



NATS Consultation Briefing



Welcome and overview



Welcome to this Scottish Airspace Modernisation webinar.

This webinar is part of the formal consultation about the Edinburgh Airport, Glasgow Airport and NATS proposals to modernise airspace in Scotland.

The purpose of today's webinar is to complement your understanding of the consultation documents which can be found online.

We will provide an overview of why airspace modernisation is essential, detail about the Scottish Airspace Modernisation project and the proposed airspace designs.

If you have any questions, please raise your hand or type your question into the chat function.

Glossary of terms

Approach Transitions: a segment that connects a Standard Terminal Arrival Route (STAR) to a point on the instrument approach procedure.

Controlled Airspace (CAS): where an air traffic service is provided by air traffic controllers who can utilise a network of routes to safely manage passenger and commercial aircraft transits.

Performance Based Navigation (PBN): defines performance requirements for aircraft navigation, using satellite-based and other technologies to enable more flexible, accurate, and repeatable flight paths.

Radar Manoeuvring Area (RMA): a defined volume of airspace, typically near an airport, where air traffic controllers use radar to vector aircraft for approaches and departures, ensuring safe and efficient traffic flow.

Standard Instrument Departures (SIDs): route linking the aerodrome or a specified runway of the aerodrome with specified point, normally on a designated ATS route, at which the en route phase of a flight commences.

Standard Terminal Arrival Routes (STARs): route linking a significant point, normally on an ATS route, with a point from which an instrument approach procedure can be commenced.

Systemisation: A structured route network which uses satellite technology on modern aircraft, allowing aircraft to fly on precise flight paths from take off until they reach the higher-level network.

Introduction to Airspace Modernisation



Why is airspace change necessary?

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

The Airspace Modernisation Strategy (AMS), also known as CAP1711, is a document first published by the DfT and CAA in December 2018 and updated in February 2024.

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.

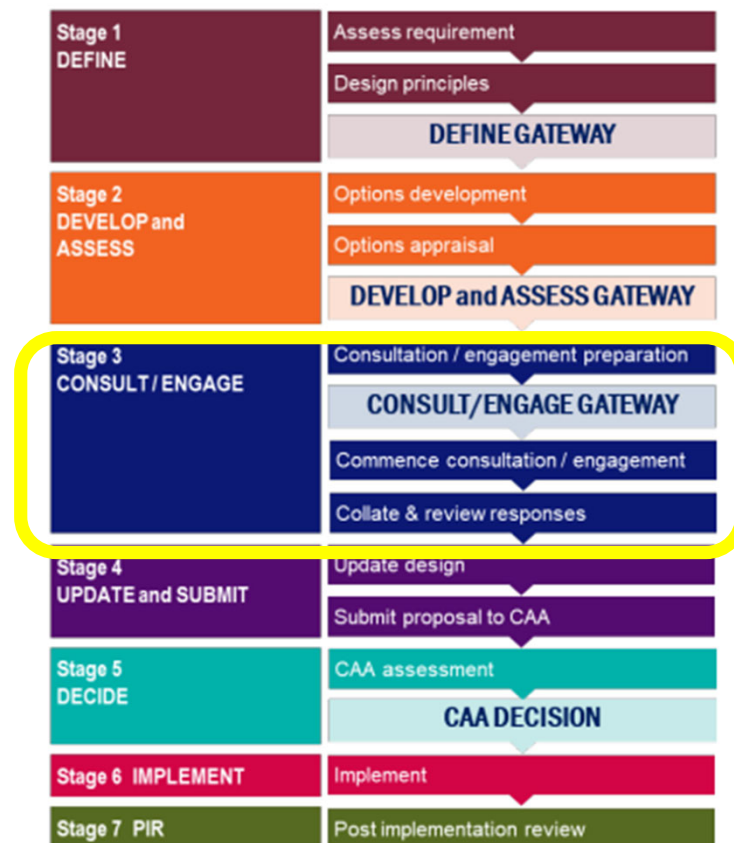


The Airspace Change Process

Since January 2018, any changes to airspace are required to follow the CAA's CAP1616 regulatory guidance. CAP1616 outlines a 7-stage process for changing airspace design.

Edinburgh Airport, Glasgow Airport and NATS are developing Airspace Change Proposals (ACPs) following the CAP1616 process with all three proposals now at Stage 3.

If you're interested in finding out how we have developed the proposals, please use the links below to the respective pages on the CAA's airspace change portal:



[Edinburgh Airport ACP-2019-32](#)

[Glasgow Airport ACP-2019-046](#)

[NATS ACP-2019-74](#)

Three Airspace Change Proposals (ACPs)

Scottish Airspace Modernisation		
Edinburgh Airport	Glasgow Airport	NATS
Changes to arrival and departure routes to introduce PBN and change the Controlled Airspace for Edinburgh Airport to allow use of the Firth of Forth, avoiding flying over communities. • RNAV 1 (DME/DME or GNSS) arrival transitions • RNP approach procedures and associated MAPs • RNAV 1/RNP 1 Standard Instrument departures and associated NPRs	Modernisation of arrival and departure routes to include the introduction of: • RNAV 1 (DME/DME or GNSS) approach transitions • RNP Instrument Approach Procedures • RNAV 1 (DME/DME or GNSS) / RNP 1+RF Standard Instrument departures	NATS is proposing to systemise airspace above airport arrival and departures routes by creating a structured route network. This will allow aircraft to follow defined flight paths through a large area of airspace at and above 7000ft. Systemised airspace enables aircraft to fly more efficient flight profiles and make their routes more predictable. This in turn will reduce the number of tactical interventions Air Traffic Controllers need to make and reduce holding and airborne delay.
Controlled Airspace Proposal below 7000ft		Controlled Airspace Proposal at and above 7000ft
<u>Edinburgh Airport ACP-2019-32</u>	<u>Glasgow Airport ACP-2019-046</u>	<u>NATS ACP-2019-74</u>

