles generally worked well, there were some questions from participants about some of the terminology used and several requests for further clarification. This resulted in some redrafting of the Design Principles, while further explanation of some of the more technical terminology has been provided in a glossary at the end of this document in response to feedback.

Following the sessions, YouGov provided London Stansted with a report of the stakeholder feedback, which was then used to further refine the list of draft Design Principles. In general, participants understood the inclusion of each draft Design Principle and could see how their earlier conversations had helped shape them. Full details of the feedback from the phase two engagement are available in the YouGov report at Appendix 12 and summarised in the table on the following pages.

Testing our Design Principles in phase two engagement

The following table sets out how feedback from the second phase of stakeholder engagement has been considered in the final drafting of London Stansted's proposed Design Principles:

Ref	Draft Design Principle	Summary of feedback received in second phase of engagement	Outcome
S	Safety is our highest priority; our routes must be safe, and must comply with national and international industry standards and regulations.	Stakeholders agreed that safety should be paramount above all other factors such as fuel efficiency and noise impacts. There was consensus that this was an important principle to include. Some stakeholders cited that new routes may be safe but could involve a degree of risk, so a comprehensive risk assessment should be considered, and risks may be balanced in consultation with the wider GA and general community. They also felt that this assessment should be carried out independently and should not be influenced by factors such as cost or time. These points are addressed because all routes will be assessed by our independent technical advisors and the CAA during Stage 2 of CAP1616, Develop and Assess. Furthermore, some stakeholders felt the wording could be more explicit, for example, which standards would apply and, if standards differ, asked if we would adopt the most stringent. Others asked if the principle went far enough and suggested that we might use the word 'exceed' rather than 'comply'. However, we do not consider that these comments merit a change to this part of the wording, as aviation is a highly regulated industry and complying with both the national and international industry standards will deliver sufficiently stringent control of safety. Compliance with standards will continue to be verified by our regulator, the CAA. As this verification is in place and we have also used the word 'must' in this Design Principle to make it obligatory, we have also not considered it necessary to include further reassurance in the wording of the Design Principle to respond to concerns that safety should not be compromised. Some stakeholders felt that safety should encompass air quality and pollution. However, these factors are already addressed by other Design Principles including Design Principles P (Policy) and B (Balance). There were also some that felt that those on the ground should be included in this statement. We have therefore carried this forward into the amended wording.	Amended
P	Any changes must be consistent with the CAA's strategy for Airspace Modernisation and the FASI-S programme, taking into account the needs of other change sponsors and airspace users.	Feedback on this principle was supportive of taking a collaborative approach and stakeholders recognised the need to fit into the wider FASI-S programme. Some felt it is a given that neighbouring airports will work together to improve conflicts within their shared airspace, and that a clear compromise between all stakeholders will be necessary. Other feedback focused on how this would work in practice, to ensure all stakeholders are fairly accounted for, and how trade-offs would be managed. Whilst this feedback is important, this point is covered in the current wording of the principle as the CAA's Airspace Modernisation Strategy includes mechanisms to balance the interests of all stakeholders. This integration with other airports and the wider changes to the airspace system is also an objective in our Statement of Need. There were also a number of questions around what some of the terminology meant, particularly 'change sponsors' and 'FASI-S'. We propose to define these and other technical terms within a glossary for ease of reference. In light of the importance of the CAA's Airspace Modernisation Strategy, a brief summary of this document will also be included in the glossary of terms. We have amended the wording of the reference to the CAA's Airspace Modernisation Strategy, to ensure clarity.	Amended

