
# Development of Airspace Design Principles for the Aberdeen Airport FASI-North Airspace Change Proposal

CAP1616 Stage 1B Define Gateway Submission Document

Final report on airspace design principles engagement

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# 1. Introduction and Background

Aberdeen Airport (ABZ) is required to undertake an airspace change proposal (ACP) to enable the removal of conventional ground-based navigation aids and support the widespread introduction of new routes based on satellite navigation[1].

The UK's Airspace Modernisation Strategy (AMS) [2] is sponsored by the Department for Transport (DfT) and Civil Aviation Authority (CAA) and sets out the main initiatives that industry stakeholders including airports should progress to modernise the UK's airspace structure and route network. One of the most important components of the AMS focuses on the implementation of aviation regulations that require airports, including Aberdeen, to introduce Performance Based Navigation (PBN) routes by January 2024.

In addition, prior to this date, some existing ground-based navigation aids, to which several of Aberdeen Airport's routes are attached, are being withdrawn by NATS[3] En Route Limited (NERL) as part of the national modernisation programme. This means that any routes which rely on ground-based navigation aids must be upgraded to satellite-based PBN procedures.

In order to meet the requirements of the AMS and NERL's navigation aid withdrawal programme, it is expected that the Aberdeen airport airspace change proposal (ACP) will:

- Introduce PBN arrival procedures to replicate existing flight paths to Aberdeen's main runways
- Replicate the conventional holding patterns with ones based on a PBN structure
- Remove Aberdeen's reliance on the navigation aids that are being withdrawn by NERL
- Support to the broader programme of initiatives at Aberdeen airport to improve environmental performance
- Review existing controlled airspace boundaries, classifications and Flexible Use of Airspace (FUA) arrangements.

Aberdeen airport has a unique airspace operation due to the complex integration of a high number of rotary wing aircraft (helicopters) alongside fixed wing (aeroplanes). As a result, the Air Traffic Control (ATC) operation requires a highly flexible and adaptable environment. This ACP therefore seeks to replicate as closely as possible the existing arrivals and holding procedures to maintain this high level of operational flexibility whilst meeting its obligations with NERL and the AMS. We therefore do not expect there to be any significant changes to tracks over the ground of aircraft arriving or departing the airport as a result of this airspace change. This will be confirmed in later stages of the airspace change process.

In 2019, rotary wing (helicopter) traffic made up approximately 40% of movements into and out of Aberdeen Airport. The helicopter route structure, defined in the UK Aeronautical Information Publication (UKAIP), is not within scope of this ACP as it is not reliant on conventional navigation. This ACP therefore does not intend to make changes to these helicopter route structures. In addition to this, the proposal does not intend to make changes to any departure route tracks over the ground, as there is no requirement to introduce Standard Instrument Departures where they do not already exist.

[1] Also referred to as performance-based navigation.
[2] The UK Airspace Modernisation Strategy (CAP1711) co-sponsored by the Government and Civil Aviation Authority (CAA) can be viewed here.
[3] NATS are the UK's enroute Air Navigation Service Provider

The ACP follows the regulatory process for changing airspace design including community engagement requirements, set out by the CAA in CAP1616[4].

## 1.1 Purpose

In developing the ACP, ABZ must take into account feedback from a representative mix of stakeholders. This report describes the outcomes of the stakeholder engagement conducted by ABZ to develop and refine airspace design principles for its ACP (2019-82).

The report forms part of Aberdeen Airport's submission to the Civil Aviation Authority (CAA) for the Define Gateway of the regulatory process for changing airspace design (CAP1616). The report aims to:

- Demonstrate how the engagement conducted by ABZ has influenced the development of the design principles that the airport proposes to adopt for the ACP.
- Provide evidence that the conversations held with stakeholders have created a good understanding of the design considerations that are important to different stakeholder groups.
- Explain how the final list of proposed design principles forms a broadly accepted framework for evaluating airspace design options during Stage 2 of the ACP process.

## 1.2 Structure

The report is organised into six sections:

- Section 1 summarises the background of our ACP.
- Section 2 describes our engagement approach and the stakeholder groups that we invited to participate.
- Section 3 outlines the engagement work undertaken to gather issues and opportunities that should be considered when developing an initial list of design principles. Section 3 also describes how this feedback influenced our initial list of design principles and the feedback we received following circulation of the initial list of proposed design principles.
- Section 4 summarises the second phase of engagement for the list of refined design principles and explains how we decided on the final design principles for the airspace change.
- Section 5 summarises the outputs of The Consultation Institute's (TCI) independent endorsement of the design principle engagement activities that we have conducted (the TCI's assurance is considered independent in the sense that the organisation did not participate in the engagement activities. ABZ paid the TCI for the assurance services that they provided).
- Section 6 explains our conclusions and expected next steps.

[4]Guidance from the CAA on the regulatory process for changing airspace design, including community engagement requirements (CAP1616) can be viewed here.

## 1.3 Background

### Aberdeen Airport Overview

Aberdeen International Airport is the north-east of Scotland's major transport hub and is a vital economic driver for the region, contributing more than £110 million a year to the local economy.

With a 1,953m long fixed wing runway, and three helicopter runways, it is the gateway to Europe's energy capital and is Europe's busiest commercial heliport. Helicopter movements make up almost 40% of the airport's overall movements each year and the airport handled 3.1 million passengers in 2018.

The airport's £20 million terminal transformation programme has resulted in a 50% increase in the size of the terminal building and with it, a comprehensive transformation of current passenger facilities.

## 1.4 UK Airspace Modernisation

The UK's airspace is some of the busiest in the world. The Department for Transport (DfT) has notified aviation stakeholders that, with the demand for aviation forecast to continue growing, delays and environmental impacts are expected to increase if the UK's airspace is not upgraded to introduce additional capacity. In response, the Government tasked the Civil Aviation Authority (CAA) to develop the UK Airspace Modernisation Strategy (AMS), which was published in December 2018 and describes the changes that the industry should make to meet the growing demand for aviation in a safe, efficient and environmentally sustainable way. It is expected that the recent downturn caused by the Covid-19 pandemic will recover and therefore the long-term demand facing the sector is expected to remain.

The overall programme of changes required to implement the AMS is considered one of the most significant airspace and air traffic management (ATM) developments ever undertaken. Some of the most important changes described in the AMS concern the widespread adoption of satellite-based navigation technology (commonly known as Performance-based Navigation or PBN). The UK has agreed to comply with European legal directives requiring the deployment of PBN routes. The deployment of PBN arrival routes at ABZ, in line with the AMS and European legal directives, is one of the main drivers for our ACP and the reason for our alignment with the FASI-North (Future Airspace Strategy Implementation – North) programme.

### FASI-North

The Future Airspace Strategy Implementation North (FASI North) programme is coordinating a series of linked ACPs that will modernise the overall airspace structure and route network in Scotland and Northern England.

The FASI North airports are developing ACPs which would upgrade the arrival and departure routes that support their operations below 7000ft and connects the airports with the wider network.

ABZ intends to align the development of this airspace change with the overall FASI North programme and will coordinate the schedule of airspace design, consultation and engagement, regulatory submission and implementation activities as appropriate with the other airports and NERL.

The NATS led component of FASI-North (formerly known by industry as the PLAS (Prestwick Lower Airspace Systemisation Programme) is focused on re-designing the airspace above 7000ft. The main goals of FASI-N are to introduce the additional network capacity and improve environmental performance to meet the objectives of the AMS. ABZ's ACP also offers the opportunity to:

- Minimise the impact of change for our communities and explore possible improvements to noise footprints
- Maintain or where possible improve environmental performance
- Ensure our airline operators and the overall capacity of the airspace are not negatively impacted by the changes
- Ensure ABZ meets the EU and AMS requirements
- Review existing controlled airspace boundaries, classifications and Flexible Use of Airspace (FUA) arrangements.

## 1.5 Alignment with the CAP1616 Process

In December 2017, the CAA published CAP1616 “Airspace Design: Guidance on the regulatory process for changing airspace design including community engagement requirements”. The guidance sets out the process that all ACP sponsors must follow to make a permanent change to the published airspace design. The CAP1616 process is split into seven stages, illustrated in figure 1.