Scottish Airspace Modernisation

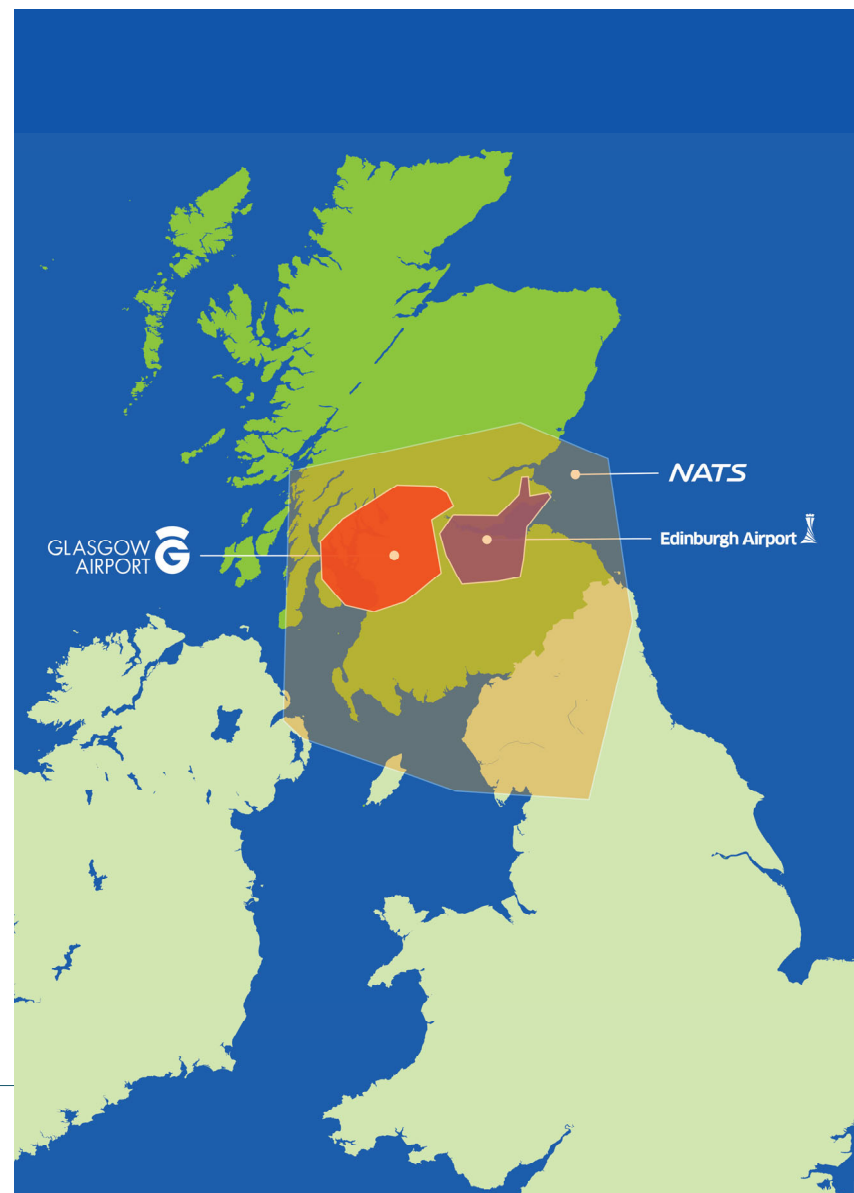


Scottish Airspace Modernisation

Scottish Airspace Modernisation is a proposal formed between Edinburgh Airport, Glasgow Airport and NATS to meet the Government's AMS.

The three ACPs are being progressed independently, however there are design interdependencies between the proposals.

Edinburgh Airport, Glasgow Airport and NATS have worked closely together to develop this Scottish Airspace Modernisation proposal and to deliver this coordinated consultation.



The proposed changes will enable...



equivalent to the emissions from the power used by **over 5,000 UK homes**^I



More direct routes save 30 minutes of flying time per day – equivalent to flying around the world

3.5 times^{II}
each year



Smarter airspace design **reduces workload for pilots** and controllers, supporting safe, efficient operations



Over **600 NM³** of controlled airspace below 7,000ft released – **improving access for recreational flying**

* Figures based on detailed modelling to assess the potential enabled impacts of the proposed cluster-wide design.

^I <https://www.theccc.org.uk/wp-content/uploads/2019/06/ESC-Living-Carbon-Free-CCC.pdf> ^{II} Based on an enabled reduction of 79,000 nm per year ^{III} Baseline design average holding time per flight in hold 227s. New design average holding time per flight in hold 212s.

Complex Design

This picture demonstrates the scale of challenge and its complexity.

Let's break the design down

NATS: Airspace Design Proposal

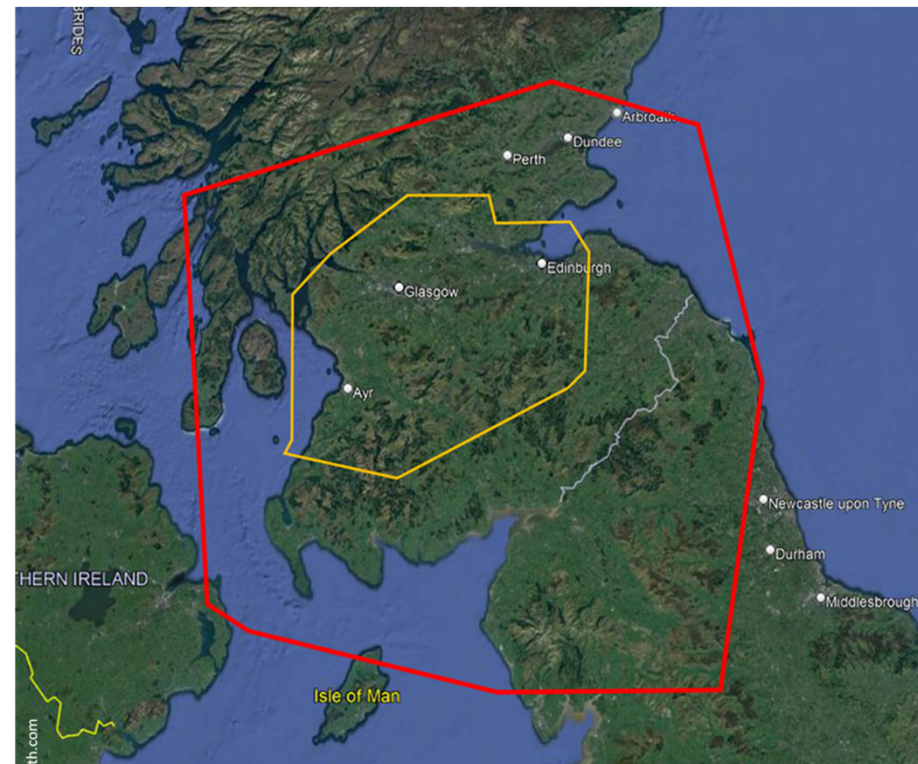


Scope of the NATS changes

NATS is responsible for connecting the Edinburgh Airport and Glasgow Airport arrival and departure routes to the airspace network.

Other changes include but are not limited to:

- The airspace and route structures at and above 7000ft.
- The interface with neighbouring ANSPs.
- The interface with military airspace at and above 7000ft.
- The interface with other airports in the ScTMA.
- Any changes outside this area to enable those changes within.



Area of scope: Lateral extent of the ScTMA ACP changes (Red Shape). Extant ScTMA (Orange Shape).