Testing our Design Principles in phase two engagement

Ref	Draft Design Principle	Summary of feedback received in second phase of engagement	Outcome
D	The airspace design must provide for the utilisation of aircraft movements permitted by planning permissions and within statutory limits in force at the airport.	Most stakeholders were reassured by the inclusion of this principle as they felt it underlines the requirement for airport movements to be defined by local planning limits. Some stakeholders queried whether the reference to planning permissions and statutory limits was to current or future permissions and limits. The use of the wording 'in force' is designed to make clear that the routes must utilise the aircraft movements permitted by the planning permissions and statutory limits relevant to the airport at the time when the final designs are submitted to the CAA for approval. Other stakeholders questioned whether the Design Principle suggests that planning constraints would be ignored or not easily enforced. As planning constraints are legally binding, this would not be the case. Importantly, it is the requirements set out in planning permissions and statutory limits which control the number of aircraft movements at the airport, not the airspace design itself. Therefore, if the movement limits were to be changed, new permissions would be required even if no change to airspace design was required. Others in the elected and aviation group considered that planning limits are completely separate to the airspace modernisation programme. This is reflected in the draft Design Principle, which makes clear that the airspace modernisation will accommodate both the requirements imposed by planning permissions and statutory limits in force at the airport and the Government's 'making best use' policy. The principle is in line with CAP1616 advice that the airspace change is separate from land-use planning controls. Whilst a small minority of stakeholders felt this should not be listed as a principle, overall, this principle was seen as clear and appropriate and therefore no changes to the wording are proposed.	Unchanged
C	Where we choose routes that fly over new areas there will have to be a clear benefit in doing so.	There was much debate about the wording of this draft principle, and this particularly focused around the definition and interpretation of 'clear benefit'. While respondents agree that changes should be made where they are justified, several people considered that clear benefit would be difficult to define objectively, measure and balance against any resulting impacts. In addition, some felt there would be 'winners' or 'losers' as a result of this principle and questioned what criteria would be used to make the final decision as to what constitutes a 'clear benefit'. Stakeholders also emphasised the need to clearly communicate proposed changes to ensure communities' involvement and understanding. In response to this feedback, we have amended the principle to clarify that benefits will be objectively assessed. This assessment will take place under Stage 2 of CAP1616, with communities and other stakeholders being engaged and consulted during Stages 2 and 3 of CAP1616. Under this assessment, benefits may include reductions in emissions, aircraft noise or operational benefits that make airport operations more efficient. As this assessment is an inherent feature of the CAP1616 process, it does not require further explanation in the body of this Design Principle, although the assessment process will be made clear in the later stages.	Amended

Testing our Design Principles in phase two engagement

Ref	Draft Design Principle	Summary of feedback received in second phase of engagement	Outcome
T	Routes should be designed using the latest widely available navigation technology and facilitate continuous climb and descent to both runways.	Stakeholders broadly agreed that new technology should be utilised where possible. They can see there are potential environmental benefits such as less noise pollution and fuel burn. Some highlighted that technology should be kept up to date even if this impacts older aircraft, and others used examples of the environmental benefits of the previous deployment of Performance Based Navigation (PBN) at Stansted. However, some questioned whether our new routes would accommodate newer technology as it develops. In response to this feedback, we will continue to discuss and take account of developments in technology with our stakeholders and consider this point in Stage 2 of the CAP1616 process. The use of the terms 'both runways' and 'continuous climb and descent' was queried, as it was felt that this could be misunderstood by those that are not familiar with aviation terms. We have therefore amended the draft principle text to state 'both ends of the runway', to clarify what is meant by the term previously used. In response to comments about the use of technical terms, such as 'continuous climb and descent', we have added these to the glossary to ensure definitions are available. Some stakeholders felt that the use of continuous climb and descent would benefit General Aviation as less controlled airspace would be needed. One particular aviation stakeholder felt this was positive but only if it does not impact other airports in FASI-S. This point is addressed in Design Principles S (Safety) and P (Policy) and, therefore, the wording of this principle will not be changed in this respect. Some queried whether the use of technology would impact older aircraft and ultimately increase costs for airlines. While the airport will continue to work with operators to support the phasing out of older aircraft, this is not part of our Future Airspace project. Aircraft which are unable to utilise any required new technology are accounted for in our Design Principle A (Alternatives).	Amended