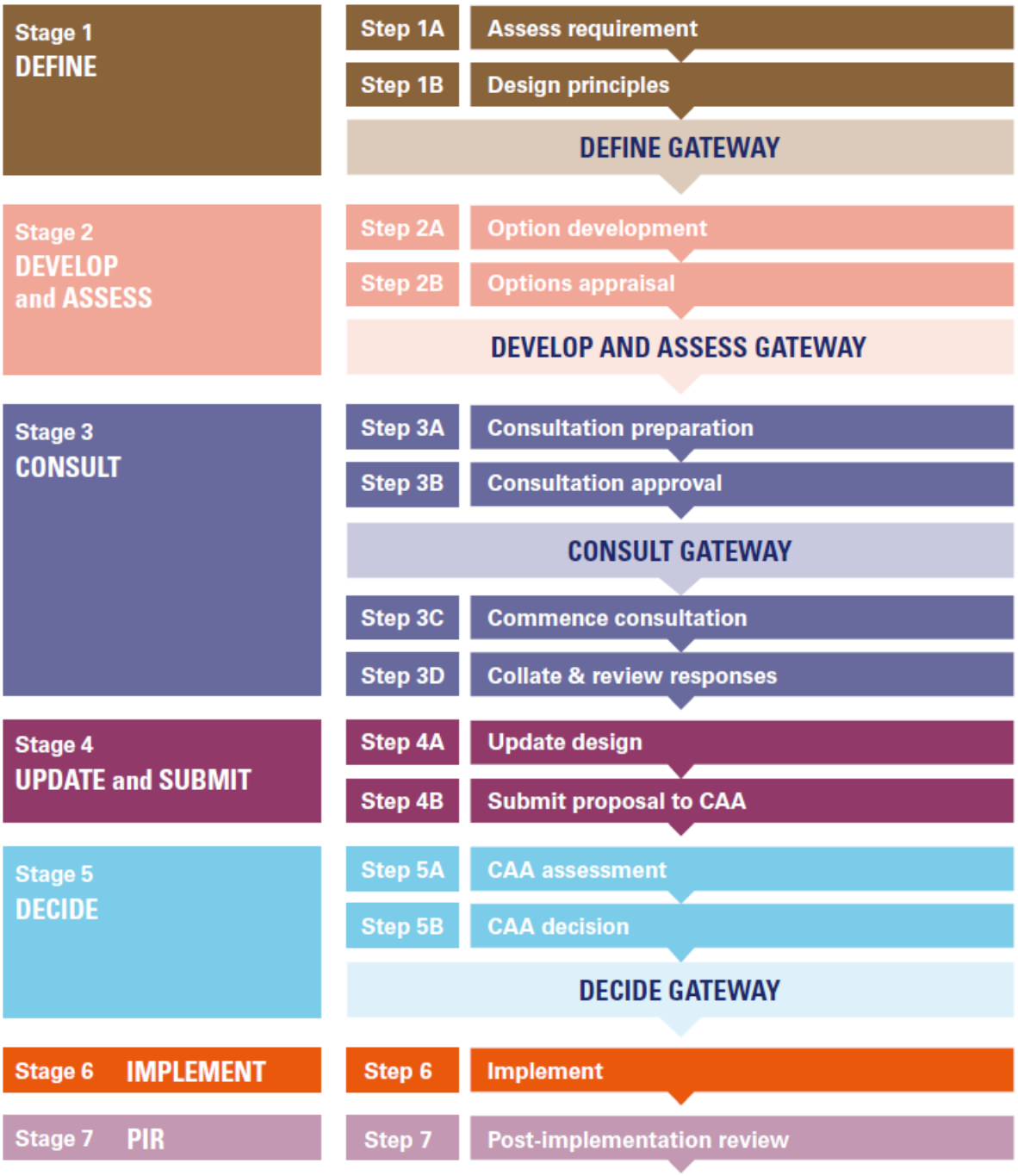


*Figure 1 Stages of the CAP1616 Process*

ABZ originally commenced Stage 1a of an Airspace Change in June 2019 and as part of this former ACP, it was proposed to restructure all arrival and departure flights and introduce Performance-based navigation (PBN) Standard Instrument Departures (SIDs) and Standard Arrivals Routes

(STARs). In-depth analysis of the current airspace operation, undertaken at the start of the ACP, showed that ABZ is unique and highly complex due to the integration of a high number of rotary wing aircraft (helicopters) alongside fixed wing (aeroplanes). As a result, the Air Traffic Control (ATC) operation requires a highly flexible and adaptable environment. The outcome of the analysis demonstrated that the introduction of a full system of SIDs and STARs could result in an overall operational disbenefit to the airport and its operators due to a decrease in the flexibility of the airspace operation and an accompanying potential deterioration in environmental performance.

In light of the analysis, ABZ, following discussion with the CAA, ceased that original ACP and commenced this new airspace change (ACP 2019-82) with a scope which aims to maintain the existing flexibility within the airspace. We started the process at Stage 1A by submitting a Statement of Need (SoN) that describes the airspace issues and opportunities that ABZ is seeking to address by sponsoring the ACP. In November 2019 we held an assessment meeting with the CAA and the minutes from the meeting can be found on the CAA Airspace Change portal.

Stage 1B concerns the development and communication of airspace design principles to be applied to the ACP. We understand that our airspace design principles should encompass the safety, environmental and operational criteria and the strategic policy objectives that ABZ is seeking to achieve in developing the ACP. We also recognise that the design principles must be drawn up through discussions with stakeholders at this early stage in the process. As part of the design principle development, we considered key government policy documents, including the DfT Aviation Strategy Green Paper, the AMS, Air Navigation Guidance 2017, and local factors, such as planning agreements, noise abatement arrangements relating specifically to ABZ.

Once evaluated by the CAA, we expect our final list of proposed design principles to form a framework that we can use with stakeholders to consider and compare all the airspace design options available to address the issues and opportunities set out in the SoN.

The final list of airspace design principles that we propose to adopt for the ACP are set out in table 1.

*Table 1 Final List of Airspace Design Principles that ABZ propose to adopt for ACP 2019-82*

| # | **Airspace Design Principle** |
|---|---|
| DP1 | The airspace design and its operation must be as safe or safer than today for all airspace users that are affected by the airspace change. |
| DP2 | Subject to the overriding design principle of maintaining a high standard of safety, the highest priority principle of this airspace change that cannot be discounted is that it accords with the CAA's published Airspace Modernisation Strategy (CAP 1711) and any current or future plans associated with it.[5] |
| DP3 | Design options should minimise the change to tracks over the ground of aircraft arriving and departing from Aberdeen. |
| DP4 | Design options should investigate the feasibility of steeper approaches for PBN arrivals to reduce the noise footprint of Aberdeen Airport's operation. |
| DP5 | Arrival route options should enable aircraft to descend continuously and should not inhibit departures from climbing continuously. If both cannot be achieved, there should be preference to the most environmentally beneficial option. |
| DP6 | Options should not increase and should aim to reduce the emissions footprint of aircraft operating at Aberdeen by reviewing existing controlled airspace boundaries and usage of flight paths in the NERL network. |
| DP7 | Design the appropriate volume of controlled airspace (CAS) to safely support commercial air transport and release controlled airspace which is not required. |
| DP8 | Controlled airspace options should ensure there is safe and efficient access for other types of operations, and should explore measures, including classification and flexible use of airspace, where possible and appropriate, to improve access and decrease airspace segregation. |
| DP9 | Options shall not reduce and where possible enhance the air traffic movement capacity of Aberdeen Airport. |
| DP10 | Ensure the Aberdeen operation is resilient to the withdrawal or failure of navigation aids and systems. |

The principles are numbered for ease of reference. Design principle DP1, regarding the safety of all affected airspace users takes top priority, over all other principles. Subject to this overriding principle of maintaining a high standard of safety, the second highest priority principle for our ACP that cannot be discounted is that it accords with the published AMS (CAP 1711), any current or future plans associated with it and all other relevant policies and regulatory standards. DP3 - DP10 are not organised into a priority order; feedback was sought regarding prioritisation however no insight was provided by stakeholders. Where airspace design options may bring certain principles into conflict with one another, we will make trade-offs decisions based on an assessment of the overall impacts and two-way conversations with the affected stakeholders during stages 2 and 3 of the process.

[5] This design principle is mandated by the CAA.

# 2. Design Principle Engagement Approach

## 2.1. Summary of Stakeholder Groups invited to participate

Aberdeen International Airport is an international airport, located at Dyce, a suburb of Aberdeen, Scotland, approximately five nautical miles northwest of Aberdeen city centre. As a result of its proximity to both urban and rural areas, ABZ had to undertake a stakeholder mapping exercise to identify stakeholders that are affected by current airport operations and those that could be affected by any changes associated with an ACP. Given that we are at the design principle stage and are not able to predetermine the full scope of any potential changes, we engaged with those who are currently impacted by ABZ operations and selected a sample of those who could be affected by any future changes, even though those changes are expected to have negligible impact. In total those areas that are currently affected or have the potential to be affected by the ACP spanned two local authority areas, Aberdeen City and Aberdeenshire.

### Stakeholder Identification

The detailed guidance in Appendix C of CAP1616 sets out the expectation for stakeholder engagement at Stage 1B as follows:

*"Earlier in the process, as there will not be clarity on the precise impacts of a proposed change, it will be more challenging to identify potential audiences with whom to engage on this process. It is therefore likely that contact will primarily be with stakeholders' representatives:*

- *community leaders;*
- *local authorities elected representatives;*
- *airport consultative committees;*
- *representative groups;*
- *governmental organisations;*
- *industry groups.*

*These will likely be a more informed audience and will often be people with whom the proposer has an ongoing relationship, helping to contextualise the engagement and developing proposal."*

The CAA's supporting Stakeholder Communications Analysis and Engagement Plan template document includes the following suggested categories and example subcategories:

- Local stakeholders – MPs, local authorities, airport consultative committees, parish councils, local interest groups;
- Industry stakeholders – airlines, industry bodies, airports, MoD, others;
- General Aviation stakeholders - NATMAC/national bodies, local flyers, others;
- NGOs, trade groups, others.

In forming our stakeholder selection, we have covered all of those referenced in both Appendix C and the indicative list in the CAA's engagement plan template.

Given the breadth of stakeholders potentially affected by a future ACP we adopted the following approach to stakeholder selection:

- Involving representatives of communities currently affected by the flightpaths
- Involving representatives of communities that could be affected by future flight paths
- Proactively engaging the representatives of any relevant seldom heard/hard to reach including equalities groups
- Targeting interested parties and/or those with a willingness to engage through future phases as per CAP1616 guidance
- Qualifying participants to ensure we have the right representative

During Stage 1B ABZ sought to engage initially with stakeholders that have some prior knowledge of the airport, who can meaningfully feed into the development of the design principles on behalf of those that they represent, which for community representatives includes the general public. The engagement strategy for Stage 1B (as distinct from the wider Consultation under Stage 3) focused on representative groups and stakeholders that can provide insight into the range of views of those they represent.

In line with the Stage 1B guidance outlined above, ABZ's stakeholder mapping process focused on identifying participants who could represent a range of different perspectives.

To ensure we had identified the most appropriate person within an organisation and to verify their willingness to participate, we proactively qualified all stakeholders via either telephone and / or email contact in advance of issuing invitations to the workshops.

We wanted to ensure that the views of political policy-makers responsible for the local authority areas were accounted for and both local authorities, Aberdeen City Council and Aberdeenshire Council, were asked to nominate appropriate person(s) to represent their interest in this process.

In engaging with local community councils, we selected a representative sample of councils. These community councils were selected to ensure (1) representation amongst each local authority area, (2) are adjacent to the both the existing and any potential proposed new flightpath (3) are a mixture of urban/rural and affluent/less affluent areas.

- A careful process of mapping stakeholders to supplement the existing information held by ABZ and those involved in its existing consultative forums focused on normal operational issues.
- Qualified all those stakeholders initially identified via the mapping exercise to ensure the correct contact information was held, via both phone call and email.

