

Aberdeen International Airport (AIAL)

FASI-N Airspace Change Proposal

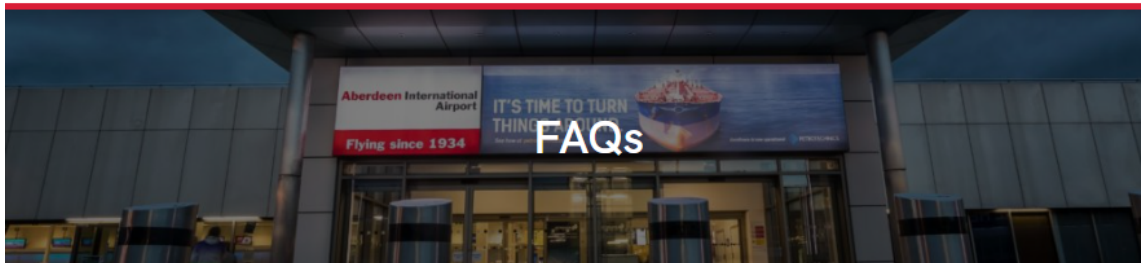
Step 2A Appendix E

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Aberdeen Airport Airspace Change Proposal Appendix E – Stakeholder Resources

Executive Summary

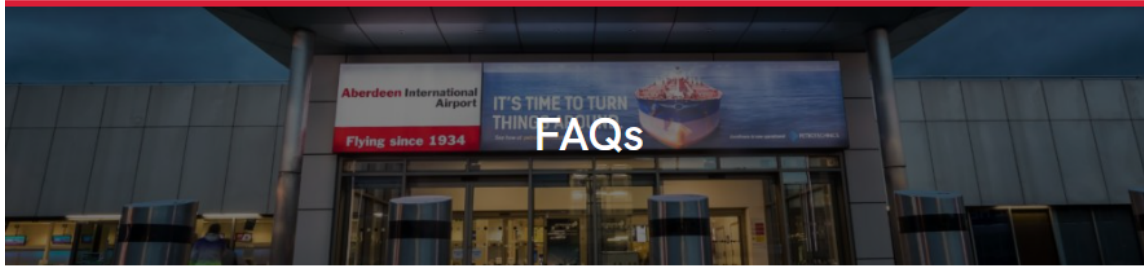
This document contains the documentation that Aberdeen Airport's ACP stakeholders were provided with during Stage 2A. The presentation given to stakeholders at the briefing sessions are provided as a separate file. Full details of the communications, including communication content, can be found in Appendix C. For a timeline of key engagement activity, please see the engagement report.



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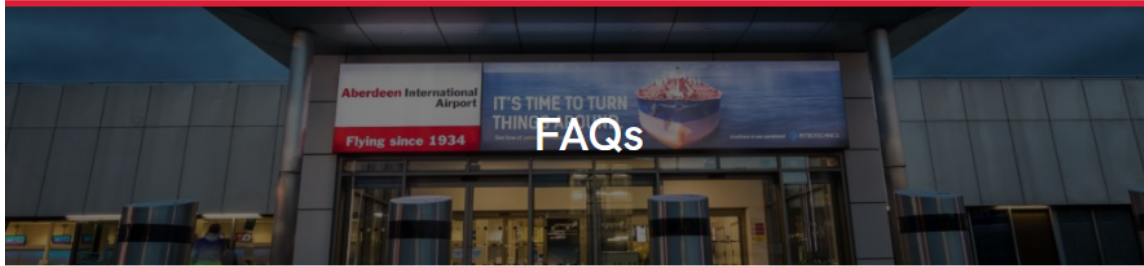
Airspace is the 'invisible infrastructure' in the sky which helps aircraft operate safely. It includes the flight paths that aircraft take when arriving and departing from an airport, which are usually the responsibility of an airport up to 7000ft above ground level, and the routes on the airspace network above 7000ft which are the responsibility of NATS.