Ref	Draft Design Principle	Summary of feedback received in second phase of engagement	Outcome
N1	In order to address the effects of aircraft noise, each route should seek to minimise the number of people overflown.	Stakeholder feedback acknowledged that this principle will be important to local communities keen to address noise impacts. Whilst there was support for this proposed Design Principle, there was some concern that adopting this approach might be to the detriment of other factors, such as environmental impact and cost. They also noted the importance of looking closely at the nature of the areas being overflown. We consider that our Design Principle N3 (Noise 3) addresses this point, which will be addressed by the balancing of Design Principles inherent during detailed design (Stage 2 of the CAP1616 process). A number of stakeholders felt the wording 'should seek to minimise' could be interpreted in many ways and should be changed to 'must'. Whilst we acknowledge this feedback, this change was not made to the Design Principle as it is important to maintain the ability to balance Design Principles in the Stage 2 assessment. As cited by a member of the general public, extending or routing away from any residential areas may result in longer flight times and an increase of emissions. We acknowledge this possibility, and feel this point is also addressed in our Design Principle B (Balance). Future development was also raised in terms of ensuring a joined-up approach to take account of known future developments. This is accounted for as part of the CAP1616 process, which requires that future development be considered as part of Stage 2. Some stakeholders also expressed concerns that some areas that are not overflown by Stansted may be overflown by neighbouring airports. This coordination with other airports is addressed by Design Principle P (Policy) and as such we have not amended the wording of this Design Principle.	Unchanged

Testing our Design Principles in phase two engagement

Ref	Draft Design Principle	Summary of feedback received in second phase of engagement	Outcome
N2	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.	Stakeholders felt this principle was important to include and could see the benefit that it seeks to achieve for affected communities. There were, however, some questions about the terms used. The use of the term 'where practical' was debated by some, as to whether this referred to operational practicality or just being in the interest of the airport. Therefore, we have removed 'where practical' for clarity. One particular aviation stakeholder felt that if this option was possible it should be implemented, but not if it involved (for example) doubling the size of Stansted Airport's controlled airspace and therefore creating inefficiencies in the design. We believe this point is addressed in our Design Principle E (Efficiency), as well as the use of the term 'will be considered'. A number of general public and elected stakeholders supported this principle as they felt this was a key theme in the first stage of the engagement and agreed with the benefits of respite. Whilst some felt the use of multiple flight paths could be complex and difficult to implement, the use of the term 'will be considered' was welcomed, as this provides an element of flexibility. However, others suggested the term lacked commitment. On balance, we have retained 'will be considered' as an element of flexibility will be required to balance the Design Principles and safeguard for when safety or technical reasons mean that a particular form of respite is not possible. A number of stakeholders felt the terms 'operationally viable', 'respite' and 'balanced runway mode' lacked clarity. In response to this feedback, we have included these terms in our glossary of terms.	Amended

Ref	Draft Design Principle	Summary of feedback received in second phase of engagement	Outcome
N3	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.	Stakeholders were understanding of the rationale for including this principle and can see that it responds to concerns raised about sensitive sites. While it was seen to be a good principle, some wondered how operationally viable it would be to avoid every site of interest and residential areas, and highlighted that there will be challenges when deciding which receptors to avoid. On the other hand, some stakeholders assumed that some of these sites are not currently overflown and that this principle supports the status quo. Others suggested that, rather than complete avoidance, there could be other solutions to reduce the impact on sensitive receptors – such as varying overflight by time of day. Some also highlighted the need to consider places of learning and sites providing care as noise-sensitive receptors. The use of 'where practical' makes clear that the Design Principle does not envisage that every noise-sensitive receptor will be avoided. Rather, it provides a mechanism under which to consider noise-sensitive receptors during Stage 2 of the CAP1616 process. While some noise-sensitive receptors may not be currently overflown, this principle will be balanced against the other principles, including Design Principle C (Change) to determine whether current arrangements will be retained. The points regarding the reduction of impacts rather than total avoidance are accounted for within the current wording, which refers to avoidance or minimising effects, which could take a number of forms. For these reasons, the Design Principle has not been amended. Stakeholders also requested clarity as to the acronyms used in this principle. In response to this, full definitions will be included in our glossary of terms used to improve clarity.	Unchanged