Once stakeholders were qualified, we aimed to maximise continued engagement through the following measures:

- Initial invites issued via both email and post.
- Invites were followed up by telephone contact to ensure as diverse stakeholder representation as possible – unavailable invitees were called to ask if they would like to nominate another representative.
- If an organisation which was representing a particular interest or viewpoint decided they did not want to take part, ABZ then invited a similar organisation to represent this view (if there was sufficient time to organise).

## Stakeholder revision following revised Statement of Need (SoN)

The initial stakeholder identification and qualifying process was conducted in response to ABZ's original SoN. ABZ revisited the initial scope of its ACP and submitted a detailed and revised Statement of Need describing the revised scope. The scope revision laid out that ABZ believes that it now does not expect any significant changes to the distribution of flight paths over the ground.

The scope revision meant that we had to review both our initially identified stakeholders and adjust both our submission and engagement timelines as a result. During the qualifying contact with stakeholders (via telephone calls and emails), no specific date for engagement activity was provided; we were seeking to identify willingness to engage and the correct contact details of individuals. However, as part of these discussions a general indication of when approximately engagement would start was provided. As a result, all initially qualified stakeholders were informed of both the delay to commencing engagement via email on 28th October 2019, plus a further email update around the submission of a revised SoN to the CAA on 28th November 2019.

As the revised scope does not anticipate any change to tracks over the ground, the potentially affected stakeholders identified during the original mapping exercise in response to the original SoN was reviewed and revised. As the wider stakeholder area was the focus for the qualifying calls, ABZ continued to keep this initial list of stakeholders informed as part of the pre-engagement updates.

## Removal of stakeholders following ACP scope revision

Those stakeholders initially qualified under the original scope, but who were likely to be unaffected by the revised scope, were also given the opportunity to continue to be engaged in the Step 1B engagement. Stakeholders were initially qualified in September 2019, with invites to our Design Principles workshops being sent to those who were still to be engaged on 14 January 2020. Stakeholders were informed that we had revisited the scope of our ACP and submitted a detailed and revised Statement of Need to the CAA.

Due to the revised Statement of Need, 11 stakeholders were informed that we anticipated that our ACP would be unlikely to impact their organisation's current experience. These 11 stakeholders were offered the opportunity to remain engaged when contacted on 14 January 2020, by either contacting our freephone information line or dedicated email address by 24 January 2020. However, none of the stakeholders contacted took us up on this offer of either attending our workshops or requested to remain engaged in the process.

All stakeholders who were removed from our ACP Stage 1 engagement are listed in table 2 below, plus the rationale for their removal.

*Table 2 Stakeholders removed from engagement following ACP scope revision*

| **Organisation** | **Date of removal** | **Reason for removal / comments** |
|---|---|---|
| Scottish Aeronautics & Rocketry Association (SARA) | 6 September 2019 | Stated that they don't use ABZ airspace and asked to be removed from engagement process. |
| The Royal Environmental Health Institute of Scotland | 10 September 2019 | Stated that they weren't in a position to offer technical expertise on ACP and asked to be removed from engagement process |
| Keep Scotland Beautiful | 10 September 2019 | Stated they did not wish to participate and to be removed from engagement process. |
| Scottish Natural Heritage | 16 September 2019 | Informed us that being involved in the ACP was outside of their service level agreement at this stage, stating; *"Should any of the assessment work show that the Aberdeen Airport Modernisation will impact on sites designated for their natural heritage interests then we would be happy to engage with you but not until that point. "* |
| Visit Scotland | 27 January 2020 | Stated that they weren't in a position to offer technical expertise on ACP and asked to be removed from engagement process |
| BAE Systems<br>Banchory Community Council<br>Bennachie Community Council<br>Cruden Community Council<br>Edinburgh Airport<br>Ellon Community Council<br>Inverness Airport<br>QinetiQ<br>Slains & Collieston Community Council<br>Torphins Community Council<br>Ythan Community Council | 10 February 2020 | Removed from engagement following no response to initial 'Not impacted letter' sent on 14 January 2020. |
| Scottish Human Rights Commission | 13 February 2020 | Stated they did not wish to participate and to be removed from engagement process. |

Following the removal of certain stakeholders from our engagement, the below stakeholders were added to our engagement from 19 September 2019, to try and enable as representation from as many stakeholder groups as possible. As a result, they received all relevant communication materials going forward:

- Aberdeen Forward
- North East Scotland Climate Change Partnership

## 2.2. Our engagement approach

### Methodology

When developing our design principles, we have based our approach to engaging stakeholders on the Inform, Listen and Adapt model suggested in the template guidance for an engagement strategy accompanying CAP1616, to:

- *Inform* stakeholders of the background, drivers, issues and opportunities associated with the ACP and the factors that might give rise to potential design principles.
- *Listen* to the feedback from stakeholders about the issues and opportunities and other factors that they think should be considered when developing and evaluating airspace design options.
- *Adapt* to demonstrate how stakeholder feedback has influenced the development and refinement of our airspace design principles.

Given the scope of stakeholders potentially affected by this ACP, it was important to develop an engagement strategy that ensured a wide range of representative feedback could be received in a manageable environment. It was important that the methodology employed also enabled participants of varying interests and levels of understanding to engage in the process equally. To achieve this, we decided that facilitating workshop style discussions with representatives of communities and organisations would allow us to understand the perspectives of a broad range of differing communities and stakeholders in a manageable and effective way.

To further ensure ABZ was able to fully understand and manage the feedback of a broad range of people / organisations, it grouped stakeholders into the following categories based on their common background, knowledge and needs:

- Aviation Stakeholders
- Stakeholders representing wider groups, including local government/business and community/interest groups

### Overview of engagement activities

ABZ's engagement featured two phases of activities to ensure that participants had sufficient opportunity to help shape and refine the design principles. This included the following engagement activities:

- Phase 1 - Provide information on airspace change that should guide the decision-making process and start a discussion to gain any relevant input about design principles that should be adopted to guide the development and assessment of different airspace change options later in the process. This discussion was started through the medium of workshops, followed by information gathering from all stakeholders (whether they attended the workshops or not) via the issue of materials provided at the workshop, a report detailing the feedback received at the workshops and how this feedback had been used to shape a set of draft design principle statements, and a feedback form.

The workshop setting allowed stakeholders to convey their thoughts in a face-to-face setting, whilst also allowing discourse between stakeholders with differing needs and viewpoints. Having technical experts there to answer questions also allowed stakeholders to gain more insight into the ACP process.

- Phase 2 - Review and refine the initial set of draft design principle statements, which have been based on feedback from the initial phase of engagement, share with stakeholders and seek further feedback prior to submission to the CAA. During this phase we sought feedback remotely from all stakeholders, after issuing a report detailing the feedback provided in Phase 1 and how this feedback had been used to shape a set of draft design principle statements. This was accompanied with feedback response forms regarding the proposed design principle statements and the overall engagement process to date. We gathered feedback remotely during this phase, allowing each stakeholder the opportunity to equally reflect on the draft design principles.

During the first phase of our engagement, we wanted to ensure that each stakeholder group was given the chance to outline their own views in a forum of stakeholders with a similar background, knowledge or need. In addition, it provided ABZ with an opportunity to understand specific stakeholder needs and opinions.

This resulted in us facilitating two stakeholder workshops, one for stakeholders involved in aviation, and another to represent the interests of various stakeholders who do not have an aviation background. At this stage this was important to ensure we could tailor the workshops to suit the level of knowledge and understanding within the room.

The workshop participants were given a presentation outlining the drivers for changing our airspace that are set out in the UK AMS and an overview of the regulatory process that all airspace change sponsors must follow.

Stakeholders were then presented with themes related to airspace change to discuss in sub-groups. The themes presented were:

- Safety
- Environment
- Airspace capacity and access
- Use of advanced technology
- Other issues and opportunities

Stakeholders were reminded about the change in scope of the ACP and the research that led to this change in scope. The research demonstrates how the specific nature of the ATM operations at ABZ required highly complex activities to integrate of a large number of rotary aircraft (helicopters) alongside fixed wing (planes). As a result, Air Traffic Control (ATC) at the airport operate in a highly flexible and adaptable environment. Stakeholders were also informed that the original ACP, which proposed to restructure all the arrival and departure flight paths and introduce PBN procedures, could result in an overall disbenefit to the airport, its operators and external stakeholders through:

- Decreased airspace capacity
- Decreased environmental performance

- Potential delays and increased holding for operators and their passengers

The aim of the sub-group discussions were to gather stakeholders' views about the main airspace design considerations associated with each theme, and to use that information in plenary to have conversations about the factors that are important for us to consider when developing an initial list of potential design principles.

Note takers from our engagement consultants captured all feedback from the sub-group discussions, whilst nominated representatives from each table reported back the main points raised by their table to the room.

The workshops which started our Phase 1 engagement took place on 4th February 2020 at the Station Hotel, Aberdeen. We developed an initial list of potential design principles using the feedback gathered during the workshops and circulated it to all stakeholders. Irrespective of whether stakeholders attended the workshops, they were provided a report detailing the feedback received at both workshops and how this feedback had been used to shape a set of draft design principle statements, plus a feedback form.

This information was sent out on 12th February 2020, requesting feedback returns within a 14-working day window by 2nd March 2020. The feedback window for Phase 1 was made slightly longer than Phase 2 to account for a three-day school holiday between February 17th-19th.

For our Phase 2 engagement, which was conducted remotely, we issued a report detailing the feedback received during Phase 1 and how this feedback had been used to further shape our set of draft design principle statements. This report was accompanied by feedback forms for both the proposed design principle statements and the overall engagement process to date. Participants were asked to review, refine and provide views on this updated list of design principles. This information was sent to all stakeholders on 6th March 2020, with all feedback relating to Step 1B asked to be returned by 19th March 2020, ahead of submission to the CAA.

