

BVLOS Trial in Unsegregated Airspace

Stakeholder Engagement
ACP-2024-001

July 2026

NATS
FLYLOGIX 

Project Background



About Us

NATS Services have partnered with an uncrewed aircraft system (UAS) operator Flylogix to conduct airspace uncrewed aircraft (UA) flight trials over the North Sea. The objective of the trial is to generate a cooperative and recognised airspace environment and to safely integrate uncrewed with crewed airspace operations.

Project Summary

This airspace change proposal (ACP) is part of a project called Enduring-Integrated Traffic Management (E-ITM). E-ITM is the framework NATS are developing to govern the integration of uncrewed aircraft in unsegregated airspace. This ACP proposes the operation of a beyond visual line of sight (BVLOS) aircraft within a Temporary Reserved Area (TRA) receiving an air traffic service from an Air Traffic Controller.

Our intent is to request a TRA, with a Transponder Mandatory Zone (TMZ) overlay. This will allow Flylogix, to conduct uncrewed BVLOS operations at 800ft, primarily over water in unsegregated airspace to support the oil and gas industry.

Previous Engagement

In October - November 2024, NATS engaged with stakeholders regarding this ACP. Due to the complexity of the developing regulatory framework this project has been delayed until this point.



Figure: The Flylogix FX2

E-ITM TRIAL OBJECTIVES



The E-ITM trial aim to evaluate the effectiveness of airspace, surveillance, communications and safety services required to support scalable BVLOS operations within the UK airspace environment.



01

AIRSPACE SERVICES

- Dynamic Airspace Management
- Operational Volume Activation/Deactivation
- Airspace Compliance
- Altitude Correction



02

SURVEILLANCE SERVICES

- UAS Identification
- Conformance Monitoring
- Surveillance Performance
- Remote Pilot Situational Awareness



03

TRAFFIC & DECONFLICTION SERVICES

- Traffic Information Provision
- Crewed Aircraft Avoidance
- Blue-Light Deconfliction
- Non-Cooperative Aircraft Management



04

COMMUNICATIONS & COORDINATION SERVICES

- Communication Performance
- Communication Quality
- Communication Failure Recovery
- Multi-Stakeholder Coordination



05

SAFETY ASSURANCE

- Flight Termination & Recovery
- Alerting Services
- Human Factors Assessment
- Detect and Avoid



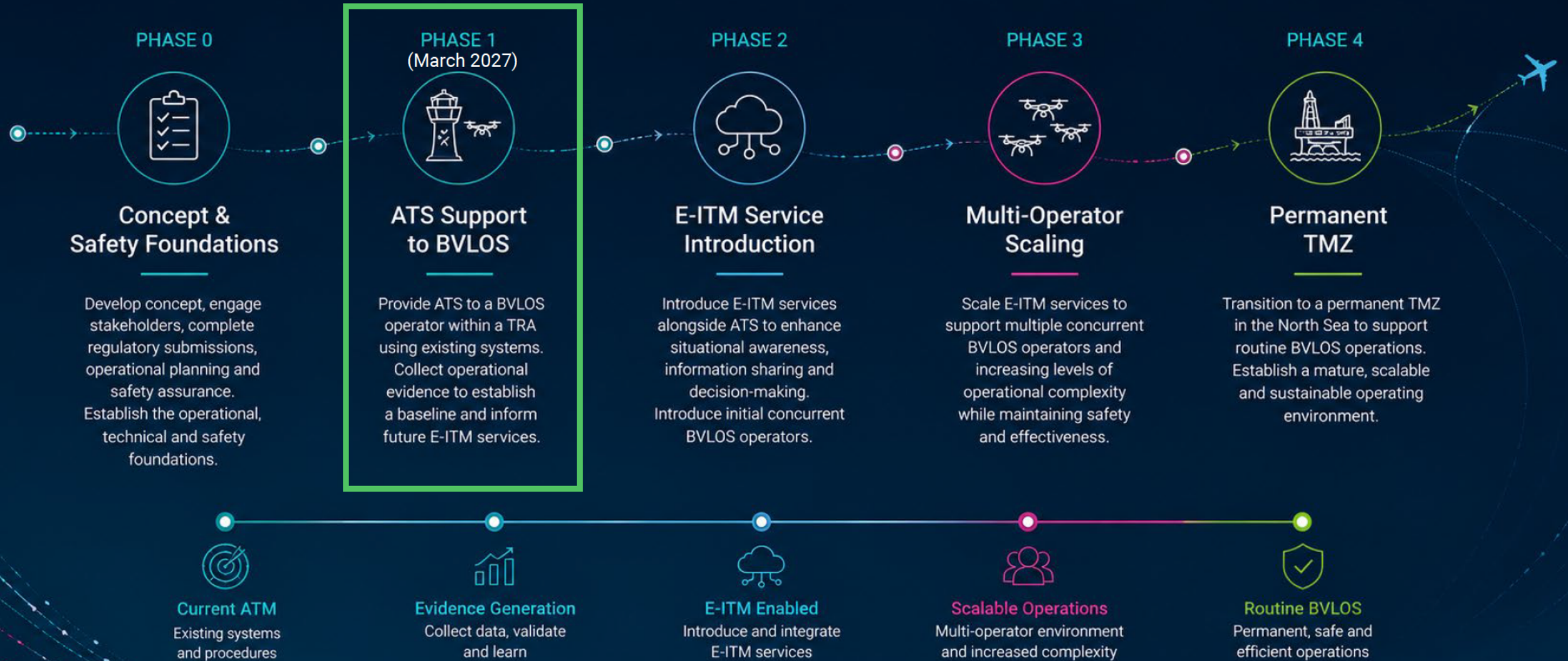
E-ITM TRIAL: Enabling safe, scalable and efficient BVLOS operations through collaboration and innovation.