Airspace can be controlled and uncontrolled; this means that in some areas there are restrictions on which aircraft and/or pilots can fly in the airspace to protect other airspace users such as commercial airliners. To enter most controlled airspace, pilots must get permission from Air Traffic Control. There are different classifications of controlled airspace that have varying requirements. For more information about different types of controlled airspace, please see [here](#).



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Airspace change is the process through which flight paths, routes, controlled airspace boundaries and controlled airspace classification can be changed. The Department for Transport (DfT) is responsible for all aviation policy in the UK, including airspace. The Civil Aviation Authority (CAA) is responsible for its regulation and for the Airspace Change Process which all airports must follow where changes to airspace are proposed. Aberdeen Airport is responsible for the design of any changes to flight paths into and out of the airport up to approximately 7,000ft, and NATS is responsible for changes to airspace above 7,000ft.

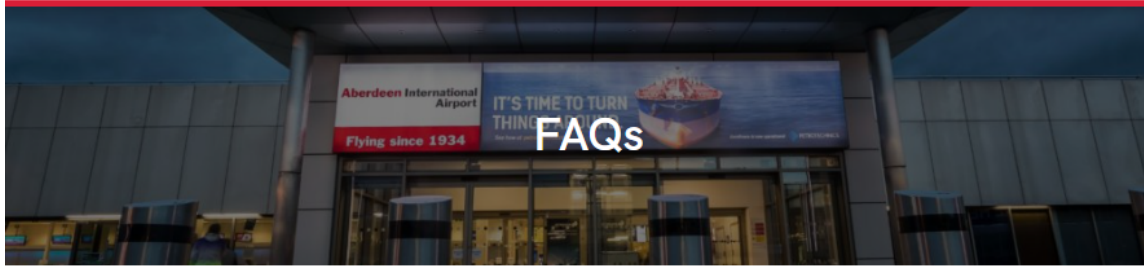


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The aviation industry is regulated by the Civil Aviation Authority (CAA) in the UK, and they ensure that the environmental impact of aviation on local communities is managed through efficient use of airspace. When changes to airspace are proposed, an airport is required to follow the CAA's Airspace Change Proposal (ACP) process, this is known as **CAP1616**. (click link to view the document).

CAP1616 is a 7-stage process which places great importance on engaging and consulting on airspace proposals throughout the process with a wide range of stakeholders, including potentially affected communities.

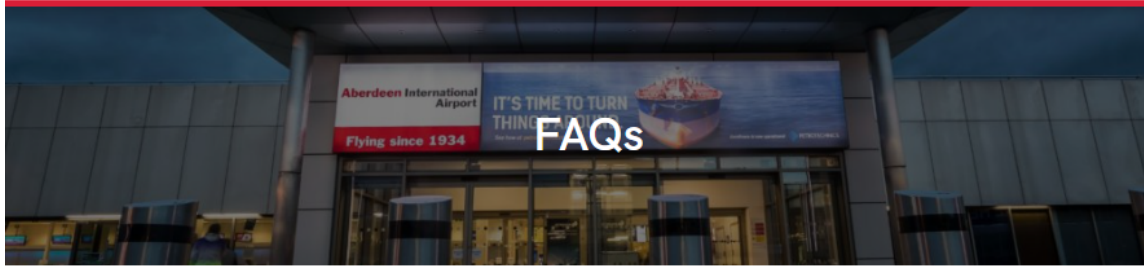
Aberdeen Airport is currently in Stage 2 of the CAP1616 process. More information on Stage 1 can be found on the [CAA's Airspace Change Portal](#).



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The Airspace Modernisation Strategy (AMS), also known as CAP1711, is a document published by the DfT and CAA in December 2018. The document describes how the airspace within the UK is reaching capacity and due to the age of the design, includes features that restrict the aviation industry's ability to improve its operational and environmental performance.