We also engaged with elected political members representing areas of potential impact, inviting them to arrange a briefing regarding airspace modernisation and the development of the design principles for ABZ. The following MPs/MSPs were offered briefings (table 3 Chronology of Engagement Activities highlights which meetings were arranged):

**MSPs (Constituency)**

- Member for Aberdeenshire East
- Member for Aberdeen Donside
- Member for Aberdeen Central
- Member for Aberdeen South and North Kincardine

**MSPs (Regional)**

- Seven MSPs representing North East Scotland

**MSP (Cabinet)**

- Cabinet Secretary for Transport, Infrastructure and Connectivity

**MPs**

- Member for Aberdeen North
- Member for West Aberdeenshire and Kincardine
- Member for Gordon
- Member for Aberdeen South

## Maximising stakeholder participation

Stakeholders identified as part of the process were given the opportunity to provide feedback both remotely, via feedback forms, and face-to-face at workshops. ABZ felt that giving stakeholders an equal platform to provide their views, whilst offering those who could not attend the workshops the opportunity to provide representative feedback, was vital to our engagement process. Using these methods enabled ABZ to bring every stakeholder with them along the journey of developing the principles upon which any future airspace design must adhere. The methods used were:

- Correspondence (letters and email) to all stakeholders explaining the engagement process and how they can participate
- Workshop materials
- Workshop outputs circulated to all stakeholders at the same time
- Feedback form regarding the design principles provided to all stakeholders following the workshops to ensure an opportunity for remote input is provided consistent with face-to-face opportunity. Stakeholders were given a minimum of two weeks to provide additional feedback remotely via email
- A dedicated ABZ ACP email address to encourage remote feedback and freephone information line to encourage and coordinate correspondence
- Bilateral engagement between the sponsor and individual stakeholders
- Feedback form that seek stakeholders' views on the engagement process itself (rather than the design principles themselves) circulated during Phase 2, to help identify lessons for future engagements

All identified stakeholders continued to be engaged throughout the process irrespective of whether they attended a workshop, this was achieved as follows:

- Non-attendees were provided with the same materials listed above at each engagement milestone as per attendees
- Materials issued ensured that non-attendees still received the same information and background as those that attended a workshop to enable them to provide informed feedback.

We contracted specialists in airspace change, air traffic management and stakeholder engagement to support us in preparation for and facilitation of all of the workshops and ensure that the outputs were recorded accurately. The materials we created to support the workshops were designed to be simple and accessible for all stakeholders to understand.

All of the engagement material is available in Appendix B.

## Responding to CAA feedback from previous ACPs

Aberdeen Airport is owned by AGS Airports Ltd, who own Aberdeen (ABZ), Glasgow (GLA) and Southampton (SOU) Airports. GLA recently passed its Stage 1B define gateway, and learnings from that engagement have helped shape how ABZ undertook its Stage 1B design principle engagement.

The CAA provided the following feedback for consideration regarding GLA for its stage 2 activities:

- Use a master spreadsheet outlining all initially identified stakeholders, newly added stakeholders and removed stakeholders. The purpose of this recommendation was to help

the change sponsor trace how and when the stakeholders were contacted, how long they were given to respond, and who responded when.
- Strengthen document quality check to ensure reduction in spelling errors.
- Use feedback forms which are more clearly identifiable and include a short introduction to the forms and purpose of those.
- Where the change sponsor provides evidence on how stakeholders' feedback has influenced current design principles/future design options, ensure they capture the most significant/pertinent items of feedback consistently.

ABZ has ensured it has taken this learning forward in its engagement activities for Stage 1B, through the following methods:

- Investing in stakeholder management software that will track engagement of stakeholders throughout future stages, across the ACP's of ABZ, GLA and SOU.
- Additional document quality checking procedures.
- Editing of feedback response forms to clearly distinguish between feedback views on the design principles and feedback of the overall engagement process.
- Appropriate 'mapping' of stakeholder feedback, detailing how this has affected the outputs of any design principle formulation.

## Workshops

Table 3 summarises the details of the workshops that we conducted during Phase 1 and outlines the main stakeholder groups that were invited to participate in each forum.

*Table 3 Stakeholder groups invited to participate in each engagement workshop*

| **Workshop details** | **Stakeholder groups participating in the workshops** |
|---|---|
| **Phase 1, Workshop #1**<br>**Aviation stakeholders** | We felt it was important to gather views from a wide range of aviation stakeholders that may be affected by the ACP. Invitations to workshop #1 were extended to representatives from:<br>- Commercial air transport users operating at ABZ<br>- GA users operating in the airspace close to ABZ , including fixed wing and rotary wing operators<br>- Neighbouring commercial and GA aerodromes<br>- Military airspace users and aerodromes<br>- Air Navigation Service Providers<br>- The Emergency Services |
| **Phase 1, Workshop #2**<br>**Local government and business, and community and interest group stakeholders** | We felt that engaging with local councils would provide views from policymakers responsible for the communities who currently live below ABZ flightpaths or who may be impacted by the changes proposed in the ACP. We also felt it was important to gather views from business and tourism groups with strong links to the local area, local community groups and countryside groups who could speak on behalf of the rural areas of the region. The environmental groups invited covered a wide range of interests, including climate change, air quality and local habitats. We also |

| | |
|---|---|
| | felt it was important to engage with local schools and stakeholders from the seldom heard, marginalised or vulnerable groups in the community to find out how they might be impacted by overflights.<br>Invitations to workshop #2 were extended to representatives from:<br>- Local councils<br>- Community councils<br>- Local health authorities<br>- Local business groups<br>- Local tourism groups<br>- Community groups<br>- Seldom heard, marginalised or vulnerable groups<br>- Tourism and Public Bodies<br>- Environmental interest groups<br>- Countryside interest groups<br>- Local educational institutions<br>- Trade Unions |

## 2.3. Chronology of engagement activity

Table 4 sets out the chronology of the engagement activities conducted to develop our design principles. A full engagement log that records all forms of engagement between us and stakeholders during the course of the engagement is provided in Appendix A, with copies of all of the correspondence in Appendix B.

*Table 4 Chronology of engagement activity*

| **Engagement activity** | **Date** |
|---|---|
| Qualifying calls and emails | 2nd – 26th September 2019 |
| Focus Group Research workshops #1 and #2 | 7th October 2019 |
| Focus Group Research workshops #3 | 9th October 2019 |
| Issued update to all stakeholders informing that ACP engagement to be delayed | 28th October 2019 |
| Issued update to all stakeholders informing of revised SoN | 28th November 2019 |
| Issued invites for Phase 1 workshop | 14th January 2020 |
| Issued invites for MSP/MP 1:1 briefing | 14th January 2020 |

| | |
|---|---|
| Phase 1 workshop reminders sent | 21st January 2020 |
| ACP briefing for Richard Thomson MP | 24th January 2020 |
| Phase 1 Stakeholder representative workshops #1, and #2 held. | 4th February 2020 |
| Issued workshop materials and feedback forms from Phase 1 workshops, to all stakeholders invited to participate in workshops #1, and #2. Start of Phase 1 remote feedback window. | 12th February 2020 |
| Phase 1 remote feedback deadline | 2nd March 2020 |
| Issued Phase 2 design principles feedback report and feedback forms to all stakeholders. Start of Phase 2 remote feedback window. | 6th March 2020 |
| Phase 2 feedback deadline reminder sent. | 12th March 2020 |
| Phase 2 remote feedback deadline | 19th March 2020 |
| Stage 1B submission to the CAA | 27th March 2020 |

# 3. Phase 1: Initial design principle development

## 3.1 Public Focus Groups

Although CAP1616 states that the early stages of engagement should primarily be with stakeholder representatives, ABZ initially commissioned an additional research exercise as part of the original ACP. Our research aided the gathering of evidence to help shape the design principles from a representative sample of local people living under the existing flight path and those living under potentially affected areas.

Although this research exercise was undertaken in preparation for the original ACP, which had a larger scope, we feel the information gathered is still relevant and have taken it on board for this ACP.

The objectives of the focus groups were to:

- Understand the level of awareness regarding the need for airspace change and the process for it
- Increase understanding about the need for airspace change and the process for it
- Provide an opportunity for participants to comment on/influence draft design principles and advise on the relative priority of the principles

Three focus groups were conducted (Focus Group Research workshops #1, #2 and #3) with ten, ten and eight participants in each workshop respectively, to build a representative picture of local attitudes and perspectives. The breakdown of the groups was as follows:

- Group 1, Focus Group Research workshop #1: participants from Dyce/immediate airport vicinity
- Group 2, Focus Group Research workshop #2: participants from further afield (Dyce)
- Group 3, Focus Group Research workshop #3: Currently living outside existing flight paths/on the edge, but with the potential to be affected (within the City of Aberdeen)

A further breakdown within the groups took into account the following factors:

- Socio-economic group: Good spread of different socio-economic grades
- Age: Spread of ages 18+
- Gender: Even mix

Participants were recruited by working with specialist local recruiters. During the recruitment process, people were screened to ensure they live in the correct areas, as well as to ensure there is a diverse spread across a range of demographic factors. Each focus group was led by an independent moderator which allowed for a workshop style deliberative discussion and consensus forming on the complex issues associated with airspace change.

The findings of the Public Focus Groups presented ABZ generally in a good light, suggesting that the positives of living near an airport outweighed the drawbacks.

Table 5 summarises the main points of feedback captured from the Public Focus Groups relating to key aspects of airspace change at ABZ. All feedback and analysis captured as part of the Public Focus Groups can be found in Appendix E.

*Table 5 Main points of feedback captured from Public Focus Groups*

| Discussion Theme | Main Points of Feedback |
|---|---|
| **Living near the airport** | • **Noise:** The prevailing opinion is that noise is not an important issue and was expected when they moved to the area. The general perception is that modern aircraft are much quieter and as a result, noise pollution is lower than it has been in the past. Some believe that helicopters create more noise pollution locally<br>• **Convenience:** Can travel to London and get a connecting flight to further destinations. Concern of limited transport links, with only one route towards the city centre<br>• **Cost:** Due to the high cost of flights and limited number of destinations, it can be more cost efficient as a consumer to travel to Glasgow or Edinburgh. |
| **Airspace Modernisation Strategy** | **What it means to participants:**<br>• Clarification was required about what AMS will mean to Aberdeen Airport<br>• People expect modernisation to mean upgrades to all aspects of the airport experience<br><br>**Perceived benefits of Airspace Modernisation**<br>• More efficient routes that will save fuel and reduce environmental impact – there would no longer be a need to extend a journey via another airport<br>• Increased levels of safety<br>• Avoidance of increasing delays for passengers as passenger numbers grow<br>• Dissuade residents from travelling to other parts of the country for flights, keeping custom and income in the local area, resulting in a boost to the local economy<br><br>**Main concerns**<br>• Participants were worried about what modernisation will mean for the local environment - convenience should not take priority over the possible impact on the environment,<br>• Potential benefits outweigh this concern with the implementation of more efficient routes that save fuel,<br>• Noise pollution does not feel like a big problem but it is agreed noise must be managed well. The burden should be shared so that a large number of people are affected less frequently than a smaller number of people being affected more often. |
| **Conclusions** | • Participants are broadly supportive of the plans at this level of information<br>• They expect improvements to their experience of the airport as well as the benefits of airspace modernisation.<br>• A boost to the local economy is also welcomed however they want to know that changes will not negatively impact the environment. |

The focus group outcome also captured recommendations, and these included:

- Open and honest communication through engagement with the public about plans as they progress.
- Honesty about the pros, cons and trade-offs, of the plans, and to not just present them in the best light possible.
- Learn from other airports as plans progress, especially those of similar size in other countries which are believed to have a better consumer experience.