E-ITM Programme Roadmap



Evolving airspace services to enable safe, scalable
BVLOS operations in the North Sea



About this Engagement



- **This engagement is about Phase 1 of the E-ITM Programme, under ACP-2024-001.**
- NATS are proposing a 3-year trial period*, to allow all phases of the programme to be completed within one ACP.
- Future phases of the programme will be detailed and communicated to stakeholders in due course. Each new phase will include updated design / method of operations, impact assessments, and full engagement.
- If progress within a phase identifies the need for changes to the TRA design or method of operations (MOPs) then stakeholders will be engaged accordingly.

* A 3-year trial period was proposed within the Department for Transport (DfT)'s Air Navigation Guidance and Directive consultation in November 2025. Whilst this has not yet been published, NATS are working based on this being accepted and the updated DfT documents being published prior to the submission of this ACP in November 2026. This approach has been discussed with the CAA.

Current Day Scenario

Operations

Airspace operations in the North Sea are managed by Aberdeen ATC. They provide a deconfliction service in HELS sector, and a traffic service in REBROS sector.

Primarily helicopter operations under Instrument Flight Rules (IFR) supporting the offshore energy industry. Other users include the Maritime and Coastguard Agency (MCA) and the Ministry of Defence (MoD).

Flights to offshore installations take place 24/7. However, they are typically Monday to Friday. On busy days there could be ~100 return trips. In June 2026, there was an average of 71 flights per day on weekdays, and 16 on weekends within the impacted area. The June average was 55 flights per day.

Flylogix currently operate flights from Cruden Bay via TDA structures. Between March and mid-June 2026, fourteen operating days have occurred. Flights are not split evenly over the period and are dependant operational requirements, weather and other factors.

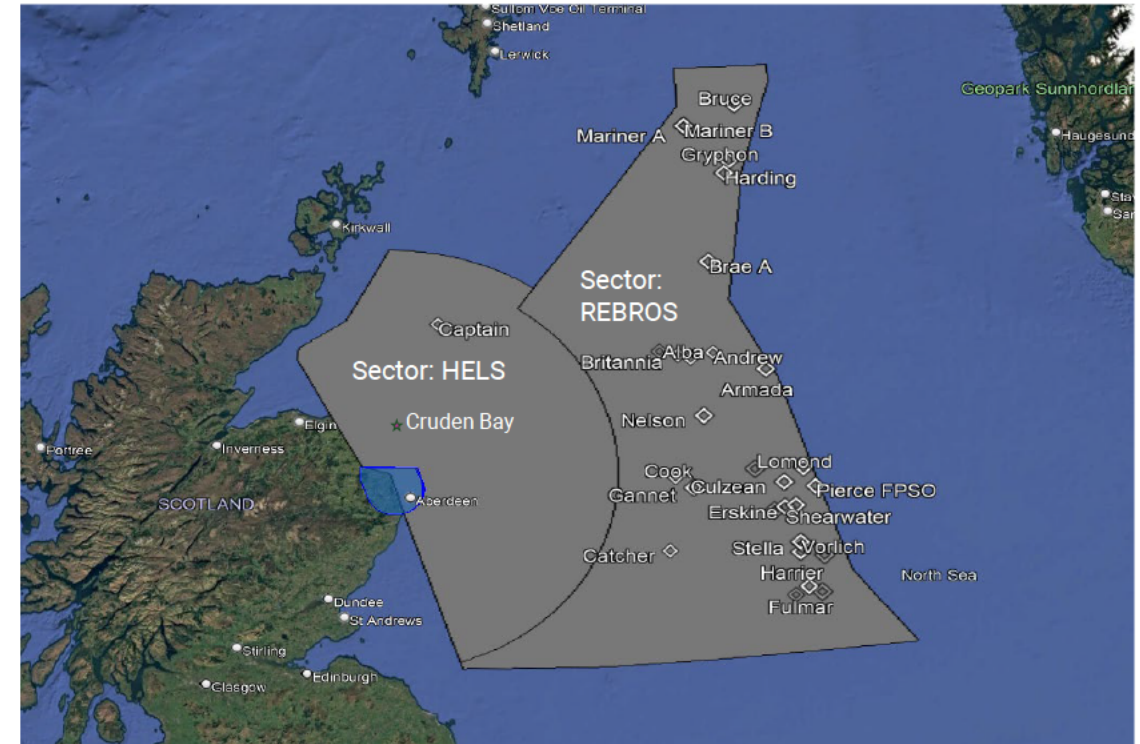


Figure: Aberdeen CTR (blue polygon); ATC sectors (grey polygons); take-off / landing site at Cruden Bay (green star); oil rigs (grey diamonds). Background map: Google Earth Pro

Current Day Scenario Continued

Environmental

In proximity to Cruden Bay, the following areas are of note...