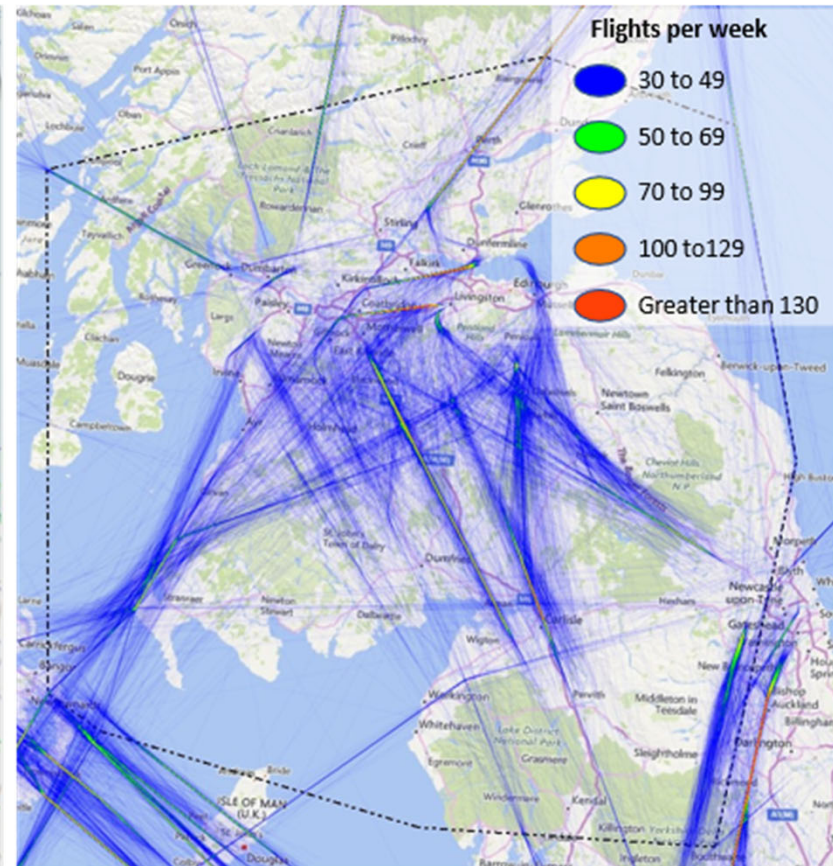
Constraints & Considerations

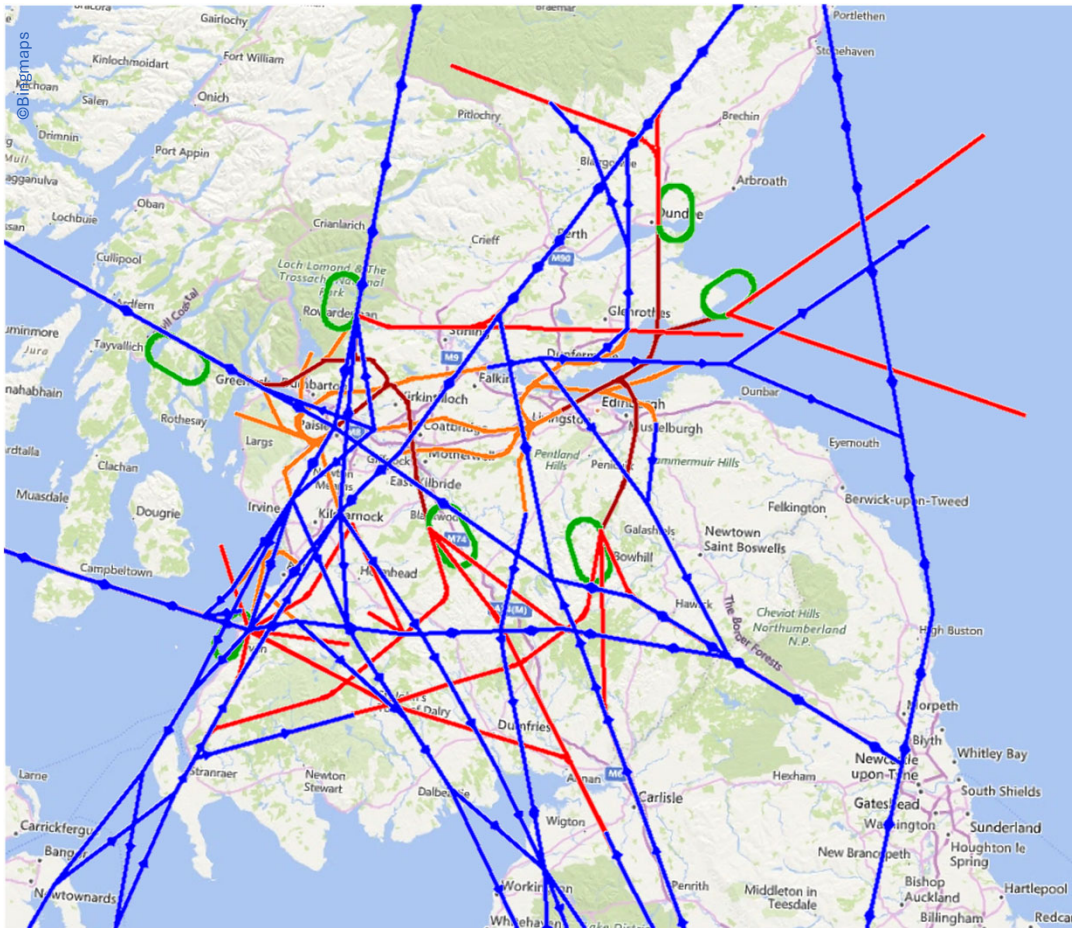
- Airfields and their operations below 7,000ft
- Danger/ Restricted or Prohibited Areas
- GA/BGA operations
- CAA Policies and Regulations