As we have progressed this new ACP, we have used the outcomes and recommendations from the public focus groups to aid us when developing our engagement material and the feedback provided around the main discussion points has also helped to shape our stakeholder workshops.

## 3.2 Stakeholder Workshops

Two workshops were conducted in the first phase of engagement with aviation organisations, local government and business representatives, and local community and interest groups. The workshops took place on the 4th February 2020 at the Station Hotel, Aberdeen. Those invited to the workshops is listed in table 6 and a full list of the workshop participants is set out in tables 7 and 8 below. The objectives of the workshops in the first phase of engagement were to:

- Increase awareness and understanding among stakeholders about the need for airspace change and of the process for bringing it about.
- Gain an understanding of what is and is not within scope of Aberdeen's airspace change and what the potential impacts may be.
- Gather feedback from stakeholders in order to assist in the creation of proposed Design Principles themes that will be used to develop design principles.
- Establish a representative group of stakeholders which can meet throughout the airspace change process to help inform and consider design options.

During the workshops, participants were given a presentation outlining the drivers for changing our airspace including an overview of the NATS (NERL) ground-based navigation aid rationalisation project and the requirements of the UK Airspace Modernisation Strategy. The presentation covered the rationale behind the scope of Aberdeen's airspace change and provided an overview of the current operation at Aberdeen and how this impacts the scope.

Following this, stakeholders were then presented with five themes relating to airspace change and attendees were divided into subgroups to aid discussion. The aim of the sub-group discussions were to gather stakeholders' views about the main airspace design considerations associated with each theme, and to use that information in plenary to have conversations about the factors that are important for us to consider when developing an initial list of potential design principles.

Note takers from our engagement consultants captured feedback from the sub-group discussions, whilst nominated representatives from each table reported back the main points raised by their table to the room. The themes for discussion were:

- Safety
- Environment
- Airspace capacity and access

- Use of advanced technology
- Other issues and opportunities

*Table 6 Stakeholders invited to ABZ design principle workshops*

| Stakeholders invited to participate in design principle workshops | | |
|---|---|---|
| Abacus Pre-School | Cornhill Primary School | North East Scotland Climate Change Partnership |
| Aberdeen & Stonehaven Yacht Club | Cruden Community Council | North East Scotland College |
| Aberdeen Air | Danestone Community Council | North Kincardine Community Council |
| Aberdeen Chamber of Commerce | Danish Air Transport | Oil & Gas UK |
| Aberdeen City and Shire Hotel Association | Deeside Gliding Club | Opportunity North East |
| Aberdeen City Council | Disability Equality Scotland | Organisation for Nepalese Culture and Welfare |
| Aberdeen Council of Voluntary Organisations | Dyce & Stoneywood Community Council | Police Scotland |
| Aberdeen Forward | Eastern Airways | PPL/IR (Europe) |
| Aberdeen Harbour Board | easyJet | Priority Wellbeing Centre Aberdeen |
| Aberdeen International Airport Consultative Committee | Edinburgh Airport | Prospect Scotland |
| Aberdeen Light Aircraft Association | Ellon Community Council | QinetiQ |

| | | |
|---|---|---|
| Aberdeen Trade Union Council | Engender | Ramblers Scotland |
| Aberdeenshire Council | Environmental Protection Scotland | Royal Society for the Protection of Birds |
| ACOG - Airspace Change Organising Group | Federation of Small Businesses Scotland | Ryanair |
| Air Baltic | Flybe | SCDI (North East) |
| Aircraft Owners and Pilots Association (AOPA) | Friends of the Earth | Scotland's Charity Air Ambulance |
| Airfield Operators Group (AOG) | Gama Aviation | Scottish Ambulance Service |
| Airlines UK | General Aviation Alliance (GAA) | Scottish Association for Mental Health |
| Airport Operators Association (AOA) | George Street Community Council | Scottish Association of Social Work |
| Airspace4All | Grampian Microlight Flying Club | Scottish Autism |
| Alexander Air Flight Training (Dyce) | Guild of Air Traffic Control Officers (GATCO) | Scottish Countryside Alliance |
| Association of Remotely Piloted Aircraft Systems UK (ARPAS-UK) | Hazlehead Academy | Scottish Enterprise |
| Aviation Environment Federation (AEF) | Heavy Airlines | Scottish Environment Link |

| | | |
|---|---|---|
| Babcock | Helicopter Club of Great Britain (HCGB) | Scottish Human Rights Commission |
| BAE Systems | HJS Helicopters | Scottish Mountain Rescue |
| Balkan Holidays | Honourable Company of Air Pilots (HCAP) | Scottish Passenger Agents' Association |
| Banchory Community Council | IAC | Scottish Trades Union Congress |
| BEMIS | Independent Commission on Civil Aviation Noise | Scottish Wildlife Trust |
| Bennachie Community Council | Insch Airfield | SEPA |
| Braeside and Mannofield Community Council | Inverness Airport | ServisAir |
| Bridge of Don Community Council | Inverurie Community Council | Signature Flight Support |
| Bristow Helicopters Ltd | Isle of Man CAA | Slains & Collieston Community Council |
| British Airline Pilots Association (BALPA) | KLM | Stobartair |
| British Airways (BA) | Light Aircraft Association (LAA) | Stonehaven and District Community Council |
| British Balloon and Airship Club | Loganair | Swissport |
| British Business and General Aviation Association | Longside Airfield | The Event Complex Aberdeen |

| | | |
|---|---|---|
| British Gliding Association (BGA) | Low Fare Airlines | Torphins Community Council |
| British Hang Gliding and Paragliding Association (BHPA) | Lufthansa | Transport Scotland |
| British Helicopter Association (BHA) | Meldrum, Bourtie, & Daviot Community Council | TUI |
| British International Freight Association | Mental Health Aberdeen | Udny Community Council |
| British Microlight Aircraft Association (BMAA) / General Aviation Safety Council (GASCo) | Military Aviation Authority (MAA) | UK Airprox Board (UKAB) |
| British Model Flying Association (BMFA) | Ministry of Defence - Defence Airspace and Air Traffic Management (MoD DAATM) | UK Flight Safety Committee |
| British Parachute Association (BPA) | National Trust for Scotland | Unite the Union |
| Buchan Aero Club | NATS | United |
| Bucksburn & Newhills Community Council | Navy Command HQ | United States Air Force Europe (3rd Air Force-Directorate of Flying (USAFE (3rd AF-DOF)) |

| | | |
|---|---|---|
| Cabro Aviation Ltd | Newmachar Community Council | University of Aberdeen |
| Catterline, Kinneff and Dunnottar Community Council | Newtonhill, Muchalls and Cammachmore Community Council | Visit Scotland |
| CBI Scotland | NHS Grampian | West Atlantic UK |
| CEMVO | NHV Helicopters | Wideroe |
| CHC Scotia Helicopters | North East Aviators | Wizzair |
| | | Ythan Community Council |

*Table 7 Attendees at workshop 1*

| Date: 4th February 2020<br>Stakeholders: Aviation Community<br>Workshop Time: 10:00 – 13:30 |
|---|
| **Attendees (Organisation)** |
| Deeside Gliding Club |
| British Gliding Association / Airspace-4-All |
| Babcock |
| Flybe |
| Eastern Airways |
| Scottish Ambulance Service |
| Guild of Air Traffic Control Officers |
| Signature Flight Support |
| easyJet |
| CHC Scotia Helicopters |
| Longside Airfield / North East Aviators |
| Alexander Air Flight Training |
| Aberdeen International Airport Consultative Committee (AIACC) |
| Insch Airfield / Grampian Microlight Flying Club |

*Table 8 Attendees at workshop 2*

| Date: 4th February 2020<br>Stakeholders: Local Government, Community & Business<br>Workshop Time: 14:00 – 17:30 |
|---|
| **Organisation** |
| Aberdeenshire Council |
| Environmental Protection Scotland |
| NHS Grampian |
| University of Aberdeen |
| SEPA |
| Aberdeen City Council |
| Bridge of Don Community Council |
| Bucksburn & Newhills Community Council |

Tables 9 to 13 summarise all the feedback points gathered from the discussions about each theme in the first phase of engagement workshops. This includes any feedback that was assessed to be of relevance to the creation of an initial list of potential design principles for further refinement.