Special protection area (SPA) and special area of conservation (SAC):

- “Buchan Ness to Collieston Coast”
- “Ythan Estuary, Sands of Forvie and Meikle Loch”

Special area of conservation (SAC):

- “Buchan Ness to Collieston Coast”
- “Ythan Estuary, Sands of Forvie and Meikle Loch”

Ramsar site:

- “Ythan Estuary and Meikle Loch”

Cruden Bay Golf Club is a links golf course between the take-off and landing-site and the current TDA. For noise / tranquillity reasons, the course is not overflown.

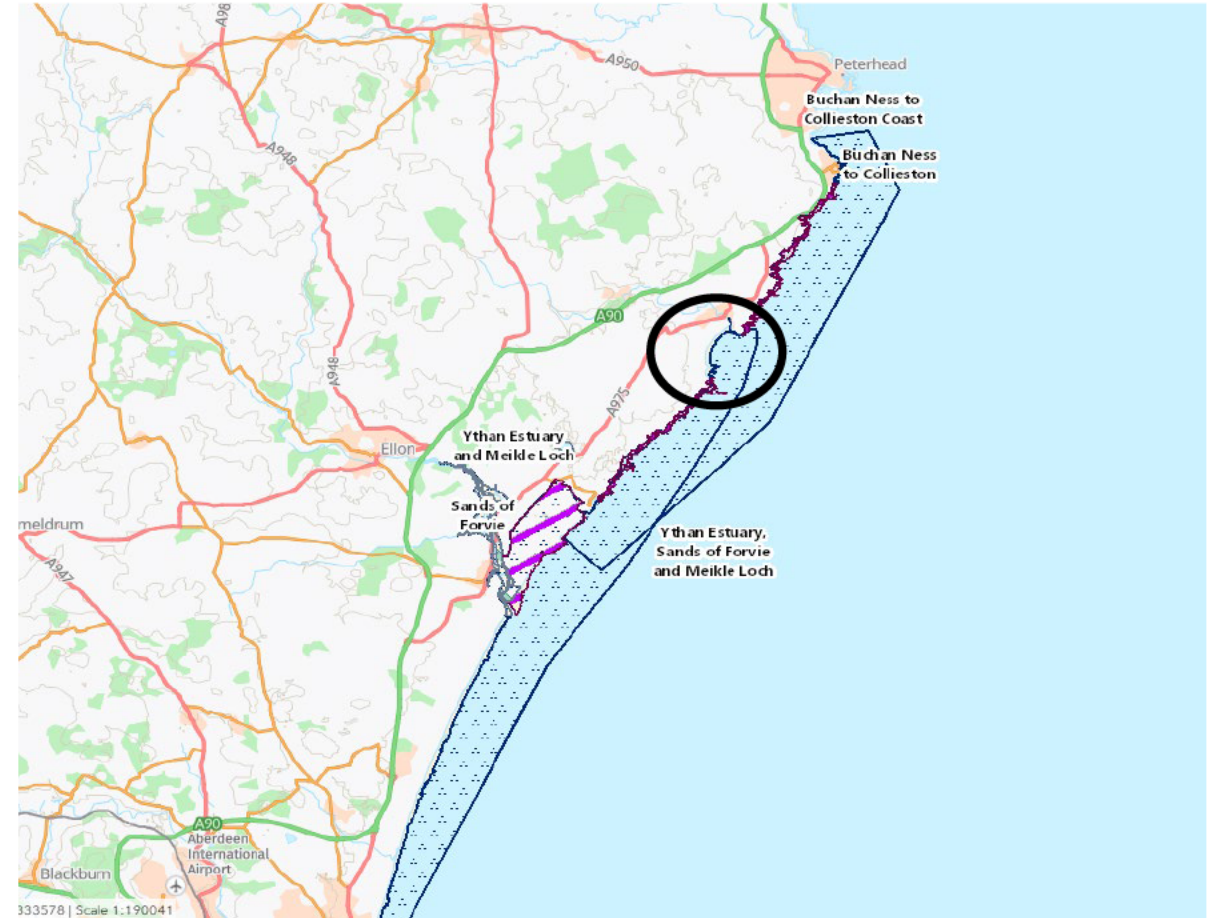
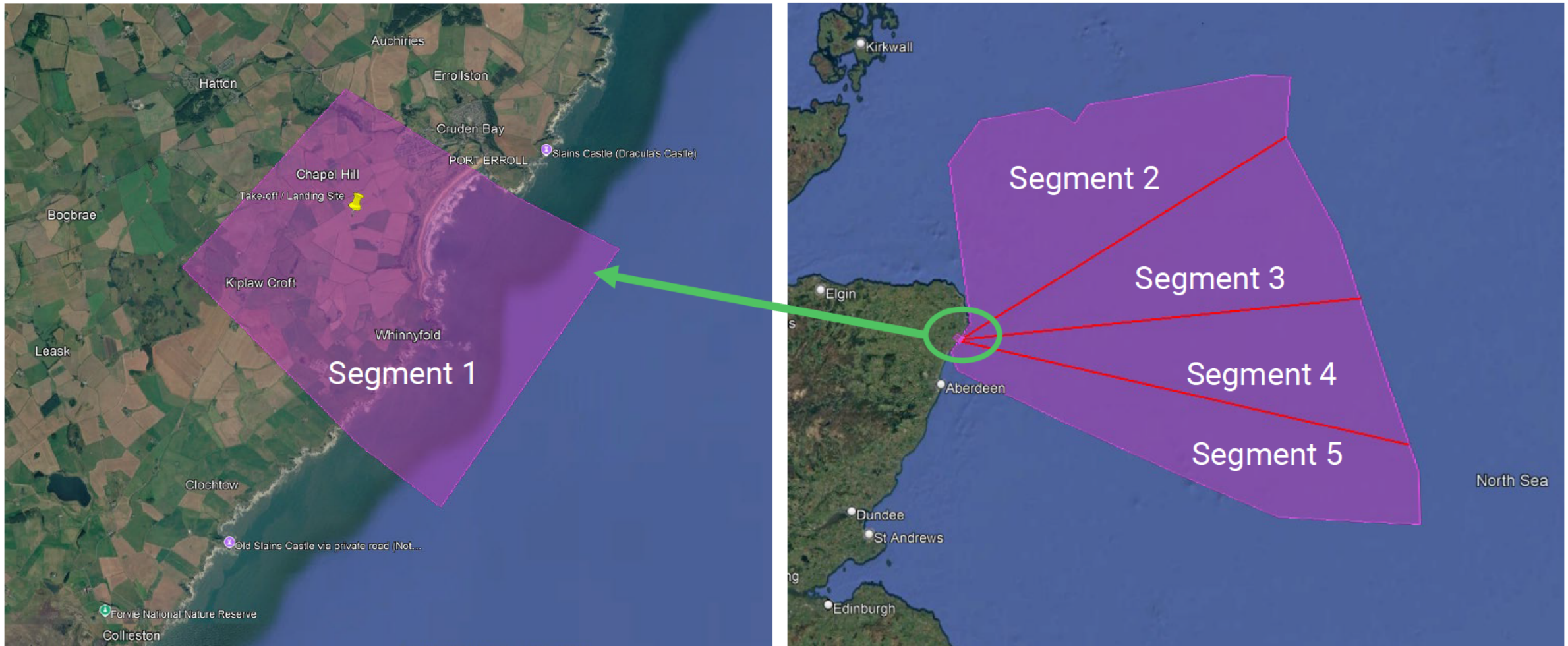