Combined



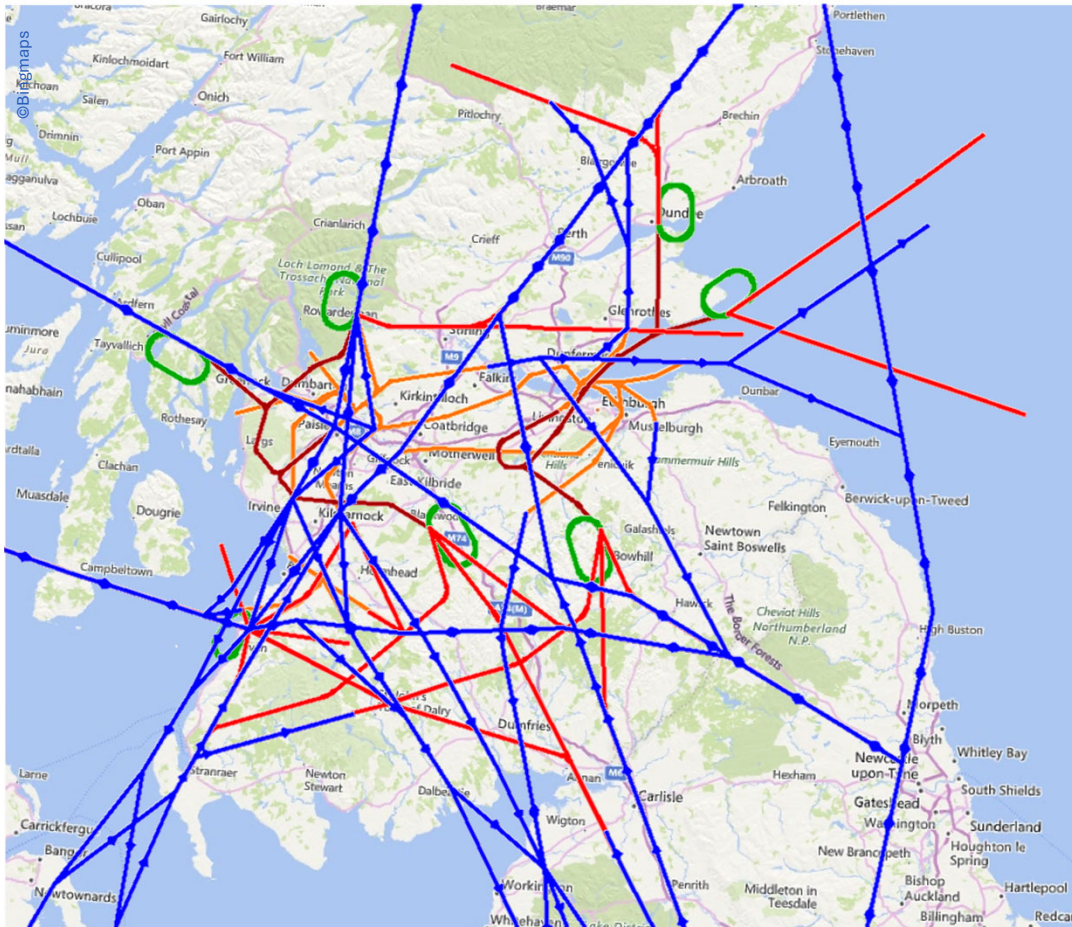
Current Airspace





Design Summary: Westerly Operations

- ATS Routes
- STARs
- Holds
- Arrival Transitions
- SIDs



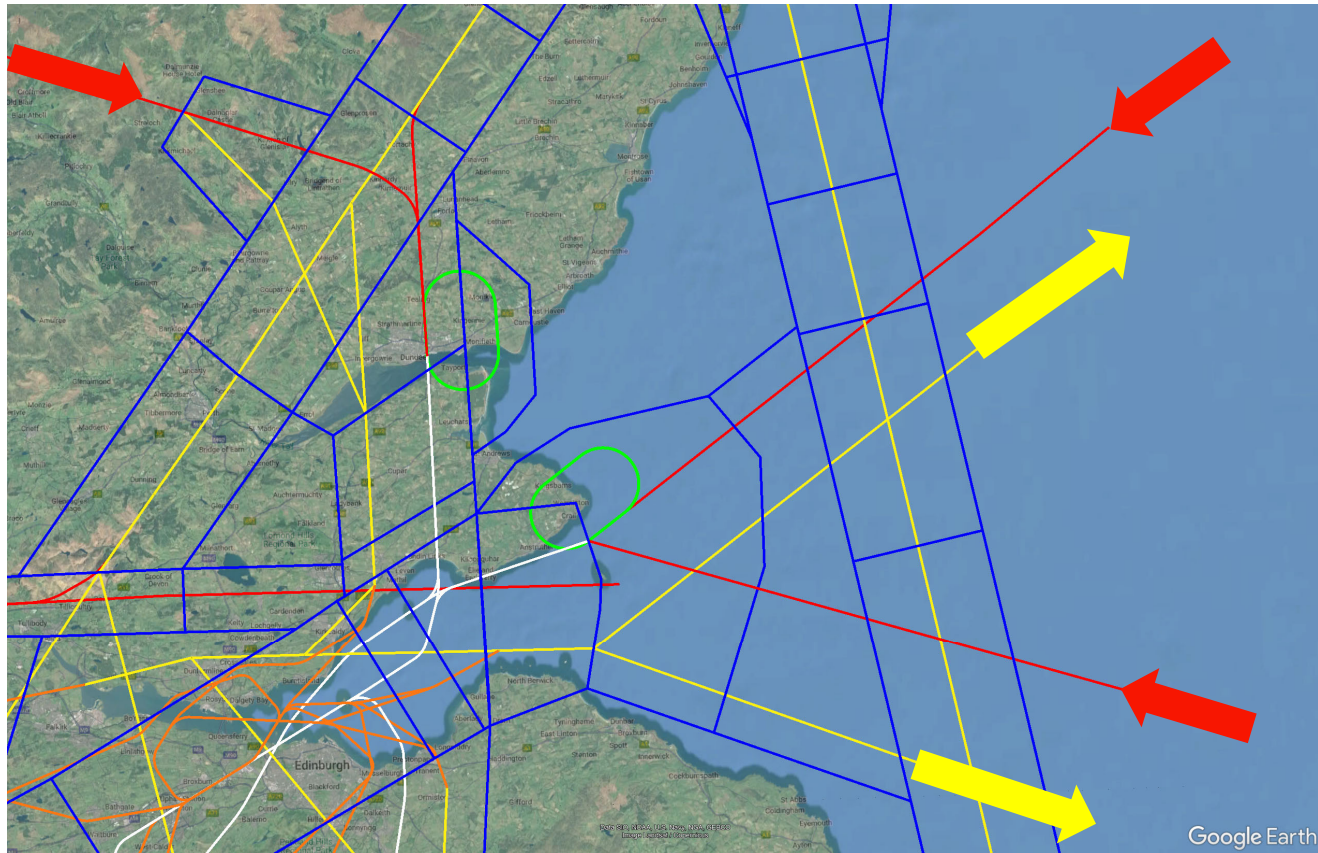
Design Summary: Easterly Operations

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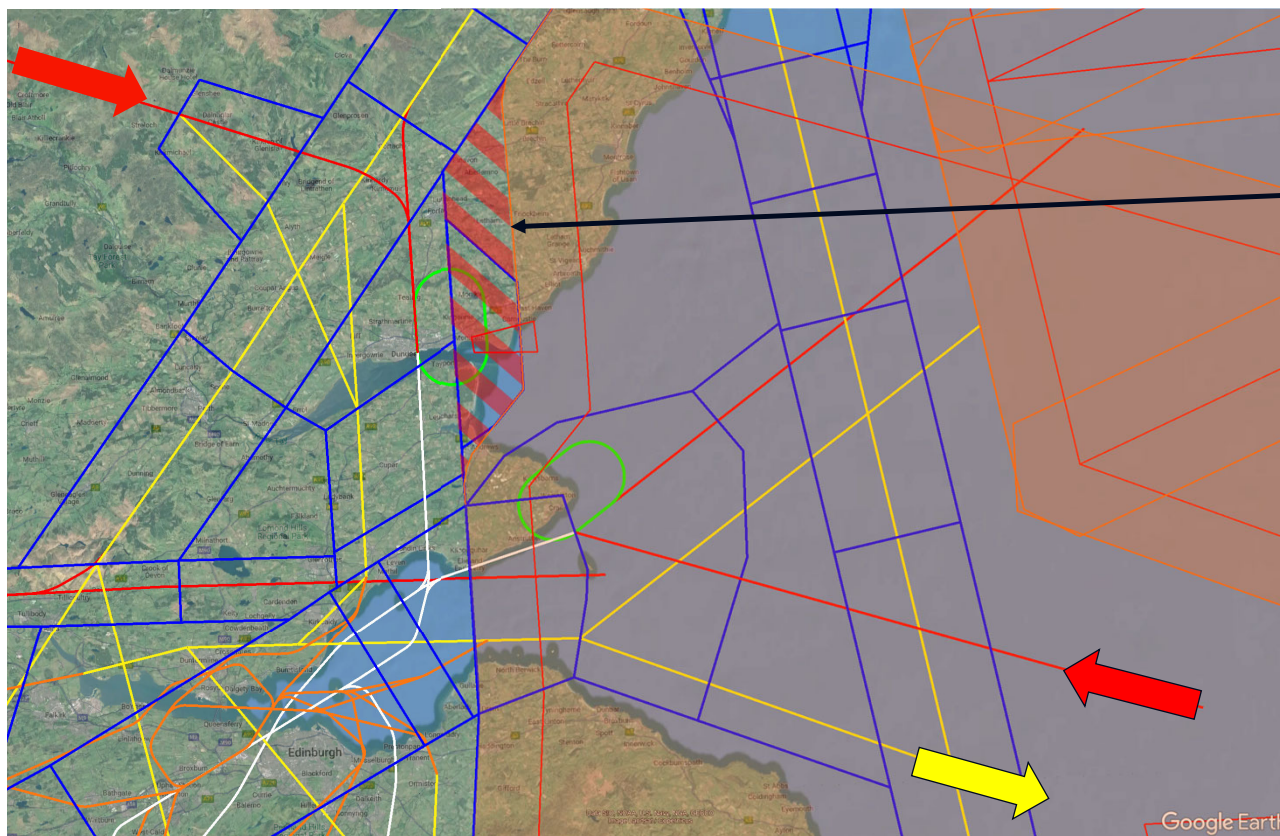
New network connectivity

NATS

Scottish Airspace
Modernisation



New network connectivity: Firth of Forth & Military Activity



Revised EGD514
boundary



©Googleearth.com

Terminal Holds

- Current Edinburgh holds
- Proposed holds for Edinburgh
- Current Glasgow holds
- Proposed holds for Glasgow