*Table 9 Phase 1 feedback linked to safety*

| *Feedback* |
|---|
| 1.a. Aviation safety is the top priority and should be the overriding consideration when developing airspace design options for Aberdeen. |
| 1.b. Controlled airspace design options should be carefully considered to ensure the safety of all airspace users whilst balancing accessibility. |
| 1.c. Airspace design options should not increase the workload for Air Traffic Controllers and aim to reduce radio interactions with flight crew. |
| 1.d. Steeper Approaches should be carefully considered to ensure that there is no increased safety risk as a result of their introduction. It is recognised that the increase in angle is subject to legislative and safety constraints. |
| 1.e. Any introduction of new technology should have suitable resilience and alternative systems available in case of system failure. |
| 1.f. Risks to aviation safety should continue to be as low as practicable and there should be no degradation in safety performance for any airspace user group as a result of an airspace change. |
| 1.g. The introduction of discrete squawk for VFR traffic could enhance safety. |
| 1.h. One participant expressed that safety should not always be the number one priority and that it should be balanced with other considerations such as accessibility. |

*Table 10 Phase 1 feedback linked to Environment*

| *Feedback* |
|---|
| 2.a. Airspace design options should minimise the change to tracks over the ground of aircraft arriving and departing from Aberdeen. |
| 2.b. Any changes to airspace design should facilitate increased continuous climb and continuous decent operations allowing optimal vertical profiles. |
| 2.c. The airspace design options should be developed to ensure there is not an increase in holding for fixed and rotary wing aircraft. |
| 2.d. Options should investigate the feasibility of steeper approaches. |
| 2.e. The angle of steeper approaches should be carefully considered to ensure that there is not an adverse impact on noise and the environment. |
| 2.f. The environmental benefits of steeper approaches should be clearly and transparently communicated with all stakeholders. |
| 2.g. If implemented, steeper approaches should be monitored to ensure they are delivering the noise and environmental benefits calculated. |
| 2.h. Noise from ground-based helicopter operations should be managed and reduced, although participants recognised that this is out of scope of this airspace change. |

| |
|---|
| 2.i. The ACP process should consider the balance between capacity, economic growth and the environment. |
| 2.j. There should be a full environmental assessment of the benefits and impacts of the removal of ground-based navigation aids. It was highlighted to participants that this forms part of a NATS (NERL) project and is not part of this ACP. |
| 2.k. The airspace design should consider the optimisation of controlled airspace to enable the most efficient direct routings. |
| 2.l. Existing boundaries of airways should be reviewed given that they are no longer constrained by ground-based navigation aids and PBN technology can be introduced which could enable more efficient routings. |
| 2.m. The Airspace Change Process should ensure a thorough cost benefit analysis is undertaken for any proposed changes. |

*Table 11 Phase 1 feedback linked to airspace capacity and access*

| *Feedback* |
|---|
| 3.a. Controlled Airspace should be fit for purpose. |
| 3.b. Design options for controlled airspace should ensure that it is the minimum volume necessary to facilitate the current day and forecast growth for commercial air transport and ensure maximum accessibility for other airspace users. |
| 3.c. Opportunities to change existing airspace should be explored and these should include reviewing boundaries and classifications. |
| 3.d. The use and improvement of VFR corridors should be considered as part of the airspace design options. |
| 3.e. Airspace access and integration may be improved by exploring options for other forms of electronic conspicuity/surveillance, although stakeholders recognised that this is outside the scope of the ACP. |
| 3.f. Airspace design options should consider the advancing technology of Unmanned Aerial Systems (UAS) / drones and how these can be safely integrated with other airspace users. |
| 3.g. Overall, controlled airspace design options should be developed with a view of integration not segregation. |
| 3.h. Airspace design options should be cognisant of the impacts on the operations at nearby general aviation aerodromes. |
| 3.i. Flexible use airspace concepts and procedures should be considered to optimise the benefits of additional airspace capacity for all users. |
| 3.j. Measures to enable airspace access and integration should be as safe or safer than the current operation. |
| 3.k. When Controlled Airspace is required, Class E airspace is favoured over Class C or D however it is important to note that Class E is not automatically Class E + TMZ |

*Table 12 Phase 1 feedback linked to use of advanced navigation technology*

| *Feedback* |
|---|
| 4.a. The airspace design options should provide sufficient resilience and redundancy against Global Navigation Satellite System (GNSS) failure. |
| 4.b. The introduction of GNSS approaches should explore the possibility of achieving an enhanced minima compared to the Instrument Landing System currently in operation. |
| 4.c. It was suggested that the airport should consider an upgrade to the current ILS however this was clarified that it is not within the scope of this ACP. |
| 4.d. Participants raised issues with R/T coverage to the west and suggested this was investigated although it was acknowledged that this does not form part of this ACP. |
| 4.e. Design options should consider current and future equipage of aircraft operating out of Aberdeen and ensure that there are suitable procedures available for all aircraft. |
| 4.f. Design options should provide sufficient resilience to ground based navigation aid outage and withdrawal. |
| 4.g. The airspace design options should be developed using the same performance-based navigation standards as other airports and design options should align and integrate into the en-route network. |

*Table 13 Phase 1 feedback linked to any other issues and opportunities*

| *Feedback:* |
|---|
| 5.a. The classification and dimensions of airway P600 should be reviewed. It was acknowledged that this is an en-route airway that does not form part of Aberdeen's ACP. |

The feedback from the first round of engagement workshops influenced the development of the initial list of potential design principles that were a starting point for further refinement. Below we have summarised the process used for developing the initial list of design principles following the workshops:

- The feedback gathered during conversations at the first-round engagement workshops was summarised into distinct points, linked to each of the discussion themes, to be considered by the ABZ airspace design team when developing an initial set of potential design principles.
- The airspace team including airspace technical specialists from Trax, communications and engagement specialists from BECG, and the airport's own management and operational personnel examined the round 1 workshop feedback and worked together to create a set of potential design principle statements that addressed the related pieces of feedback in each theme.
- Some feedback points relate directly to a potential principle and some points support several principles. Within the proposed design principle table, we outlined how each feedback point supported the proposed design principle.

- Others feedback points not specific to design principle development were also noted and added in a separate table in the report.

The initial list of proposed design principles, and the corresponding feedback are shown in table 14. The initial list of design principles were then circulated, alongside a summary of the feedback received from the workshop, to all attendees and stakeholders who were unable to attend the workshop for feedback.

*Table 14 Phase 1 initial list of potential design principles.*

| # | ***Potential design principles*** | ***Feedback supporting this proposed design principle*** |
|---|---|---|
| 1 | **The airspace design and its operation must be as safe or safer than today for all airspace users.** | 1.a. 1.b. 1.c. 1.d. 1.e. 1.f. 1.g. 3.f. 3.j. |
| 2 | **Subject to the overriding design principle of maintaining a high standard of safety, the highest priority principle of this airspace change that cannot be discounted is that it accords with the CAA's published Airspace Modernisation Strategy (CAP 1711) and any current or future plans associated with it.[6]** | 4.e. 4.g. |
| 3 | **Design options should minimise the change to tracks over the ground of aircraft arriving and departing from Aberdeen.** | 2.a. |
| 4 | **Design options should investigate the feasibility of steeper approaches for PBN arrivals to reduce the noise footprint of Aberdeen Airport's operation.** | 1.d 2.d. 2.e. 2.f. |
| 5 | **Arrival route options should enable aircraft to descend continuously and should not inhibit departures from climbing continuously. If both cannot be achieved, there should be preference to the most environmentally beneficial option.** | 2.b. |
| 6 | **Options should not increase and should aim to reduce the emissions footprint of aircraft operating at Aberdeen by reviewing existing controlled airspace boundaries and usage of flight paths in the NERL network.** | 2.b. 2.c. 2.d. 2.e. 2.f. 2.i. 2.k. 2.l. |
| 7 | **Design the appropriate volume of controlled airspace (CAS) to safely support commercial air transport and release controlled airspace which is not required.** | 1.a. 1.b. 3.a. 3.b. 3.c. 3.j. |

[6] This design principle is mandated by the CAA.

| | | |
|---|---|---|
| 8 | **Controlled airspace options should ensure there is safe and efficient access for other types of operations, and should explore measures, including flexible use of airspace, where possible and appropriate, to improve access and decrease airspace segregation.** | 1.a. 1.b. 3.a. 3.b. 3.c. 3.d. 3.f. 3.g. 3.h. 3.i. 3.j. 3.k. |
| 9 | **Options shall not reduce the air traffic movement capacity of Aberdeen Airport.** | 1.c. 2.c. 2.i. |
| 10 | **Ensure the Aberdeen operation is resilient to the withdrawal or failure of navigation aids and systems.** | 1.e. 4.a. 4.f. 4.e. |

A summary report was then circulated to all stakeholders. Irrespective of whether stakeholders attended the workshops, they were provided a report detailing the feedback received at the workshops and how this feedback had been used to shape a set of draft design principle statements, plus a feedback response form, all on the same day. This allowed all stakeholders equal time to provide further feedback as part of Phase 1. This was circulated to all stakeholders on February 12th with a request to:

- Review the feedback summary and initial list of potential design principle statements produced from the output of the workshops.
- Complete the draft design principle feedback form and return via airspace@aiairport.com by Monday 2nd March 2020.

Stakeholders were requested to email airspace@aiairport.com or telephone our freephone information line on 0800 298 7040 with any queries or comments.

The above material was also accompanied by a copy of the presentation that was given at the workshops, which had been drafted as such to ensure it provided enough context to those stakeholders who did not attend but wanted to provide views.

## 3.3 Remote feedback following the workshop

Table 15 summarises the feedback provided by stakeholders after the circulation of the workshop report and how it has influenced the refinement of the design principles. Feedback was categorised against the applicable initial design principle and then a response or refined design principle was proposed. Some more detailed design related feedback by stakeholders was offered and it was deemed more appropriate to store this feedback to be reviewed in more detail during Stage 2 – Develop and Assess of the CAP1616 process.