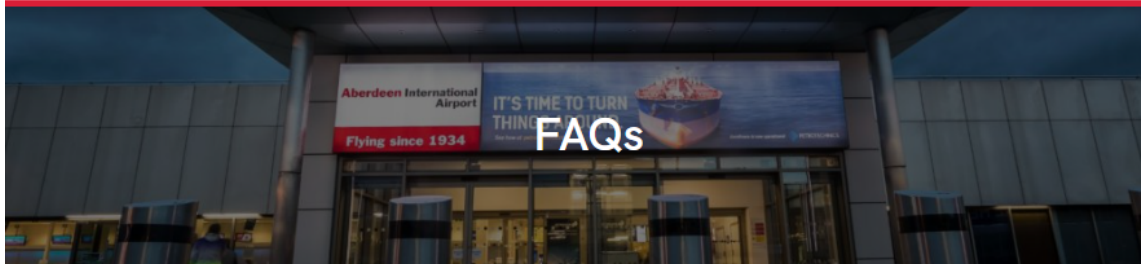
The AMS sets out a new shared objective between the CAA and the DfT for modernising airspace which is to deliver quicker, quieter, and cleaner journeys and more capacity for the benefit of those who use and are affected by UK airspace.



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Performance based navigation (PBN) is a type of navigation that uses satellite-based technology. This is similar to the type of technology used in car sat-navs, or in GPS based sports watches. PBN is being introduced across the world and Aberdeen Airport are required to consider implementing it as part of meeting the requirements of the Airspace Modernisation Strategy.

PBN improves the accuracy of where aircraft fly and offers opportunities for different flight path locations by moving away from the constraints of outdated conventional navigation using ground-based beacons. This helps improve operational performance, reduce delays, and improves resilience.

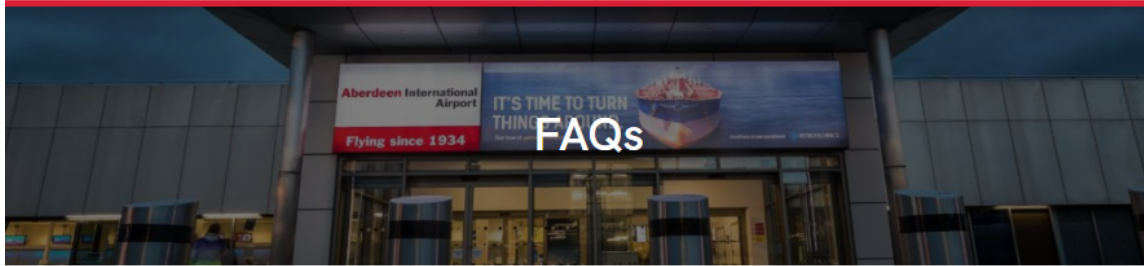


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Many of the airspace changes that the airports and NATS are required to deliver overlap. In the busiest areas of Southern England, Northern England, and Scotland the airspace changes have been grouped into two major programmes:

- Future Airspace Implementation (FASI) North: The fundamental redesign of the terminal airspace in northern England and Scotland that is based on the widespread adoption of satellite navigation procedures.
- Future Airspace Implementation (FASI) South: The fundamental redesign of the terminal airspace in Southern England.

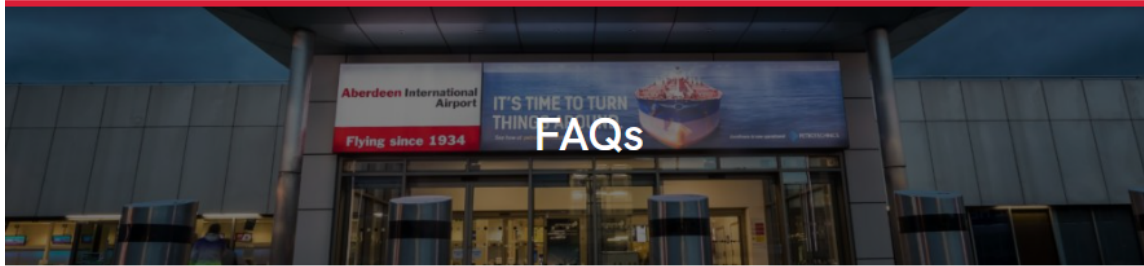
The FASI North and South airports are responsible for upgrading their individual arrival and departure routes from the ground to 7000ft. NATS are responsible for redesigning the route network above 7000ft that guides traffic to and from the boundaries of the UK's airspace. The airports and NATS are working closely to ensure that their individual ACPs are aligned, and the final set of changes can be combined seamlessly.