NATS: Changes to Controlled Airspace



Southwest Quadrant

NATS

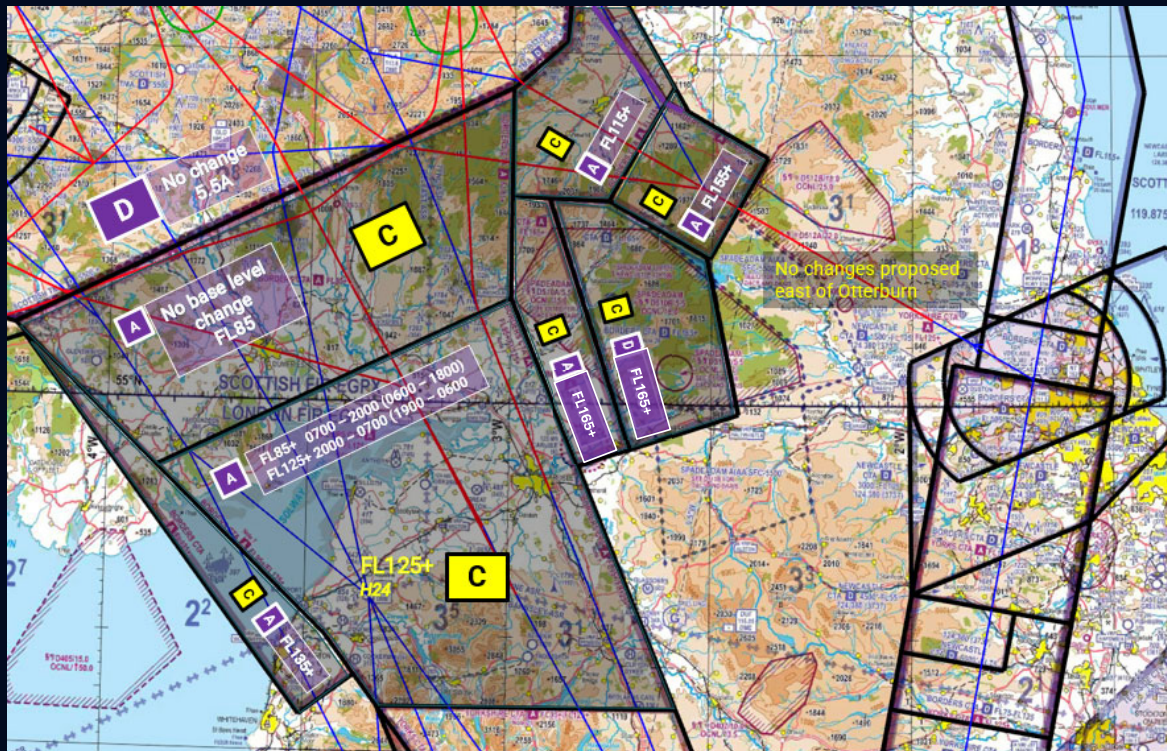
Scottish Airspace
Modernisation

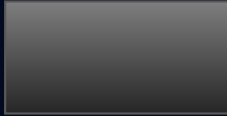


- FL125+ A Current Airspace base and classification
- FL125+ A Proposed Airspace base and classification
- Proposed Airspace Change

Specific changes described on map

Southeast Quadrant

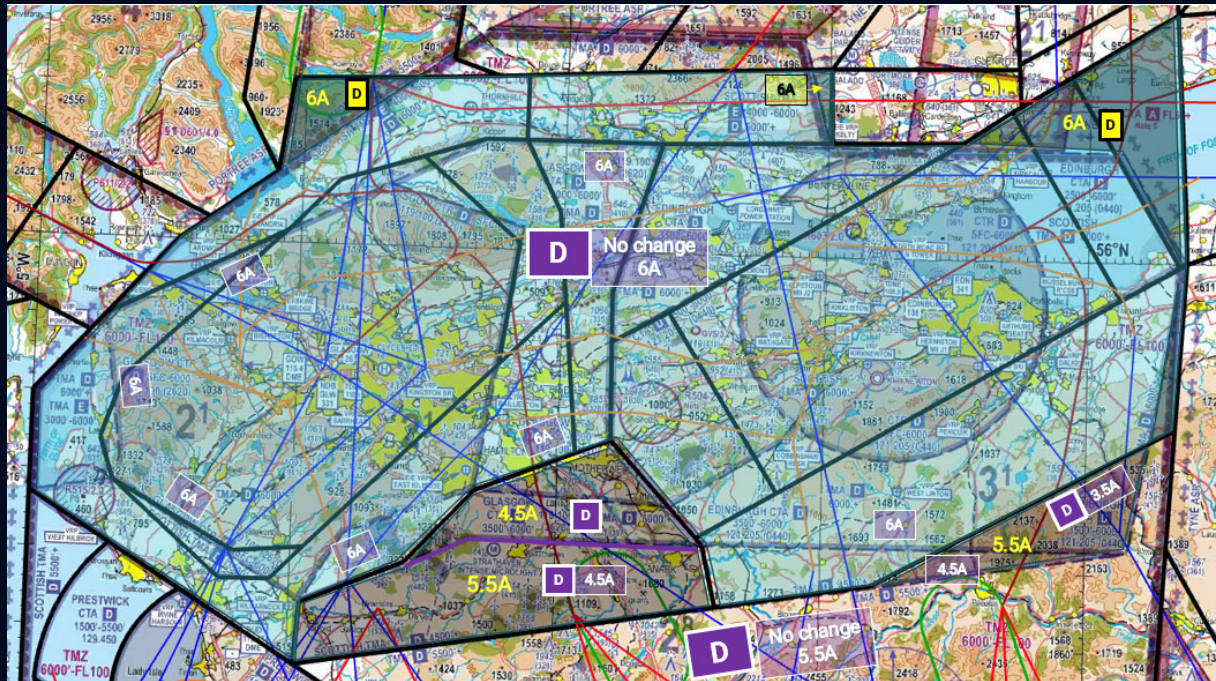


- FL125+  Current Airspace Design
- FL125+  Proposed Airspace Design
-  Proposed Airspace Change

Specific changes described on map

No changes proposed south of Borders CTA 3 & 8

Central Belt

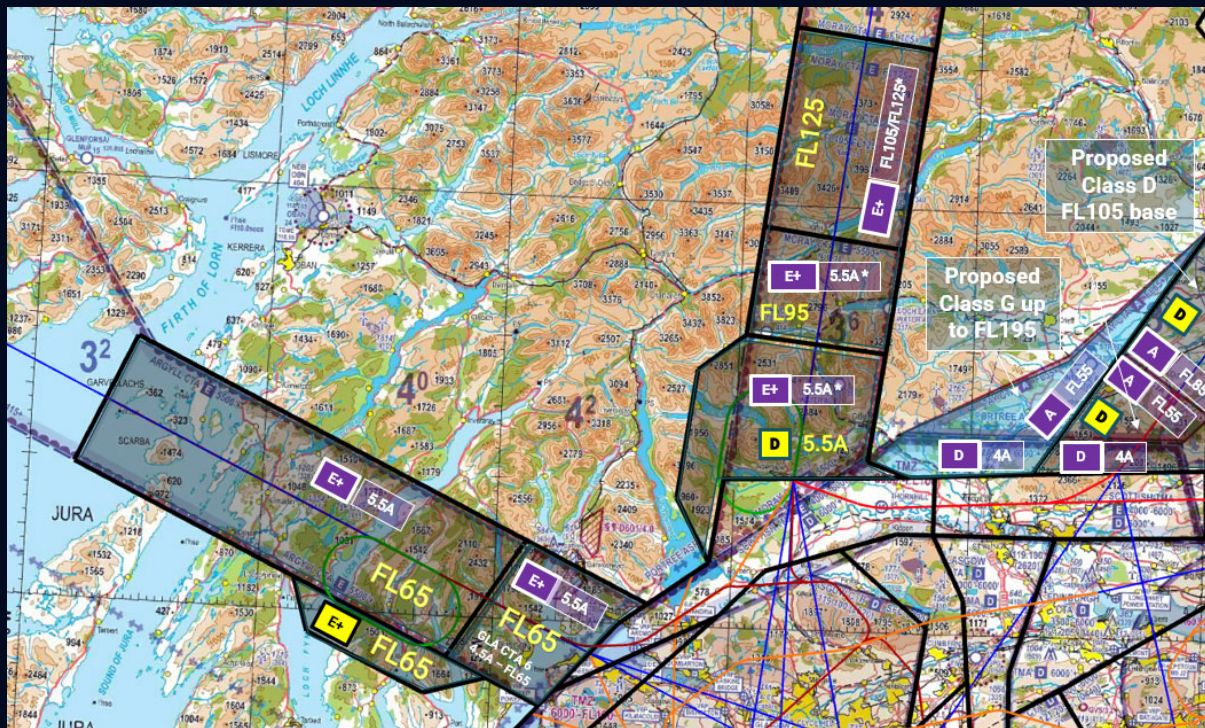


- FL125+  Current Airspace Design
- FL125+  Proposed Airspace Design
-  Proposed Airspace Change