*Table 15 Feedback provided remotely after the phase 1 workshops and its influence on the initial list of potential design principles*

| # | *Initial potential design principle* | **Summary of feedback points provided remotely following the phase 1 workshops** | **Proposed refined Design Principle** |
|---|---|---|---|
| 1 | **The airspace design and its operation must be as safe or safer than today for all airspace users.** | - British Gliding Association & Airspace4All raised that safety consideration should be given not only to the safety of people inside of controlled airspace, but also that of aircraft outside which are utilising areas adjacent to controlled airspace.<br><br>- British Gliding Association & Airspace4All raised that the statement in the slide pack saying that the new airspace must be "as safe or safer than today" is a good design principle however the statement that safety is the overriding top priority is not the case; it was suggested that safety and functionality must be balanced using an evidence based safety assessment.<br><br>- Defence Airspace and Air Traffic Management (DAATM) Ministry of Defence (MoD) agreed that the top priority should be safety, as proposed. | Proposed:<br>**The airspace design and its operation must be as safe or safer than today for both commercial air transport and general aviation (GA) users that are affected by the airspace change.**<br><br>ABZ notes the BGA and A4A feedback regarding the prioritisation of safety however strongly feels that safety should be the top priority. This was also reflected in the feedback received from the MoD and the feedback received from other stakeholders as part of the design principle workshops. ABZ will ensure that a transparent process is followed as the ACP progresses and this will include details of the safety assessments undertaken for any airspace options developed. |

| # | *Initial potential design principle* | Summary of feedback points provided remotely following the phase 1 workshops | Proposed refined Design Principle |
|---|---|---|---|
| 2 | **Subject to the overriding design principle of maintaining a high standard of safety, the highest priority principle of this airspace change that cannot be discounted is that it accords with the CAA's published Airspace Modernisation Strategy (CAP 1711) and any current or future plans associated with it.[7]** | | No specific feedback received regarding additions or amendments to this principle. |
| 3 | **Design options should minimise the change to tracks over the ground of aircraft arriving and departing from Aberdeen.** | | No specific feedback received regarding additions or amendments to this principle. |
| 4 | **Design options should investigate the feasibility of steeper approaches for PBN arrivals to reduce the noise footprint of Aberdeen Airport's operation.** | | No specific feedback received regarding additions or amendments to this principle. |

[7] This design principle is mandated by the CAA.

| # | *Initial potential design principle* | Summary of feedback points provided remotely following the phase 1 workshops | Proposed refined Design Principle |
|---|---|---|---|
| 5 | **Arrival route options should enable aircraft to descend continuously and should not inhibit departures from climbing continuously. If both cannot be achieved, there should be preference to the most environmentally beneficial option.** | | No specific feedback received regarding additions or amendments to this principle. |
| 6 | **Options should not increase and should aim to reduce the emissions footprint of aircraft operating at Aberdeen by reviewing existing controlled airspace boundaries and usage of flight paths in the NERL network.** | | No specific feedback received regarding additions or amendments to this principle. |
| 7 | **Design the appropriate volume of controlled airspace (CAS) to safely support commercial air transport and release controlled airspace which is not required.** | - Defence Airspace and Air Traffic Management (DAATM) Ministry of Defence (MoD) agreed and added that as well as volume, classification of CAS should also be a considered. | No changes proposed as the feedback regarding the consideration of the classification of airspace has been included as part of design principle 8. |

| # | *Initial potential design principle* | **Summary of feedback points provided remotely following the phase 1 workshops** | **Proposed refined Design Principle** |
|---|---|---|---|
| 8 | **Controlled airspace options should ensure there is safe and efficient access for other types of operations, and should explore measures, including flexible use of airspace, where possible and appropriate, to improve access and decrease airspace segregation.** | - Defence Airspace and Air Traffic Management (DAATM) Ministry of Defence (MoD) agreed and added, as per DP7, the classification of airspace required should be considered. The MOD would wish to ensure that any controlled airspace implemented should be minimised and there should be provision for other airspace users to transit portions of controlled airspace as required. It should also consider the impact on any adjacent uncontrolled airspace e.g. traffic funnelling, as a result of any change. It is important that provision is made to allow military airspace users access to any portions of controlled airspace when required to meet defence operational and training requirements. | A small update has been proposed as the feedback given supports the purpose of this design principle:<br><br>**Controlled airspace options should ensure there is safe and efficient access for other types of operations, and should explore measures, including classification and flexible use of airspace, where possible and appropriate, to improve access and decrease airspace segregation.** |
| 9 | **Options shall not reduce the air traffic movement capacity of Aberdeen Airport.** | | No specific feedback received regarding additions or amendments to this principle. |
| 10 | **Ensure the Aberdeen operation is resilient to the withdrawal or failure of navigation aids and systems.** | | No specific feedback received regarding additions or amendments to this principle. |
| n/a | **General feedback on the Design Principles** | - Aberdeen Airport Consultative Committee Chair and Cabro Aviation confirmed he had no comments on the design principles report. | |

| # | *Initial potential design principle* | **Summary of feedback points provided remotely following the phase 1 workshops** | **Proposed refined Design Principle** |
|---|---|---|---|
| | **General feedback on the Design Principles** | - Bridge of Don Community Council agreed with the Design Principles laid out in the document.<br>- Longisde Airfield invited comments and suggestions from its active pilot members and confirmed that no responses were received.<br>- A representative for Meldrum, Bourtie and Daviot CC confirmed that as the airspace around Aberdeen International Airport is not going to change significantly, I have no comment to make on this. All the main concerns seem to have been covered.<br>- Gama Aviation Ltd and Scottish Ambulance Service confirmed all read and understood, no questions or concerns so far.<br>- Scottish Environment Protection Agency said that the comments presented reflect the discussions had on the day. We have no further comments at this point. | |

*Table 16 Additional feedback provided remotely after the phase 1 workshops*

| **Additional feedback points provided following the phase 1 workshops** | **ABZ response** |
|---|---|
| Scottish Environment Protection Agency advised that the impact of the Airspace Change Proposal on the environment in regard to these changes should be considered and addressed possibly through the SEA process. | Stage 2 and Stage 3 of the CAP1616 process involve an Initial Options Appraisal and a Full Options Appraisal which include a comprehensive Environmental Impact Assessment of each proposed option. More information around the technical requirements of CAP1616 can be |

| | |
|---|---|
| | found here. At these stages of the process, we will publish the outputs of the environmental assessment. |
| Deeside Gliding Club (DGC) raised feedback around the design of the Aberdeen CTA overhead Aboyne in close proximity to the airfield and suggested that the low base, 3000' asl, on the western edge of the CTA, next to the DGC airfield, should be reviewed to determine if a relaxation of this constraint close to DGC is feasible. This would directly improve safety of operations at DGC. | We intend that design principles DP7 and DP8 will address these concerns. This specific feedback has been recorded to be used in later stages of the CAP1616 process when we will review the controlled airspace. We will ensure that this review includes the impact of the current airspace on the arrangement of Deeside Gliding Club. |
| Bridge of Don Community Council requested that where feedback points were deemed to not be in scope of this ACP, can confirmation be published to which agencies the feedback has been passed on to. | We will ensure that this information is included as part of the overall submission of the Stage 1b documents and published on the CAA portal. |
| Meldrum, Bourtie and Daviot CC raised a slight concern around PBN systems and their vulnerability to cyber-attacks on GNSS. | We believe that DP10 'Ensure the Aberdeen operation is resilient to the withdrawal or failure of navigation aids and systems' suitably covers this concern. |
| The MOD recognises the importance of Airspace Modernisation and remains committed to ensuring airspace is used safely, efficiently and flexibly. Airspace modernisation and future airspace design must consider and allow for MOD access to airspace in order to meet future defence requirements. | This specific feedback has been recorded to be used in later stages of the CAP1616 process when we will review the controlled airspace. |
| British Gliding Association & Airspace4All raised that the ACP should take a realistic view of likely future activity and forecast growth and highlighted highly optimistic forecasts for future growth that have been used with historic ACPs. | This specific feedback has been recorded and will be considered during the later stages of the CAP1616 process when future traffic levels are used as part of options appraisal. |

## Refined list of Design Principles following remote feedback

Following the outcome of the engagement workshops and the remote feedback, the initial design principles were refined as per table 17.

*Table 17 Refined list of design principles following phase 1 engagement*

| # | ***Refined list of design principles*** |
|---|---|
| 1 | **The airspace design and its operation must be as safe or safer than today for both commercial air transport and general aviation (GA) users that are affected by the airspace change.** |
| 2 | **Subject to the overriding design principle of maintaining a high standard of safety, the highest priority principle of this airspace change that cannot be discounted is that it accords with the CAA's published Airspace Modernisation Strategy (CAP 1711) and any current or future plans associated with it.[8]** |
| 3 | **Design options should minimise the change to tracks over the ground of aircraft arriving and departing from Aberdeen.** |
| 4 | **Design options should investigate the feasibility of steeper approaches for PBN arrivals to reduce the noise footprint of Aberdeen Airport's operation.** |
| 5 | **Arrival route options should enable aircraft to descend continuously and should not inhibit departures from climbing continuously. If both cannot be achieved, there should be preference to the most environmentally beneficial option.** |
| 6 | **Options should not increase and should aim to reduce the emissions footprint of aircraft operating at Aberdeen by reviewing existing controlled airspace boundaries and usage of flight paths in the NERL network.** |
| 7 | **Design the appropriate volume of controlled airspace (CAS) to safely support commercial air transport and release controlled airspace which is not required.** |
| 8 | **Controlled airspace options should ensure there is safe and efficient access for other types of operations, and should explore measures, including classification and flexible use of airspace, where possible and appropriate, to improve access and decrease airspace segregation.** |
| 9 | **Options shall not reduce the air traffic movement capacity of Aberdeen Airport.** |
| 10 | **Ensure the Aberdeen operation is resilient to the withdrawal or failure of navigation aids and systems.** |

[8] This design principle is mandated by the CAA.

# 4. Phase 2: Refining and developing design principles

## 4.1 Overview of Phase 2 Engagement

In Phase 2, we wanted to give stakeholders a further opportunity to shape the design principle statements that would outline any future design associated with this ACP. All previously engaged stakeholders identified in section 2.1 of this document were given the opportunity to provide additional feedback remotely on the evolved list of design principles.

### Evolved Design Principles Feedback Report

On 6th March 2020, we sent all previously engaged stakeholder an evolved Design Principles Feedback Report summarising the feedback provided by stakeholders remotely after the circulation of the workshop report and how it has influenced the refinement of the design principles. Feedback is categorised against the applicable initial design principle and then a response or refined design principle is proposed. Some more detailed design related feedback was offered by stakeholders and it was deemed more appropriate to store this feedback to be reviewed in more detail during Stage 2 – Develop and Assess of the CAP1616 process.

### Further opportunity to feedback

The evolved design principles feedback report was circulated to all previously engaged stakeholders along with a feedback response form asking stakeholders to consider:

- If they were comfortable with the wording within the proposed design principles and if not, to indicate what they would like to see amended.
- If there were any additional design principles that they would like to see included.
- Which of the design principles they would categorise as a high, moderate or low priority in the context of the overall list of principles and why - stressing that they may choose not to provide priority to any of the listed design principles, if they so wished.