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ACOG is the Airspace Change Organising Group, and they are the team tasked with coordinating the redesign of the UK's airspace (FASI-N & FASI-S programmes). ACOG was formed in 2019 and are a fully independent organisation within NATS, under the direction of the DfT and the CAA.

ACOG's role is to coordinate the delivery of key aspects of the AMS. The cornerstone of ACOG's work is to create and maintain the Airspace Masterplan, which will provide detailed information on the airspace design options under development, the overlaps between airport changes and the compromises and trade-offs that may need to be made to integrate each airspace change effectively. More information on ACOG can be found [here](#).



What is Airspace?	+	
What is Airspace Change?	+	Aberdeen Airport is conducting an ACP to upgrade some of the airport's flight procedures. It will cover a review of routes from the ground up to 7000ft and will also include a review of the boundaries of controlled airspace.
What is CAP1616?	+	
What is the Airspace Modernisation Strategy?	+	Aberdeen Airport is required to meet regulatory requirements to introduce routes and procedures compliant with PBN criteria where appropriate, and in line with the requirements of the Airspace Modernisation Strategy.
What is Performance Based Navigation?	+	Changes at Aberdeen are expected to be minimal. Aberdeen are not intending to make any changes to the way aircraft depart the airport or the departure flight paths they take. The intent is just to look to replicate some of our existing arrival flight paths to a PBN standard and look to see if we can reduce our Controlled Airspace volumes. Specifically, the ACP will seek to:
What is FASI-N?	+	
What is ACOG?	+	
What is Aberdeen Airport proposing and why?	+	<ol style="list-style-type: none"> 1. Introduce PBN approach procedures to runways 16 and 34 2. Redefine our conventional holding stack with one based on PBN (position and use of the hold would remain as today) 3. Review the existing controlled airspace boundaries and classifications 4. Review existing Flexible Use of Airspace (FUA) requirements.
CAP1616 Stage 1: What are Aberdeen Airport's Design Principles?	+	
Where is Aberdeen Airport in the Airspace Change Process?	+	
When can we see the flight path options?	+	More information about Aberdeen Airport's airspace change proposal can be found on the CAA's Airspace Change Portal .
How will airspace change options be assessed?	+	
When can I have my say?	+	
Will there be a public consultation?	+	
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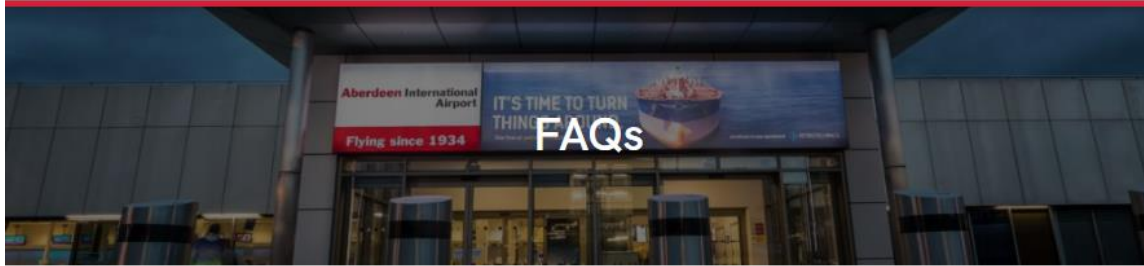


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At Stage 1B of the CAP1616 process, the following design principles were developed with stakeholders. For more information about Stage 1, please see our submission documents on the [CAA Airspace Change portal](#).

#	Design Principle
1	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.
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 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.