Specific changes described on map

Full details of changes below 6A presented by Glasgow and Edinburgh Airports

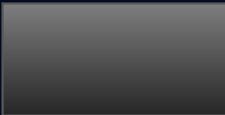
Northwest Quadrant



* MOR CTA 13

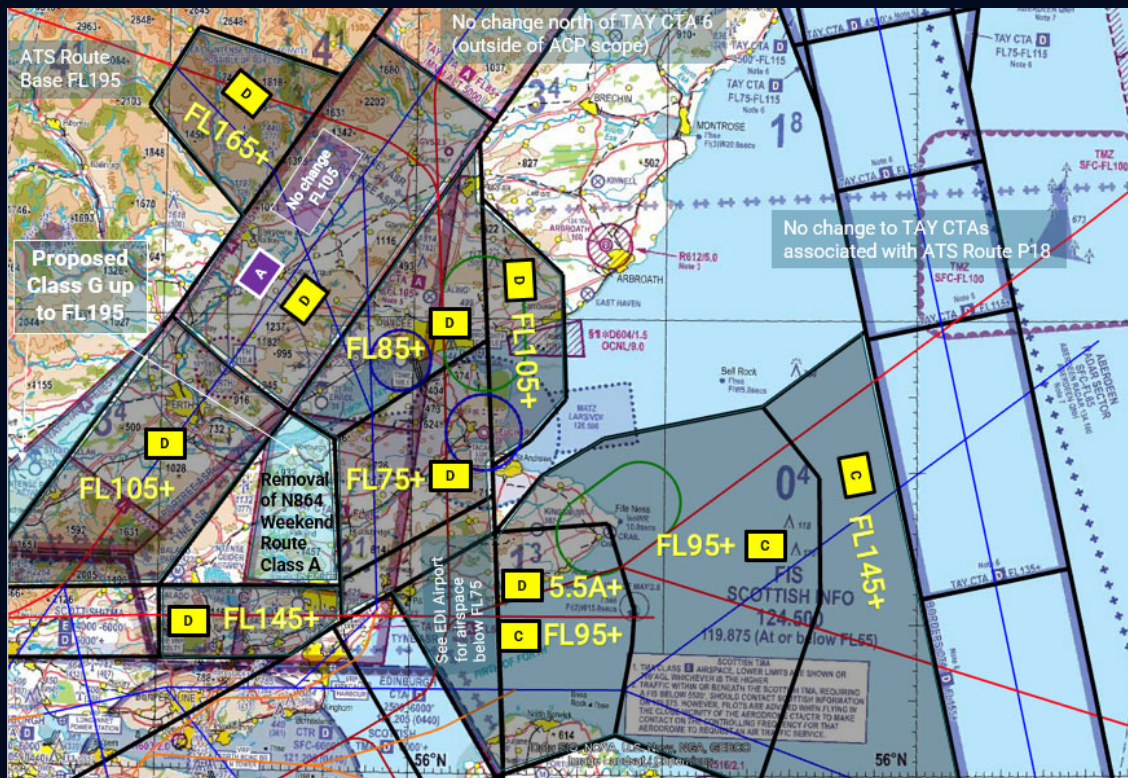
* MOR CTA 12

Activation of the airspace will be during notified activation of EGD713/EGD713Z for Exercise Joint Warrior and other large military exercises to facilitate access to the ATS Route N560.

- FL125+  Current Airspace Design
- FL125+  Proposed Airspace Design
-  Proposed Airspace Change

Specific changes described on map

Northeast Quadrant



- FL125+  Current Airspace Design
- FL125+  Proposed Airspace Design
-  Proposed Airspace Change

Specific changes described on map

TRA's (Gliding)

Current



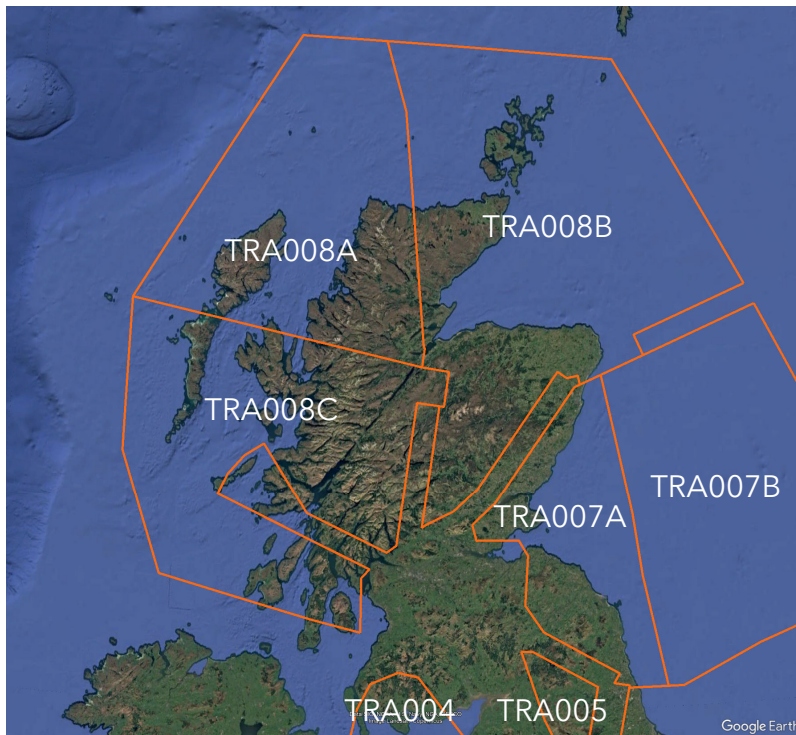
TRA (G):
FL195 to FL245
Class C Airspace

Proposed

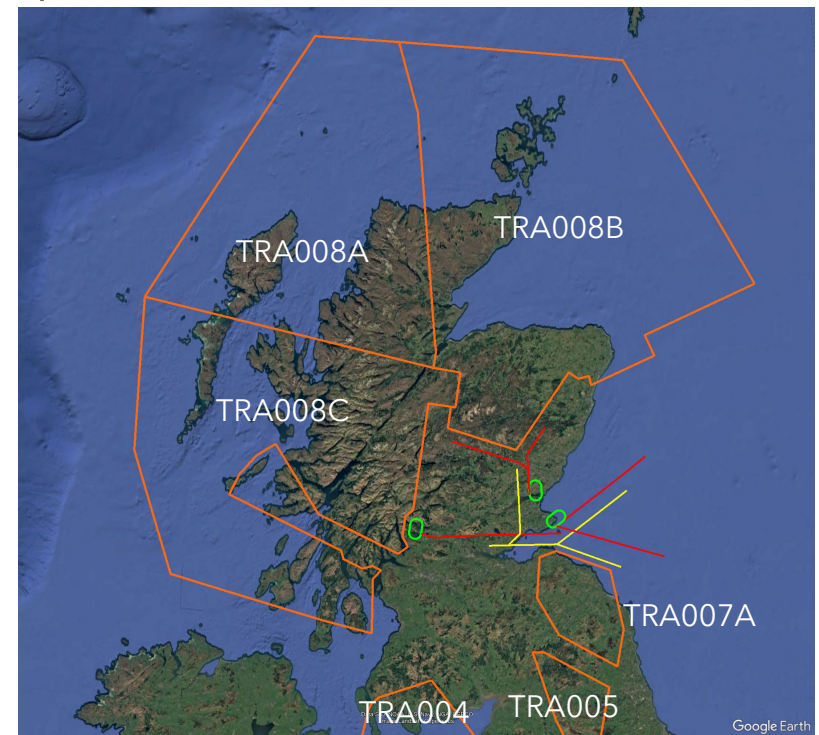


Temporary Reserved Areas

Current



Proposed



TRA FL195 to FL245 - Class C Airspace

Controlled Airspace

Overall benefits and impacts



Within UK Airspace, all airspace above FL195 (c.19500 ft) is Class C. Therefore, any changes to controlled airspace will only apply between sea level and FL195.