Figure: European sites in proximity to the take-off / landing site (circled in black). Source: DEFRA's Magic Maps (May 2026)

Proposed Airspace Design (Phase 1)

Figure: Proposed airspace design, split into five segments. Background map: Google Earth Pro



One or more segments may be activated at any time, depending on the operation on the day.

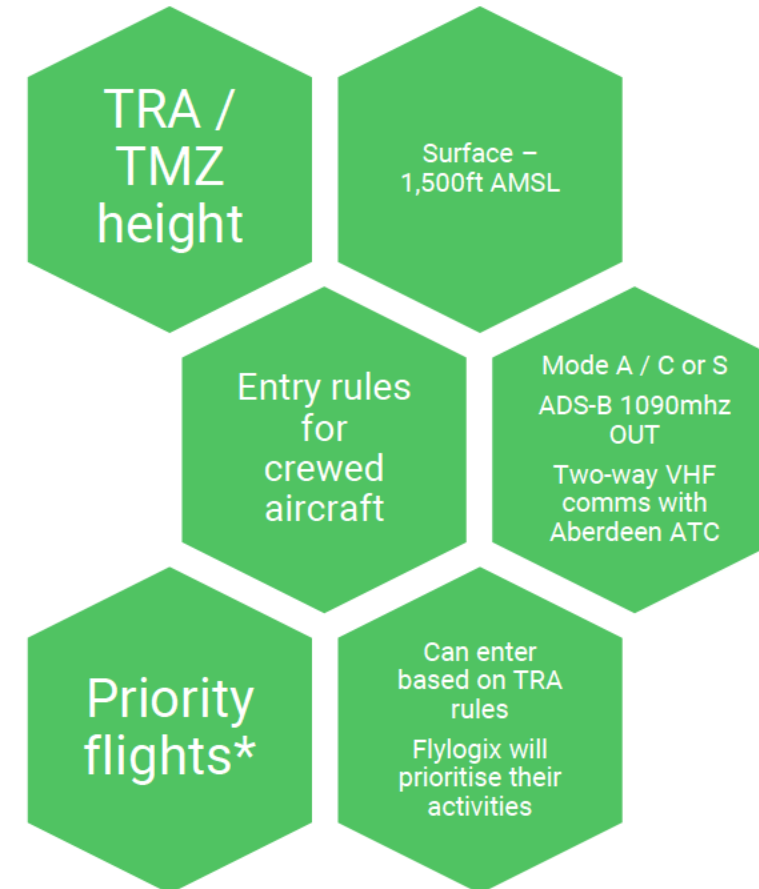
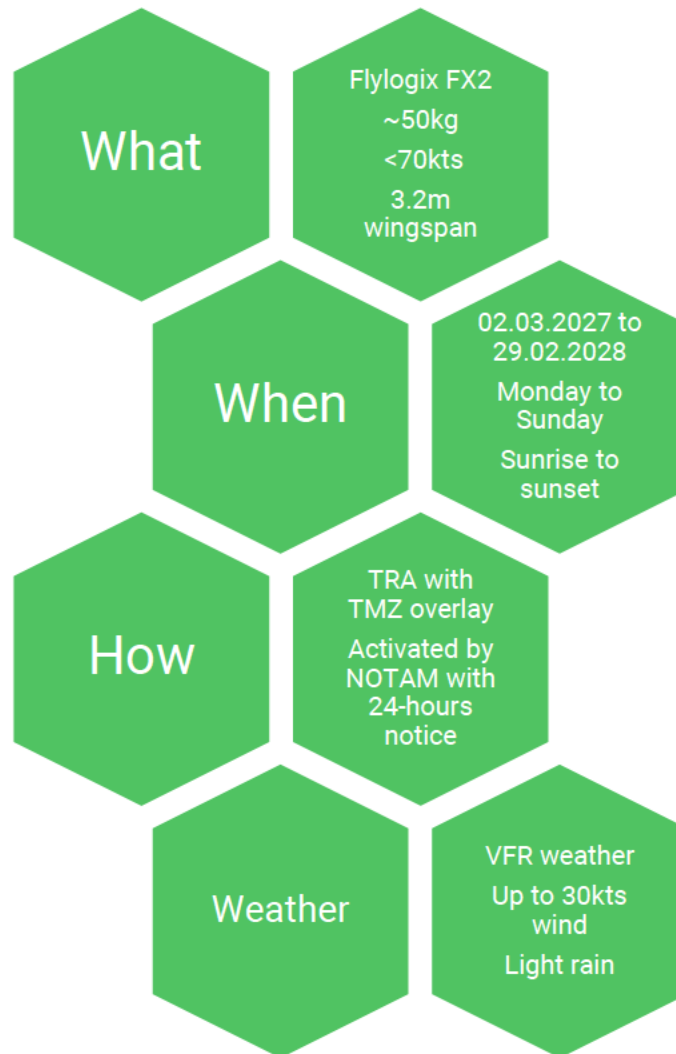
Segment 1 is a small airspace volume provided to allow access between the North Sea Segments 2, 3, 4, and 5 and the take-off / landing site. Segment 2 is shaped to avoid the Sumburgh ATC Sector, therefore, minimising ATC complexity.