These Design Principles will be used throughout Stage 2A when we are developing our comprehensive list of options and then evaluating the performance of these options (See question 10 for more details)

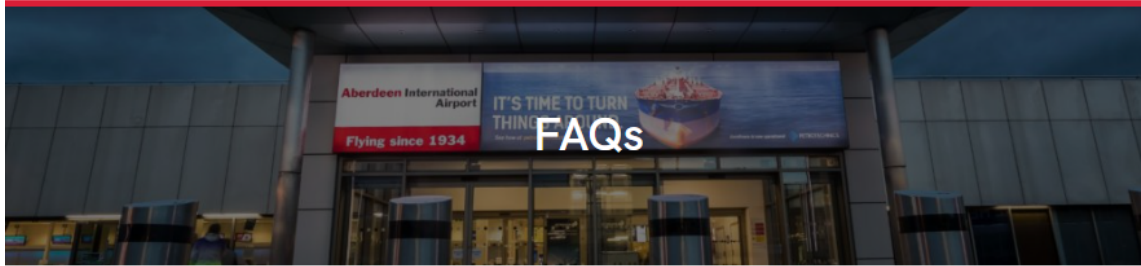


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We are currently in Stage 2 of the 7-stage CAP1616 process which is called 'Develop & Assess'.

As part of Step 2A, **Options Development**, we are developing a first comprehensive list of options which address the Statement of Need and align with the design principles from Stage 1. More information on Stage 1 can be found [here](#).





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Aberdeen Airport has started Stage 2 of the ACP process, which consists of Step 2A and Step 2B.

Step 2A

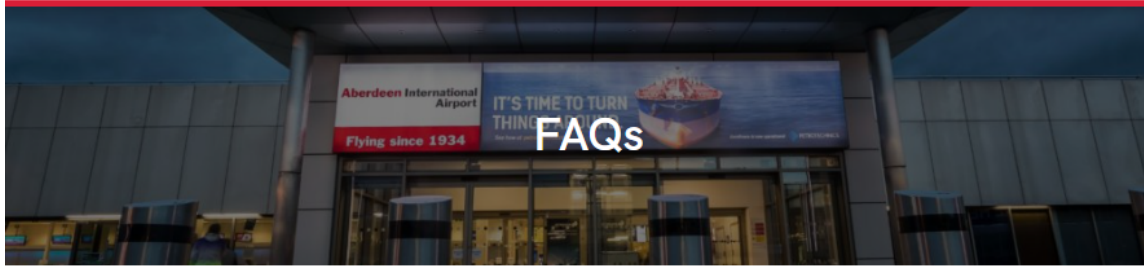
During Step 2A we are required to engage on our comprehensive list of options with our stakeholders, including those we engaged with during Stage 1. The aim of this engagement is to gain feedback from stakeholders about Aberdeen Airport's process for developing its design options. Specifically, stakeholders will be asked to consider if Aberdeen Airport has taken full account of the Step 1B Design Principles as listed above. The feedback from stakeholders may result in changes to the comprehensive list of options. This activity will take place in March 2022.

Step 2B

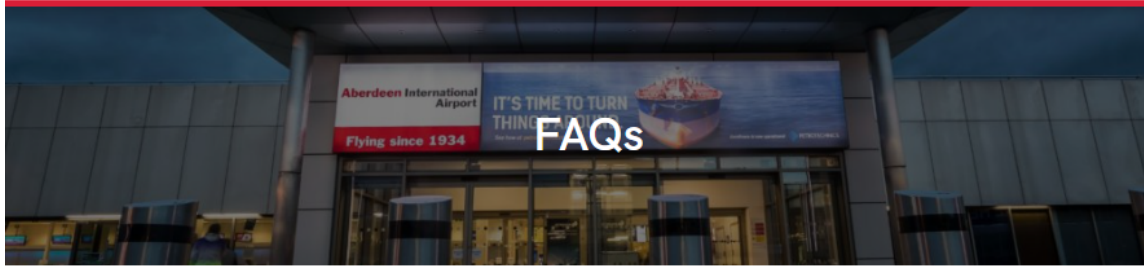
Following this, Aberdeen Airport will commence Step 2B, which involves an initial appraisal of the options presented to stakeholders at Step 2A. This step will determine which flight path options are taken forward to Stage 3.

Stage 3

During Stage 3 Aberdeen Airport will undertake detailed quantitative appraisal of the benefits and impacts of these options. These flight path options will then be shared via a public consultation process. At this stage the public will have the opportunity to see and understand what is being proposed and respond to the consultation.