Testing our Design Principles in phase two engagement

Ref	Draft Design Principle	Summary of feedback received in second phase of engagement	Outcome
B	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.	Stakeholders were in agreement that a balance had to be struck between noise and emissions, rather than prioritising one factor over the other. Respondents noted that both factors were highlighted as important considerations in earlier groups and can therefore see the rationale behind this draft principle. Some questioned how easy it will be to execute in practice and highlighted the challenges associated with taking conflicting preferences into account, while others questioned the degree of certainty provided by the terms 'will consider' and 'seek to'. However, we consider that reference to the Government's altitude-based priorities provides clear direction as to the emphasis of the Design Principle, while the use of the terms 'will consider' and 'seek to' are important to maintain the ability to balance Design Principles in the Stage 2 assessment. As such, these terms have been retained. Some called for the language to be simplified and questioned what 'other factors' were. In response to this, we have removed 'as well as other factors' to clarify that this Design Principle focuses on noise and emissions.	Amended

Ref	Draft Design Principle	Summary of feedback received in second phase of engagement	Outcome
E	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.	Stakeholders generally felt this draft principle was clear and reflective of conversations in the earlier phase of engagement (focus groups). The focus on efficiency was welcomed, as it offered potential benefits for reducing emissions, and there was an understanding of the advantages of releasing controlled airspace for greater access by others. Whilst some felt that efficiency and safety may be compromised by reducing the amount of controlled airspace, this point has been addressed in Design Principle S (Safety). There was also a query as to whether by minimising the interactions with other airports this may reduce joined-up working. However, as set out in CAP1616, our Design Principle P (Policy) and our Statement of Need, Stansted seeks to optimise procedures that will integrate fully with other airports and the wider changes to the airspace system. There was also a request for further detail on the volume amount of controlled airspace that is currently used and how this will change. This level of detail is not available at this stage, and will be provided during Stages 2 and 3 of the CAP1616 process. Stakeholders and the public will then be able to review and feed back on our detailed design options. For some general public respondents, there were questions around the terminology used. To improve clarity, we have included 'controlled airspace', 'emergency services' and 'systemised operation' in our glossary of terms.	Unchanged

Testing our Design Principles in phase two engagement

Ref	Draft Design Principle	Summary of feedback received in second phase of engagement	Outcome
A	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.	Across stakeholder groups, it was felt that this principle is fair and reflects feedback from earlier sessions. There is an understanding from most people that efficiency and new technology should be prioritised but that aircraft that cannot fly these routes should be catered for. Further, some people felt that older, and likely noisier, aircraft should be phased out and should not be allowed to operate. In addition, some stakeholders recognised that airlines are already moving towards modern aircraft as efficiency is an important factor for them. Stansted Airport has a Noise Action Plan in place and works with airlines to phase out older and noisier aircraft. This work will continue but is not within the scope of our Future Airspace project. Some stakeholders questioned how the environmental impacts from aircraft which cannot fly the new routes would be assessed, and what measures would be put in place to reduce environmental impacts. This will be a task for Stansted Airport's technical advisors to consider, and we will set out all potential options during Stage 2 of CAP1616. There was also a request for further detail on the number of older aircraft that currently either operate at Stansted or could otherwise be affected by our airspace change. However, we are unable to define this figure at this stage. Rather, it will be set out at Stage 2 of CAP1616. For the reasons set out above, we did not amend this Design Principle as a direct result of the second phase of stakeholder engagement. However, we determined that 'flight profiles' better refers to aircraft characteristics than 'flying techniques'. Therefore, we have amended this aspect of the Design Principle.	Amended