Proposed Airspace Dimensions



Point	Segment 1	Point	Segment 2	Point	Segment 3	Point	Segment 4
19	57.39858062699572, -1.924845398708692	24	57.40145701303852, -1.812274321727044	Starting from point 23 on Segment 1 Straight line to point 8.		Starting from point 22 on Segment 1 Diagonal line to point 7.	
20	57.37413499691564, -1.879029049806340	Diagonal line from point 24 to point 10.		8	57.544725, 2.1400277778	7	56.7444027778, 2.5399333333
21	57.36554069051430, -1.857873433803039	10	58.42745461869064, 1.484074383127127	9	57.90456663382833, 1.961151263365890	8	57.544725, 2.1400277778
22	57.378425, -1.8412722222	11	58.75383103864964, 1.564132166870422	10	58.42745461869064, 1.484074383127127	Straight line from point 8 to point 23.	
23	57.3897944444, -1.8244805556	12	58.77094941514692, 1.184975366286800	Diagonal line from point 10 to point 24.		Point	Segment 5
24	57.40145701303852, -1.812274321727044	13	58.64170479796126, -0.541928791916624	12	58.77094941514692, 1.184975366286800	Starting from point 20 on Segment 1.	
25	57.40860286958042, -1.838719066384936	14	58.54496805385002, -0.677119230396694	13	58.64170479796126, -0.541928791916624	2	57.32190014353235, -1.945317911753295
25	57.42362232935044, -1.883185156110959	15	58.58896054065798, -0.807458839747408	14	58.54496805385002, -0.677119230396694	3	57.22093139278470, -1.885191149622669
Return to point 19 to complete the polygon		16	58.62967558427967, -0.939893286884739	15	58.58896054065798, -0.807458839747408	4	56.39828413405421, 1.216403625502653
		17	58.56888627465394, -1.650390366331538	16	58.62967558427967, -0.939893286884739	5	56.31512707676099, 2.593737695788636
		18	58.33621094370253, -1.975853615814063	17	58.56888627465394, -1.650390366331538	6	56.59922488672157, 2.612943282072597
		1	57.47782336082376, -1.753005374558242	18	58.33621094370253, -1.975853615814063	7	56.7444027778, 2.5399333333
		25	57.42362232935044, -1.883185156110959			Diagonal line from point 7 to point 22.	

Proposed Concept of Operation



*Priority flights are helimed on an emergency call; military flights undertaking national security; or other flights declaring an emergency. Routine helimed / military training / positioning flights will not be considered as priority flights.

Operational:

- TRA less restrictive than current TDAs
- Increases situation awareness through use of a TMZ
- Reduces “funnelling” of traffic around TDA or at crossing points
- May reduce cockpit / flight deck workload to navigate TDA boundary
- Reduces ATCO workload
- Non-transponder equipped aircraft may be required to fly around the TRA / TMZ – like having to operate around the TDA today. They can request access, subject to ATC approval

Overall Impact: Positive impact compared to today

Noise:

- Low-noise UA: $\leq 45\text{dB}$ LASmax at 400ft AGL at 1km
- Flights overland avoid golf course / non-involved parties*
- Flights over European site(s) cognisant of NatureScot’s previous feedback

Overall Impact: Minimal impact - no change compared to today

Safety:

- Reduces airspace infringement risks compared to today’s TDAs
- Increases situation awareness through use of a TMZ
- Remote Pilot receives real time (ATM assured) relevant traffic information
- Reduces “funnelling” of traffic around TDA or at crossing points
- May reduce cockpit / flight deck workload to navigate TDA boundary
- Reduces ATCO workload
- Non-transponder equipped aircraft may be required to fly around the TRA / TMZ – like having to operate around the TDA today
- Crewed and uncrewed aircraft on a common frequency to aid situational awareness
- Removes the risk of life component associated with crewed aircraft undertaking the use-cases that can be achieved by uncrewed aircraft

Overall Impact: Positive impact compared to today

* Someone who is not involved in the operation of the trial.