What is Airspace?	+	
What is Airspace Change?	+	We will initially qualitatively assess options against each Design Principle as part of the Design Principle Evaluation. This takes place at Stage 2A, after we have developed our comprehensive list of options and presented these to stakeholders.
What is CAP1616?	+	
What is the Airspace Modernisation Strategy?	+	In Step 2B, we will undertake an Initial Options Appraisal which is a more detailed qualitative appraisal. The outcomes of Step 2A and 2B will be published on the Airspace Change Portal following submission to the CAA.
What is Performance Based Navigation?	+	
What is FASI-N?	+	At Stage 3, as options are developed and refined into detailed designs, we will build upon the Initial Options Appraisal with quantitative analysis as part of the Full Options Appraisal. The material published as part of the public consultation during Stage 3 will include the Full Options Appraisal and an analysis of the option(s) being proposed by Aberdeen Airport.
What is ACOG?	+	
What is Aberdeen Airport proposing and why?	+	More information about the options appraisals can be found in Appendix E of CAP1616 .
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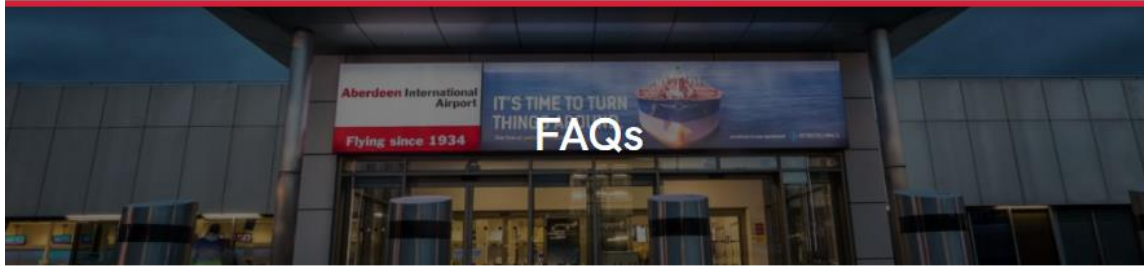
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Throughout Stage 2 we will make more information available on this website, including the initial Comprehensive List of Options. We are also holding Stakeholder Briefing Sessions as part of Stage 2 and will be asking stakeholders for feedback on Aberdeen Airport's approach to options development. Our final Stage 2 submission will be published on the [CAA Airspace Change portal](#).

The wider public will be informed of the proposals during Stage 3, with a full public consultation.

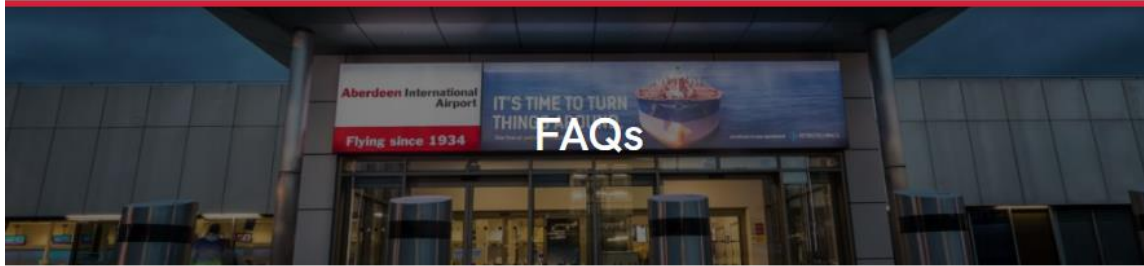
A key element of this consultation is that it takes place when proposals are at a formative stage, so that feedback from the consultees can still influence the proposal.

Aberdeen Airport are expecting the public consultation to take place in Q2 2023.



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Yes. During Stage 3 we will hold a public consultation. This is anticipated to take place in Q2 2023.



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You can find out more about this airspace change on the [CAA Airspace Change Portal](#). You can also register an email address on the [Aberdeen Airport website](#) to receive email updates about this airspace change proposal.