The controlled airspace story is complicated as there are volumes, types and locations to consider:

Design Aspects Increasing CAS	Design Aspects Decreasing CAS
Firth of Forth connectivity over the North Sea	Redesign of Airport CTRs
All procedures are now contained with CAS	Rationalisation of existing CTA Lateral Limits
Airspace has been lowered to facilitate improved vertical profiles	Rationalisation of Existing CTA Bases

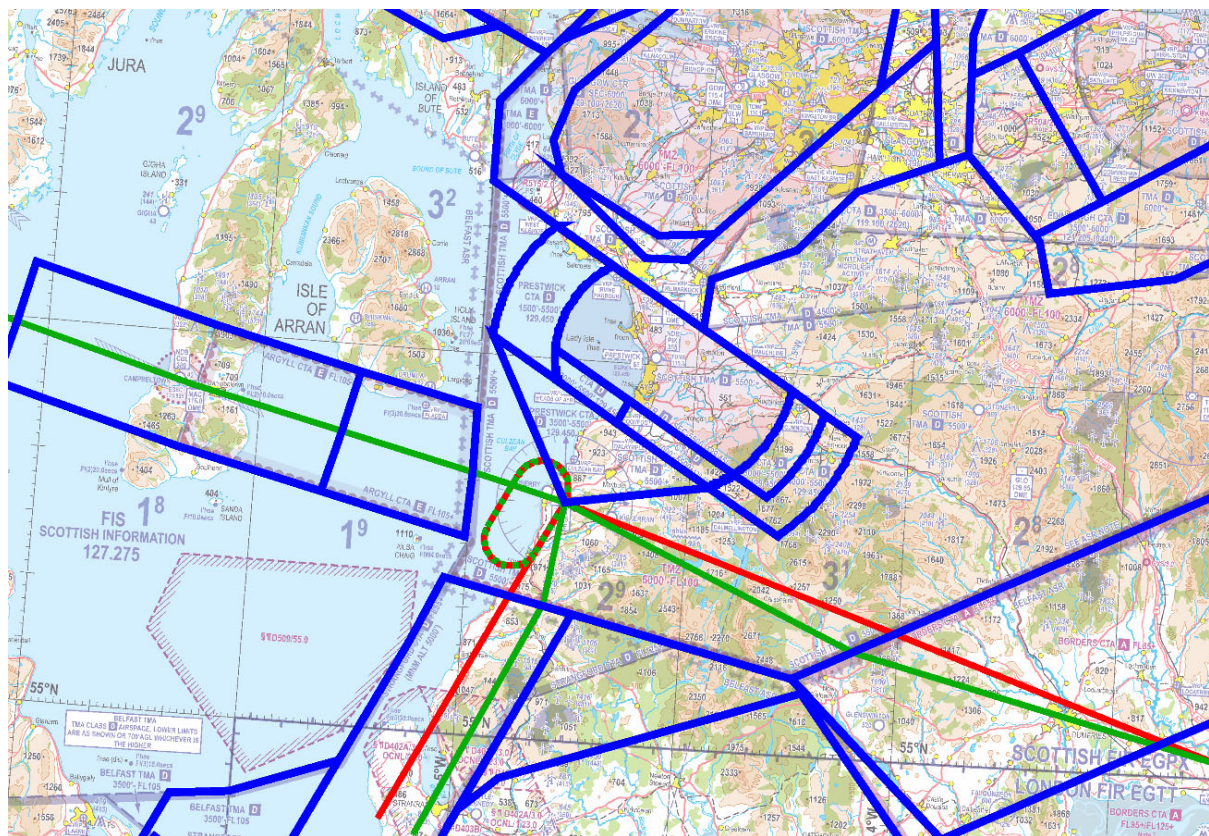
In addition, significant quantities of Class A have been reclassified.

The proposed ScTMA design requires a net increase in CAS volume. However, most new CAS is over the sea and above 7000ft. Below 7000ft there is a net reduction in CAS.

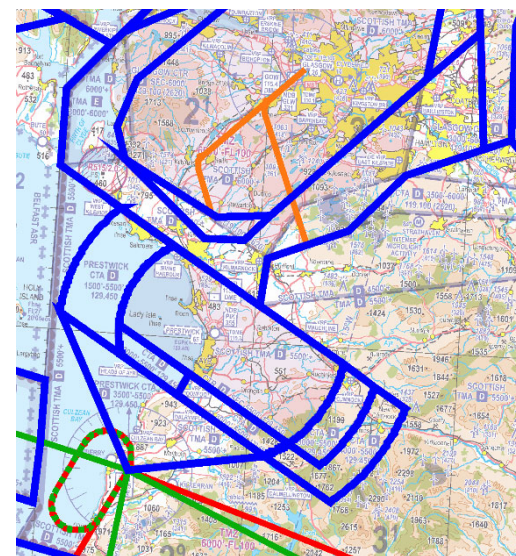
NATS: Access to and egress from other airports



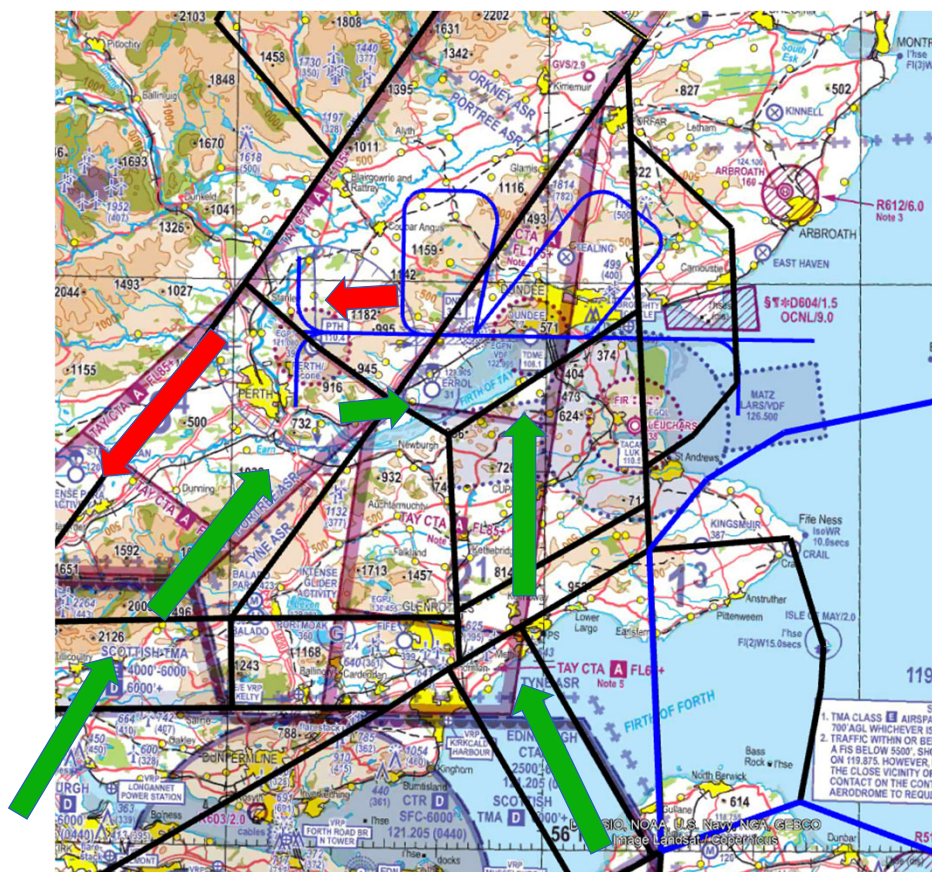
Prestwick Airport



- STARs adjusted above 7000ft to connect with proposed network design
- New STAR from the west to TRN
- No changes below 7000ft