Proposed Design Principles

Ref	Proposed Design Principle
S	Safety is our highest priority; our routes must be safe for airspace users and communities on the ground, and must comply with national and international industry standards and regulations.
P	Any changes must be consistent with the CAA's Airspace Modernisation Strategy and the FASI-S programme, taking into account the needs of other change sponsors and airspace users.
D	The airspace design must provide for the utilisation of aircraft movements permitted by planning permissions and within statutory limits in force at the airport.
C	Where we choose routes that fly over new areas, there will have to be a clear and objective benefit in doing so.
T	Routes should be designed to make use of the latest widely available aircraft navigation technology and facilitate continuous climb and descent to/from both ends of the runway.
N1	In order to address the effects of aircraft noise, each route should seek to minimise the number of people overflown.
N2	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.
N3	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.
B	Our designs will consider both noise and emissions, 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.
E	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.
A	Where the adoption of modern navigation standards and/or flight profiles mean that some aircraft cannot fly the new routes, we will seek to minimise the environmental impacts from those aircraft.

6 Next steps

“This is an opportunity to truly modernise the way local airspace operates – maximise all opportunities to realise the greatest benefits.”

– Online portal respondent

The proposed Design Principles have now been submitted for review by the CAA to ensure that they are a well-founded set of principles to inform the development of airspace design options in line with London Stansted’s Statement of Need.

Subject to approval by the CAA, London Stansted will move to Stage 2 of the CAP1616 process, where a comprehensive list of flight path options, that carefully balances the competing requirements of the proposed Design Principles, will be developed. An initial appraisal of flight path options will then be undertaken, including initial assessments of the different options, high-level noise and environmental assessments and other cost and benefits assessments.

Those stakeholders who contributed to Step 1B will then be engaged further to help London Stansted complete an initial evaluation of the flight path options against the Design Principles. Following this engagement, a shortlist of flight path options will be submitted to the CAA in conclusion of Stage 2 and London Stansted will move to Stage 3 of the CAP1616 process – the public consultation.

Stage 3 will include a full appraisal of the options that are put forward, as set out in CAP1616. Stage 3 will be a large public consultation and will give stakeholders and communities across the region the opportunity to review, refine and shape the final flight paths that will be implemented as the result of London Stansted’s Future Airspace project.

As set out earlier in this document, London Stansted will continue to work with its SRG as it develops proposals for stakeholder and community engagement for these subsequent stages of CAP1616.

Keeping in touch

London Stansted’s Future Airspace project is a significant project and will be running for some time. In order to keep in touch with the airport on this issue and be updated on any further developments relating to the Future Airspace project, please email **futureairspace@stanstedairport.com** with the following information and you will be added to the Future Airspace mailing list:

- Your name
- Your postcode
- Your email or postal address

7 Assurance statement from tCI

Stansted Airport – Future Airspace project

The Consultation Institute (tCI) has overseen Stansted Airport's (STN) engagement on design principles, at Step 1B of CAP1616 and endorses the approach within its Future Airspace Project.

This has involved reflecting on the engagement strategy prepared by STN and the approach it has taken based on the advice the Consultation Institute (tCI) has provided to it directly and to its parent body, the Manchester Airports Group (MAG), and sister airports Manchester Airport (MAN) and East Midlands Airport (EMA).

The work previously conducted at MAN and EMA helped to ensure the engagement activities planned by STN were coherent and comprehensive. An approach to engagement was developed, stakeholders and members of the general public were recruited to participate in focus groups; an online portal sought and accepted additional submissions from a wider group of stakeholders, whether previously engaged with the Airport or not. A Stakeholder Reference Group (SRG) was appointed, briefed and inducted; it informed the Airport's approach, with recommendations for strengthening it in places, that were accepted by STN.

However, towards the end of the planned engagement with stakeholders, which incorporated tCI's recommended approach of two phases of face-to-face focus groups and workshops, the UK Government announced lockdown due to COVID-19. This resulted in STN having to adjust its planned face-to-face activities, taking an agile approach to adjust its remaining engagement approach, to permit stakeholders to continue to input to, and shape the Design Principles.

In February 2019, tCI provided guidance to the MAG team working on Future Airspace Projects across each of the three airports on the best practice approach to Step 1B at a joint workshop.