Impacts Assessment – Habitats

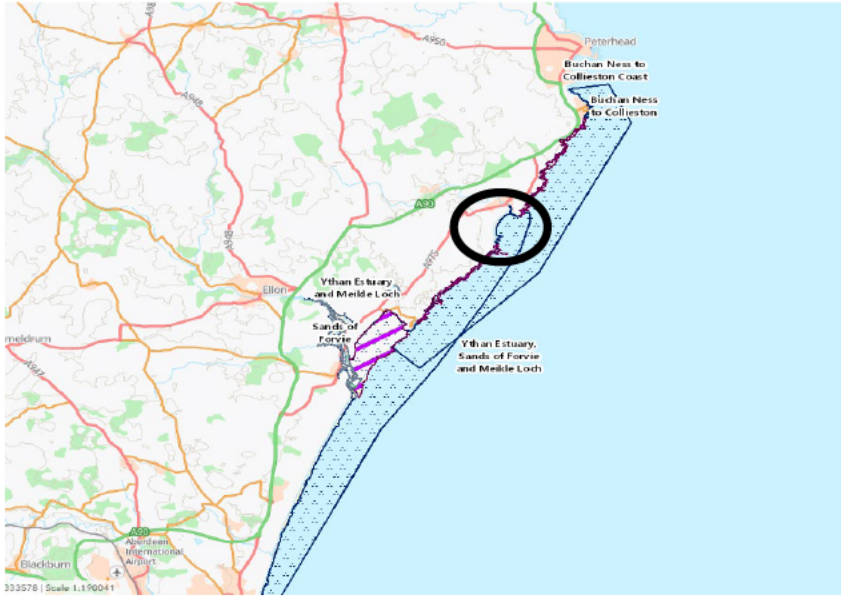


Figure: European sites in proximity (18km) of the take-off / landing site (circled in black). Source: DEFRA's Magic Maps (May 2026)

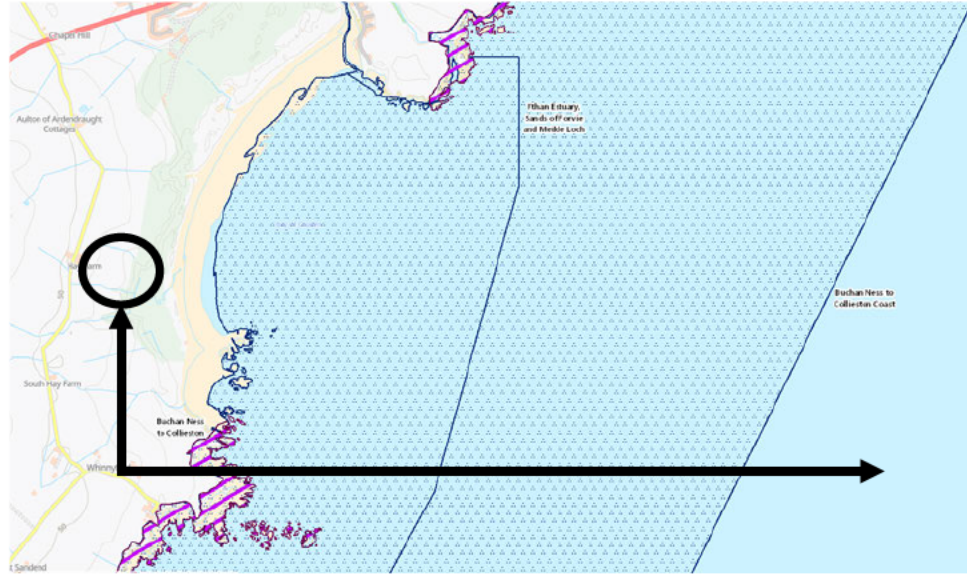


Figure: European sites in closest proximity to take-off / landing site (circled in black) and typical flight path (black arrow). Source: DEFRA's Magic Maps (May 2026)

Relevant European Sites

Joint SPA and SAC:

- "Buchan Ness to Collieston Coast"
- "Ythan Estuary, Sands of Forvie and Meikle Loch"

Ramsar site:

- "Ythan Estuary and Meikle Loch"

Potential Impacts

- Average: 12-flights per month, over 12-months. Max: 4-flights per week.
- Similar traffic volume and operating procedures and same aircraft as today
- Based on location, "Ythan Estuary and Meikle Loch" Ramsar unlikely to be overflowed
- During 2024 engagement with Nature Scot provided advice* regarding "Buchan Ness to Collieston Coast" SPA. This advice has been considered within this design / operation
- Research by Windracers shows Scottish seabirds unaffected by drone flights

Overall Impact: Minimal impact - no change compared to today

* Nature Scot's feedback included the take-off / landing being more than 100m from the cliff; overflying the coast at / above 100m; no flights within 1-hour of dawn / dusk or overnight; experience ornithologist present; report provided to NatureScot post-trial; flightpath to remain the same throughout the trial