Stakeholders were also given a form asking for feedback on ABZ's overall engagement to date. Feedback regarding this will be used to help improve any future engagement activities that ABZ undertakes. All stakeholders were given a two-week window to provide feedback via the feedback forms provided to ensure equal feedback opportunities where possible, with this being distributed on 6th March 2020 and a feedback return deadline of 19th March 2020. Copies of the feedback forms are included in Appendix B.

## 4.2 Feedback provided remotely after Phase 2 engagement

Table 18 summarises the feedback views provided by stakeholders remotely (phase 2) and its influence on potential design principles.

*Table 18 Feedback provided remotely after the phase 2 engagement and its influence on the refined list of design principles*

| # | *Phase 1 design principle* | Feedback points provided remotely (phase 2) | Proposed update |
|---|---|---|---|
| *1* | **The airspace design and its operation must be as safe or safer than today for both commercial air transport and general aviation (GA) users that are affected by the airspace change.** | - Oil and gas UK (OGUK) suggested adding SAR and air ambulance as they are not commercial air transport | To encompass all airspace users, the following update has been made to the DP: **The airspace design and its operation must be as safe or safer than today for all airspace users that are affected by the airspace change.** |
| *2* | **Subject to the overriding design principle of maintaining a high standard of safety, the highest priority principle of this airspace change that cannot be discounted is that it accords with the CAA's published Airspace Modernisation Strategy (CAP 1711) and any current or future plans associated with it.[9]** | | No specific feedback received regarding additions or amendments to this principle. |
| *3* | **Design options should minimise the change to** | | No specific feedback received regarding additions or amendments to this principle. |

[9] This design principle is mandated by the CAA.

| | | | |
|---|---|---|---|
| | **tracks over the ground of aircraft arriving and departing from Aberdeen.** | | |
| ***4*** | **Design options should investigate the feasibility of steeper approaches for PBN arrivals to reduce the noise footprint of Aberdeen Airport's operation.** | | No specific feedback received regarding additions or amendments to this principle. |
| ***5*** | **Arrival route options should enable aircraft to descend continuously and should not inhibit departures from climbing continuously. If both cannot be achieved, there should be preference to the most environmentally beneficial option.** | | No specific feedback received regarding additions or amendments to this principle. |
| ***6*** | **Options should not increase and should aim to reduce the emissions footprint of aircraft operating at Aberdeen by reviewing existing controlled airspace boundaries and usage of flight paths in the NERL network.** | | No specific feedback received regarding additions or amendments to this principle. |

| | | | |
|---|---|---|---|
| ***7*** | **Design the appropriate volume of controlled airspace (CAS) to safely support commercial air transport and release controlled airspace which is not required.** | | No specific feedback received regarding additions or amendments to this principle |
| ***8*** | **Controlled airspace options should ensure there is safe and efficient access for other types of operations, and should explore measures, including classification and flexible use of airspace, where possible and appropriate, to improve access and decrease airspace segregation.** | | No specific feedback received regarding additions or amendments to this principle. |
| ***9*** | **Options shall not reduce the air traffic movement capacity of Aberdeen Airport.** | - OGUK suggested 'odd wording. At all times options should seek to enhance'. | A small update is proposed:<br>**Options shall not reduce and where possible enhance the air traffic movement capacity of Aberdeen Airport.** |
| ***10*** | **Ensure the Aberdeen operation is resilient to the withdrawal or failure of navigation aids and systems.** | | No specific feedback received regarding additions or amendments to this principle |

| | | | |
|---|---|---|---|
| | **General feedback on Design Principles** | - Eastern Airways confirmed that 'All agreed and no changes or additions proposed'.<br>- The Ministry of Defence confirmed that they have no further comment on the draft design principles and thanked ABZ for the consideration and inclusion of their previous response. | |

*Table 19 Additional feedback provided remotely during phase 2 engagement*

| **Additional feedback points provided** | |
|---|---|
| **Feedback** | **Our response** |
| With reference to DP10 'Ensure the Aberdeen operation is resilient to the withdrawal or failure of navigation aids and systems' OGUK stated 'Yes but at what cost? And who pays? Not sure how this should be worded but due consideration should be given in any of the design options, to the costs involved. | The initial options appraisal at Stage 2 and the full options appraisal at Stage 3 of the airspace change process both include assessments of the cost benefits/impacts of individual options. |
| With reference to DP3, OGUK stated that they would accept something along the lines of, notwithstanding that such designs should not apply to SAR/air ambulance or other emergency flights.<br>With reference to DP4,5,&6, OGUK stated that any options should make due allowance if relevant and possible to emergency flights. | This airspace change is focused on the arrival routes for scheduled aircraft and does not propose to make any changes to the existing procedures for emergency flights such as search and rescue, air ambulance or other emergency flights. It is expected that any category A or B flight will continue to be given tactical priority by Air Traffic Control on the day. |

## 4.3 Prioritisation

During phase 2 of the engagement process stakeholders were asked which, if any, principles should attract a relatively higher or lower priority in the context of the overall list of principles.

Other than Eastern Airways, who confirmed that they had no priority preferences, no feedback was received regarding the prioritisation of the Design Principles. It is therefore not deemed appropriate to carry forward any particular priority of one design principle over another (excluding DP1 and DP2 regarding safety and airspace modernisation). Instead, we will make trade-offs decisions based on an assessment of the overall impacts and two-way conversations with the affected stakeholders during stage 2 of the process.

## 4.4 Final list of design principles

The final list of airspace design principles that we propose to adopt is set out again in table 20 (this table is a replication of table 1). The principles are numbered for ease of reference.

*Table 20 Final list of Airspace Design Principles that ABZ propose to adopt*

| # | **Airspace Design Principle** |
|---|---|
| DP1 | The airspace design and its operation must be as safe or safer than today for all airspace users that are affected by the airspace change. |
| DP2 | Subject to the overriding design principle of maintaining a high standard of safety, the highest priority principle of this airspace change that cannot be discounted is that it accords with the CAA's published Airspace Modernisation Strategy (CAP 1711) and any current or future plans associated with it.[10] |
| DP3 | Design options should minimise the change to tracks over the ground of aircraft arriving and departing from Aberdeen. |
| DP4 | Design options should investigate the feasibility of steeper approaches for PBN arrivals to reduce the noise footprint of Aberdeen Airport's operation. |
| DP5 | Arrival route options should enable aircraft to descend continuously and should not inhibit departures from climbing continuously. If both cannot be achieved, there should be preference to the most environmentally beneficial option. |
| DP6 | Options should not increase and should aim to reduce the emissions footprint of aircraft operating at Aberdeen by reviewing existing controlled airspace boundaries and usage of flight paths in the NERL network. |
| DP7 | Design the appropriate volume of controlled airspace (CAS) to safely support commercial air transport and release controlled airspace which is not required. |
| DP8 | Controlled airspace options should ensure there is safe and efficient access for other types of operations, and should explore measures, including classification and flexible use of airspace, where possible and appropriate, to improve access and decrease airspace segregation. |
| DP9 | Options shall not reduce and where possible enhance the air traffic movement capacity of Aberdeen Airport. |
| DP10 | Ensure the Aberdeen operation is resilient to the withdrawal or failure of navigation aids and systems. |

[10] This design principle is mandated by the CAA.

## 5. Independent Assurance of design principle engagement

The Consultation Institute has overseen ABZ's engagement on design principles, at Stage 1B of CAP1616 and endorses its approach.

This has involved reflecting on the approach taken by ABZ based on the advice tCI has provided to it directly and to its sister airports within the AGS Group, SOU and GLA. We have also examined documentation, reports and other inputs.

The work previously conducted at SOU and GLA has helped to ensure the engagement activities for ABZ were coherent and comprehensive. ABZ is significantly different from both of its sister airports and its context, geographical situation and operational procedures were therefore accounted for. An engagement plan was developed, and focus groups of the general public conducted. Following this the scope of the ACP was changed, however the intelligence and insights gathered from the focus groups were still included in the report and used to inform the ACP as part of the process. tCI was informed of the change in scope and impact on the timetable and process.

For ABZ we provided direct advice and guidance, signing off on the following elements:

- ABZ Engagement Strategy
- Methodology
- Documentation and reporting

For ABZ's sister airports we had provided direct advice and guidance and signed off on the following elements; the learning from this advice and guidance was directly applied to ABZ without intervention from the Institute:

- Objectives
- Target audiences (overview was provided in the GLA engagement strategy)
- Brief for research agency
- Detailed rationale for invitation of stakeholders
- Drafting of letters of invitation
- Approach to maximising attendance
- Planning and timetabling of all activity
- Risk Register

In addition, tCI observed the two stakeholder workshops conducted by ABZ. We found these sessions to be well organized and facilitated with the correct groupings at each workshop. There was sufficient and appropriate staff to address stakeholder questions.

tCI is satisfied that the approach taken has been delivered with professionalism. We note that despite ABZ believing its ACP will have minimal impact on stakeholders and communities, it still conducted a representatively inclusive engagement exercise. We believe that the process applied has allowed for the insights from the publicly recruited focus groups and stakeholder workshops to have been successfully captured in this report. It is the view of tCI that the resulting Design Principles therefore comply with the Statement of Need, and Engagement Plan, both agreed by the Airport.

## 6. Conclusions and Next Steps

Our final list of proposed design principles has been developed and refined through two-way conversations with a wide mix of stakeholders that are potentially affected by the airspace change. All workshops were attended by airport staff, technical specialists and third-party facilitators to ensure that our engagement in the ACP process was effective.

We would like to thank all stakeholders that gave their time to support the engagement process, consider the issues and opportunities associated with the airspace change and share their views on the development of the design principles. We expect that our engagement during the options development and assessment stage, and in the later public consultation, will be more constructive because of the outputs of the design principle engagement.

It is unusual for there to be unanimous agreement on all of the principles that we propose to adopt, or the airspace design options they may be used to evaluate. We also acknowledge that some of the principles may at times come into conflict with one another and difficult trade-offs may need to be made. We are committed to continuing a transparent two-way process of engagement as the ACP progresses, which we expect will help to inform these trade-off decisions when they emerge.

We will write to all stakeholders following the submission of the Stage 1 report to the CAA to ensure they remain updated. Stakeholders that were invited to participate in the development of the design principles will be re-engaged during Stage 2 to test our comprehensive list of airspace design options before we evaluate them against the design principles as part of the options appraisal process.