The work previously conducted at the group level at MAG has provided STN with a logical course of direction and a consistent Group approach, albeit that STN had to adapt its process, in the latter stages, to react to the lockdown due to COVID-19.

Throughout the process the main points of contact have been the Future Airspace Project Manager and Corporate Affairs team. The elements of engagement have been conducted by a third party supplier, YouGov, whose work has been found to be of a superior quality, thorough and robust.

The reports produced are well-reasoned and written in clear and accessible language, thereby offering demonstrable evidence of the successful engagement. In addition, YouGov was able to rise to the challenge of COVID-19 and present reasonable adaptations to its planned approach to substitute face-to-face engagement with online focus groups. Eight additional telephone interviews were also arranged to replace the final phase one focus group, *inter alia* seeking younger people's views, which had to be cancelled at short notice in the second half of March 2020; three online focus groups were arranged for the second phase of engagement at Step 1B in May, facilitated by YouGov and observed by STN, tCI and some members of the SRG. Observers of these sessions reported skilled facilitation with participants having equality of opportunity to make views known and to be heard. YouGov was also commissioned to code and analyse the online submissions, which ensured quality and consistency; the SRG had suggested this safeguard which was willingly adopted by the Airport.

For STN we provided direct advice and guidance on, and endorsement of, the following elements:

- Stakeholder Identification and Mapping
- Engagement strategy of stakeholders for Step 1B
- Development of Design Principles
- Stakeholder and Public Engagement Reporting
- Establishment of a Stakeholder Reference Group (SRG), comprising local voices, reflective of varied interests, asked to concentrate on the process alone; the SRG offered valuable early advice on presentational matters that the Airport took on board, and latterly on the Covid mitigation plans
- Redesign of approach to Step 1B engagement following COVID-19 requirements

For MAG we had provided advice and guidance on the following elements; this advice and guidance was then directly applied without intervention from the Institute:

- Objectives
- Risk identification
- Brief for research agency
- Stakeholder engagement methodology
- Planning and timetabling of activity

The Institute is satisfied that the approach taken up to March 2020 aligns with our best practice standards.

Further, we believe that the redesign of the engagement approach post March 2020 took account of the COVID-19 restrictions and mitigated risk accordingly. It is the view of tCI that the approach in its entirety has been delivered with a high degree of professionalism. It should also serve to build trust and strengthen relationships which will pay dividends in the subsequent stages of this Future Airspace project. We believe that the responses and inputs from stakeholders and the general public (through carefully curated Focus Groups and other means – online and through *'business as usual'* listening) – has been successfully captured in this report and the supporting documents.

The resulting Design Principles therefore, to our satisfaction, comply with the Statement of Need and approach to engagement, and we believe are consistent with the requirements of CAP 1616.