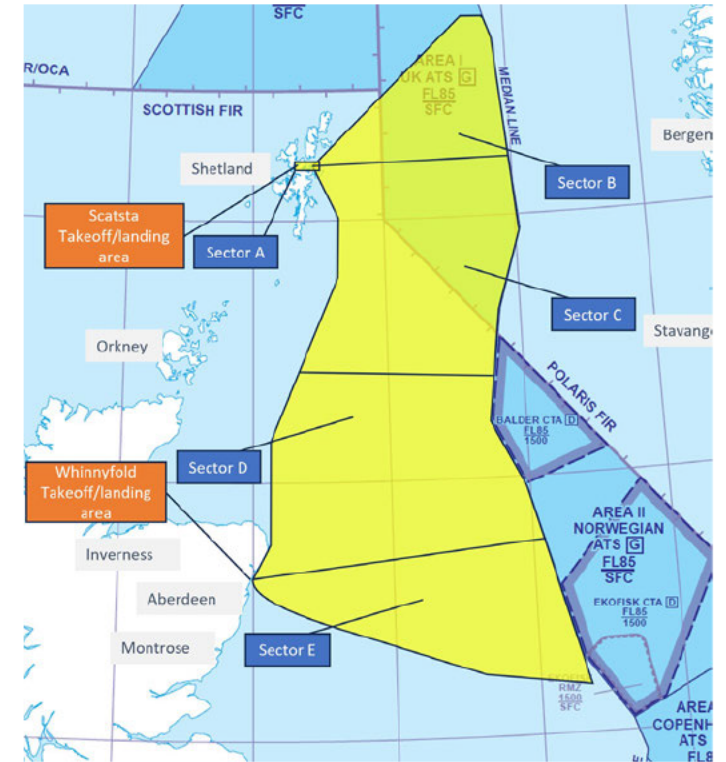
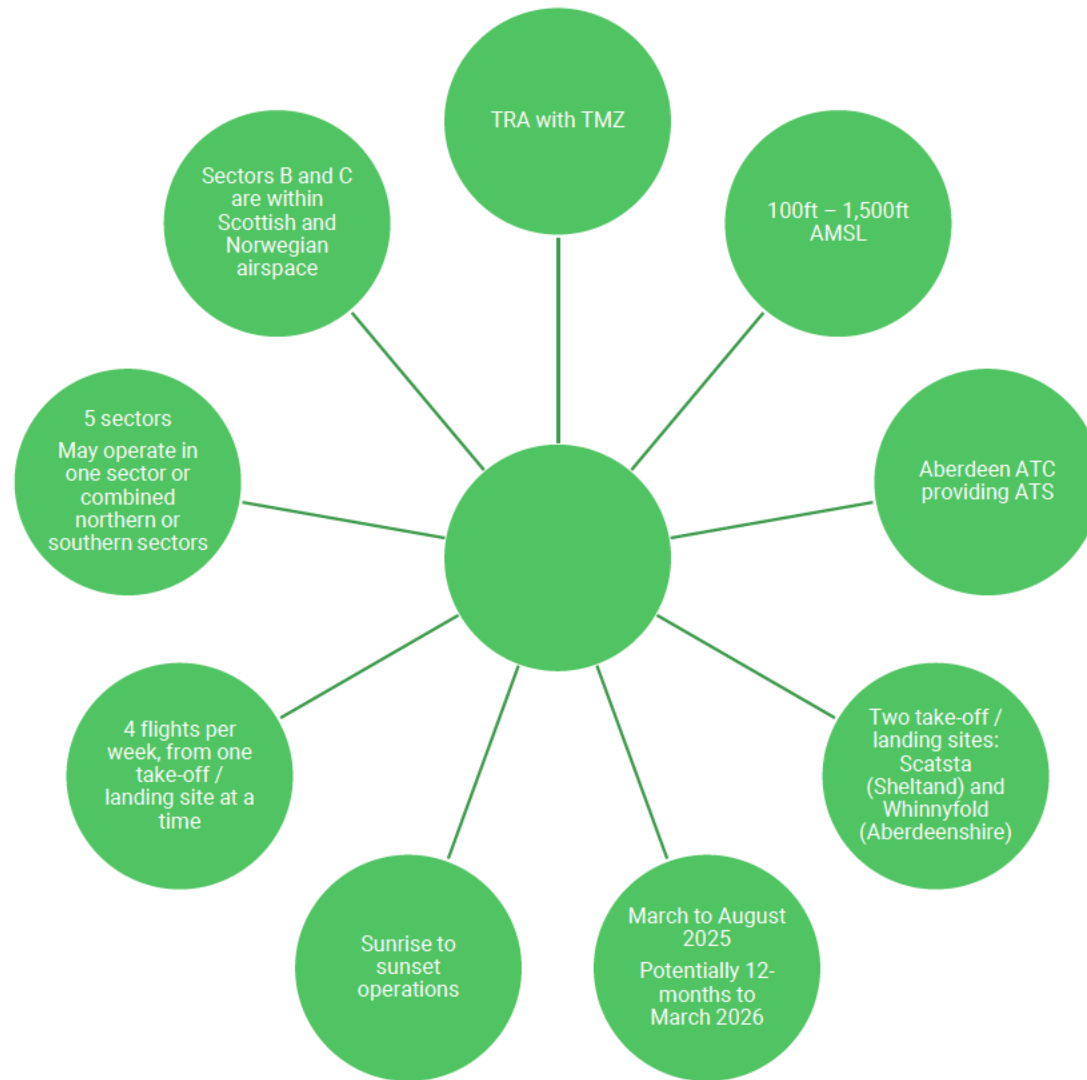