Dundee Airport

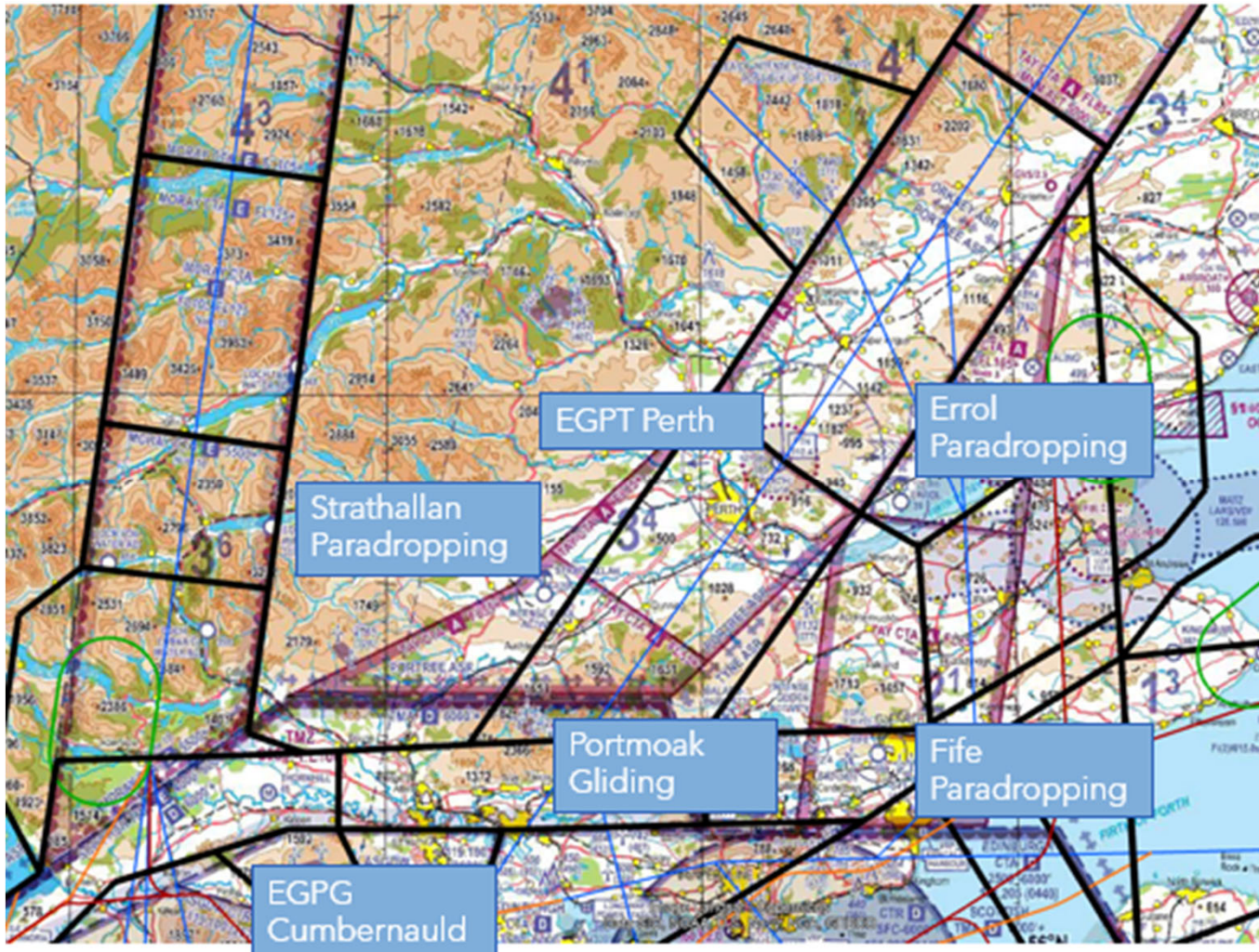


- No changes to procedures below 7000ft - NATS will continue to route traffic to DND or IAP as coordinated with Dundee ATC;
- Arrivals can continue to route via Leven area from the south;
- Arrivals continue to route via GRICE - PTH from the southwest;
- No changes to arrivals from the north or west;
- Departures to the south/southwest route via PTH - GRICE to join controlled airspace
- Increased base levels and realignment of Tay CTA 1
- Reclassified Tay CTA 1 and 6

Interfaces with other airports

- Aberdeen – no interface route changes, likely sectorisation impact
- Belfast TMA – Strangford CTA ATS routes updated
- Dublin TMA – Strangford CTA ATS routes updated
- Inverness – no interface change, likely sectorisation impact
- Leuchars – Inbound GAT aircraft will follow the same route as Dundee traffic, within CAS and then split when north of the TMA.

Other airspace users



What does the NATS design deliver?

- Integrated design between all three ACP sponsors
- Balances the demands of all users
- Enhances safety by 'systemising' interactions between airport arrivals and departures, ensuring continuous climbs and descents
- Proposes new entry/exit point via the Firth of Forth
- Enables flights to flight plan more direct routes to destination, enabling fuel/CO₂e savings per flight
- Reclassification of controlled airspace from A to D north of the central belt
- Raised controlled airspace base levels in areas of importance to GA
- Balances environmental benefits with MoD operational requirements

Fuel Burn & CO₂ Analysis Sample



Fuel Burn/CO₂ Analysis - Methodology



It is important to note that the CO₂ and fuel calculations are based on flight plan not actual trajectories.

While it is recognised modelling the planned tracks may vary from the actual tracks day to day, the process used and the industry standard BADA performance database provides an appropriate assessment of the impact of a change.

Tactical lateral shortcuts and, less often, lateral track extensions, are subject to a myriad of factors including other aircraft, military activity and weather and so for large scale airspace changes it is not possible to model this accurately or forecast exactly how this will change.

Actual trajectory changes will be analysed as part of Stage 7 (post implementation review) to ensure the AMS aims (right) are met.

Environmental sustainability will be an overarching principle applied through all airspace modernisation activities. Modernisation should deliver the Government's key environmental objectives with respect to air navigation as set out in the Government's Air Navigation Guidance and, in doing so, will take account of the interests of all stakeholders affected by the use of airspace.

Fuel Burn/CO₂ Analysis - Edinburgh Airport City Pairs (2027)



Impacted Route	Arrivals Fuel Impact (T)	Arrivals CO2e Impact (T)	Departures Fuel Impact (T)	Departures CO2e (T)
Heathrow	62	199	18	57
Dublin (Props & Jets)	56	176	262	833
Stansted	11	37	30	97
London City	8	24	18	55
Amsterdam	43	136	207	657
Belfast International	42	133	12	37
Paris Charles de Gaulle	10	33	8	25
Gatwick	28	90	1	3
Bristol	13	41	17	55
Southampton	8	25	23	72

Fuel Burn/CO₂ Analysis - Glasgow Airport City Pairs (2027)



Impacted Route	Arrivals Fuel Impact (T)	Arrivals CO2e Impact (T)	Departures Fuel Impact (T)	Departures CO2e (T)
Heathrow	33	106	245	778
Dublin	32	102	87	276
Gatwick	29	94	111	354
Amsterdam	14	46	78	248
London City	33	104	94	298
Belfast International	28	90	61	193
Bristol	13	41	82	258
Stornoway	49	157	-	-
Luton	16	54	100	320

Responding to this consultation



Have your say.



This consultation runs from **20th October 2025 to 25th January 2026** (23:59).

It is important that all three sponsors receive consultation responses from you (where applicable).

For information on the three ACP proposals, and links to where to respond, please visit:

www.scottishairspacemodernisation.co.uk

Each ACP sponsor has an email address for any questions or enquiries, as follows:

- NATS: airspaceconsultation@nats.co.uk
- Edinburgh Airport: whats-your-view@edinburghairport.com
- Glasgow Airport: airspace@glasgowairport.co.uk



What happens after consultation?

Responses are collated and reviewed.

This may result in changes to the design.

Review

The three sponsors will submit updated ACP proposals to the CAA.

Submit

With our submission, we will publish documents explaining our categorisation, our analysis and our final design.

Explain

If approved, we plan to implement the change not before 2027.

Implement



GLASGOW
AIRPORT



NATS

Edinburgh Airport



Thank You

www.scottishairspacemodernisation.co.uk



 **Scottish Airspace
Modernisation**