The Consultation Institute
June 2020

Glossary

ACOG	Airspace Change Organisation Group
ACP	Airspace Change Programme
Airspace Modernisation Strategy	The Government's strategy and plan for the use of UK airspace, including the modernisation of airspace.
ALT	The Airport Leadership Team made up of senior MAG colleagues at London Stansted
Altitude-based priorities	A system incorporated in guidance to the CAA, and designed to ensure that potential noise impacts were prioritised in airspace change decisions up to 7,000 feet above sea level, in line with the Government's overall policy on aviation noise.
AOA	Airport Operators Association
Area of Outstanding Natural Beauty (AONB)	An area of countryside designated by a Government agency as having natural features of exceptional beauty and therefore given a protected status.
ATC	Air Traffic Control
ATM	Air Traffic Movement
Balanced runway mode	Departures from one runway and arrivals on the other. This would be used when weather and traffic conditions permit and could be used as a form of respite.
Best use of the runway	The Government policy for UK airports, beyond Heathrow, as set out in *Beyond the horizon, The future of UK aviation Making best use of existing runways, June 2018, HM Government.*
Both ends of runway	Stansted Airport has one runway which operates from one of two ends depending on the wind direction referred to as either Runway 04 or Runway 22.
CAA	Civil Aviation Authority, the aviation industry's regulator.
CAP1616	The CAA's guidance document which sets out the regulatory process which all airspace change proposals must follow.
Change sponsor	An organisation that proposes, or sponsors, a change to the airspace design in accordance with the CAA's airspace change process.
Continuous climb (and descent) operations (CCO or CDO)	Allow arriving or departing aircraft to descend or climb continuously, to the greatest extent possible, which reduces the level of noise heard on the ground and will also reduce fuel burn and emissions.
Controlled airspace	Controlled airspace is an airspace of defined dimensions within which air traffic control services are provided in accordance with the airspace classification.
COVID-19	A disease caused by a new strain of Coronavirus.
DfT	Department for Transport
Efficiency	A route or operating procedure that improves travel time whilst reducing emissions.
EMA	East Midlands Airport
Emergency services	This refers to operations involving military flights, air ambulance and police helicopter.
Emissions	The carbon dioxide emissions produced from aircraft.
FASI-S	Future Airspace Strategy Implementation South Group accountable for delivering airspace changes (includes airports and NERL) in the south of the UK.
Flight paths	The routes used by aircraft inside Stansted controlled airspace.
Focus group	Group of representative stakeholders brought together to discuss proposals and offer feedback.
Future Airspace project	The Future Airspace project at London Stansted Airport forms part of the UK Government's wider airspace modernisation exercise.
GDPR	The General Data Protection Regulation
General Aviation	Any form of civil aviation that is not large-scale passenger or freight operations.
ICC	Independent Consultative Committee
MAG	Manchester Airport Group
MAN	Manchester Airport
NATS	The UK's air traffic navigation service provider, formerly known as National Air Traffic Services.
NERL	NATS En Route Limited, the air navigation service provider for the UK
Noise-sensitive receptors	Specific locations identified as likely to be adversely affected by noise from or due to aircraft operations. Individual locations will have varying degrees of sensitivity (measured noise exposure levels) depending upon their use.
Noise and Track Keeping Working Group	A working group which brings together the Department for Transport (DfT), NATS, local authorities, other interest groups and London Stansted flight evaluation team to discuss a wide range of noise and track keeping issues.
Operationally viable	Subject to weather conditions and traffic levels (linked to balanced runway mode on opposite page).
Performance Based Navigation (PBN)	Satellite-based navigation system designed to improve track-keeping accuracy for departing and arriving aircraft.

Glossary

Respite	Planned and notified periods where overflight or noise impact are reduced or halted to allow communities undisturbed time.
Routes	A route is a description of the path followed by an aircraft when flying between airports.
SAFE Form	Stansted Access for Everyone Forum
Site of Special Scientific Interest (SSSI)	An area that's of particular interest to science due to the rare species of fauna or flora it contains – or even important geological or physiological features that may lie in its boundaries.
SRG	Stakeholder Reference Group
STACC	Stansted Airport Consultative Committee
Stacking	Process of holding aircraft in a specified area of airspace while they wait to land at an airport.
Stakeholder	An interested third party in an airspace change proposal. Includes directly affected local aviation stakeholders, members of the National Air Traffic Management Advisory Committee, relevant national organisations and communities affected by potential impacts (such as noise or economic growth) associated with the change.
STN	London Stansted Airport
Systemised operation	Developing a route structure where there are little or no restrictions between Stansted arrivals and departures or from other airports' routes.
The Consultation Institute (tCI)	The Consultation Institute is widely acknowledged as the UK's leading voice on consultation and engagement activities.
UEG	The User Experience Group, a sub-meeting of the Stansted Airport Consultative Committee.
YouGov	YouGov specialises in market research and opinion polling and is the UK's most widely used and quoted market research organisation.

List of appendices

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Appendix 5	Internal Communications
Appendix 6	Press Releases
Appendix 7	Stakeholder Reference Group (SRG) Terms of Reference
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Appendix 13	Additional Engagement Material

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