Figure: Proposal as per 2024's engagement (black outline with yellow in fill). Background map: NATS operational map

Comparison of Proposals

Feature	As per 2024	This Proposal
Airspace design	TRA with TMZ overlay 5 segments offshore Aberdeen and Shetland 100ft – 1,500ft Included Norwegian airspace	TRA with TMZ overlay 2 segments offshore Aberdeen Surface – 1,500ft Only within UK airspace
Aircraft type	Flylogix FX2	Flylogix FX2
Take-off and landing sites	2	1
Number of flights	16-flights per month	8-flights per month
Operating hours	Sunset to sunrise 5 to 6 hours per flight	Sunset to sunrise 5 to 6 hours per flight
Relevant European sites	8	5
Trial date	March to August 2025	March 2027 to February 2030 (Phase 1: March 2027 to February 2028)

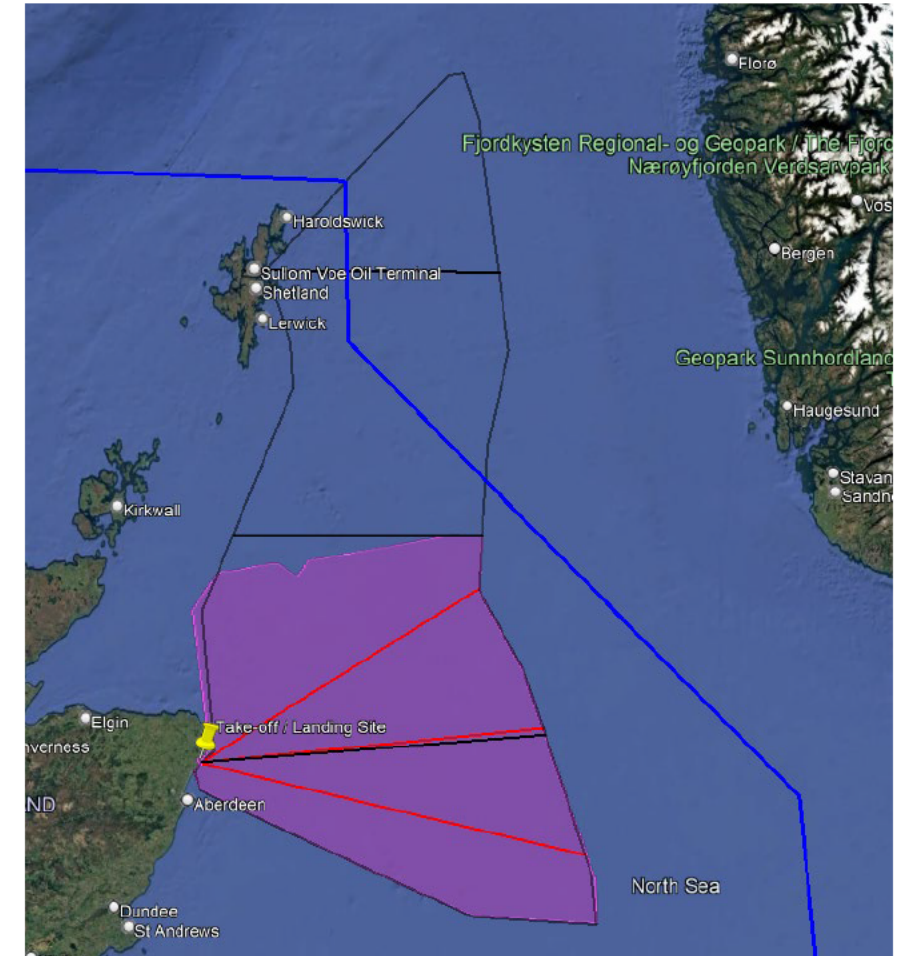


Figure: Proposal as per 2024 (black outline), proposal as per this engagement (red outline with purple infill) and the Scottish FIR boundary (blue line). Background map: Google Earth Pro

How to Respond



This engagement period is running from 28th July to 25th August 2026

Please respond via Microsoft Forms: <https://forms.cloud.microsoft/e/xgEQSq5x5G>

Any questions or to request a briefing please email*: airspaceengagement@nats.co.uk

Next Steps

Activity	Date
Potential updates to design based on feedback	Post-engagement
ACP document submitted to the CAA and published on portal	November 2026
CAA decision	December 2026
AIC publication	March 2027
Operating period	March 2027 to February 2030

*This email is for questions / briefing requests only; any feedback should be provided via Microsoft Forms.

Further Information

The following links can be used to access further information on topics relevant to this presentation.

Topic	Link
CAP1616g: Guidance on Airspace Change Process for Temporary and Trial Airspace Change Proposals	Link
This airspace change	ACP-2024-001
Flylogix	Home - Flylogix
SARG Policy 133: Policy for the Establishment and Operation of Special Use Airspace	Link
Scottish Seabird Colonies Unaffected By Windracers ULTRA Flights	Windracers

Thank you

Please respond by Tuesday 25th August 2026

NATS
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