

Stakeholder Engagement for TDA for UAS operations around Central North Sea ACP 2025-033(CNS1) February to May 2026 ACP 2025-035(CNS2) July to September 2026

1. INTRODUCTION

Flylogix are an Uncrewed Air System (UAS) service provider, focused on the offshore energy sector. Flylogix have been contracted for UAS flights to the Central North Sea Area, East of Aberdeen during two separate periods in 2026.

Flylogix have initiated two Airspace Change Proposals (ACP-2025-033 (CNS1) and ACP-2025-035(CNS2)), to establish a Temporary Danger Area (TDA) complex to contain the proposed Beyond Visual Line of Site (BVLOS) activity in accordance with CAA SUA Policy and the requirements of CAP 2533 for segregated airspace.

ACP 2025-033 (CNS1) will cover operations from February to May 2026 and ACP-2025-035 (CNS2) will cover operations July to September 2026 (ACP). Although the timelines differ, both proposals cover the same operating area, and therefore we ask that you consider both ACP's in this one engagement period.

The UAS will operate from Hay Farm on privately owned farmland immediately adjacent to the coastline and the operations will be conducted initially as VLOS for Departure and Arrival in CLASS G and then enter a TDA once the UAS is offshore.

2. OBJECTIVES OF ENGAGEMENT AND THIS DOCUMENT

In accordance with CAP1616g, Flylogix are engaging with aviation stakeholders to obtain feedback on the safety and operational impact of the proposed TDA. This engagement will occur over a 6-week period between 01 September 2025 and 10 October 2025. All feedback will be shared with the CAA as part of the final ACP submission.

This document has also been sent to the following stakeholders for feedback. This list is not exhaustive.

- Oil and Gas helicopter operators – CHC, NHV, Bristow, Offshore Helicopter Services UK Ltd
- Commercial operators working in North Sea – Airtask, 2Excel Aviation, Gama Aviation, PDG Helicopters
- General Aviation – General Aviation Alliance, AOPA, BMAA, LAA
- Emergency Helicopter Operators, SAR, HEMS, Police etc.
- SAR – JRCC, Bristow SAR

- MOD – DAATM
- Other Operators – Babcock Mission Critical Services Onshore
- ANSP – NATS (Aberdeen Radar)
- NatureScot
- All other organisations present on the CAA's NATMAC list considered as a stakeholder for the purpose of this ACP.
- Flylogix will undertake engagement with other stakeholders during the engagement period as and when they are identified by third parties. If you feel that additional stakeholders should be added to the above list, then please do contact us via the details at the end of this document.

3. TYPE OF OPERATION

The operations are uncrewed BVLOS flights conducted within a TDA. The purpose of the flights is to conduct methane surveys of critical offshore energy infrastructure in the North Sea, East of Aberdeen.

The TDA would be activated up to an altitude of 1,300 AMSL.

4. UNMANNED AIRCRAFT CHARACTERISTICS




Figure 1. The FX2 type UAS

FX2 Series Operational Limitations	
Visibility	VFR Day ONLY – 5km visibility
Cloud Base	VFR – Clear of Cloud, Surface in Sight
Weather	Day VMC, No Lightening Forecast or observe in the TDA, No Snow
Temperature	Above 0 degrees C and blow 40 degrees C. Below the freezing layer (Fmet105)
Windspeed ToL Site	Headwind <25kts Crosswind Limit 10kts Hard
Windspeed at Asset	Headwind <30kts
Rain/Snow	>1.5mm of rain per hour. No snow.

90 Degree Crosswind <10Kts, including Gusts

Based on Aviation Forecast (METAR) and Local Unofficial Met (GCS Davis Wx system)



Headwind <25Kts

Figure 2. The FX2 Operational Parameters

FLYLOGIX will operate under their existing Operational Authorisation for CNS1 and gain the appropriate SORA authorisation for CNS2 from the CAA which will be secured before any operations will commence. It should also be noted that the UAS will be fitted with ADS-B IN and OUT and a Mode-S transponder. A request for a discrete MODE 3A squawk will be requested through DAATM.

5. TDA Design Principals

When designing the proposed TDA, Flylogix had six principles:

1. Minimise the airspace within the TDA to reduce the impact on other air users.
2. Where possible, segment the TDA to minimise the airspace contained within active portions of the TDA for individual operations and to ease Special Use Area Crossing Service (SUACS) provision and deconfliction.

3. Minimise, and if possible, avoid the TDA covering land and the coast. To facilitate this the UAS is operated from the coast and flown Visual Line of Sight (VLOS) for take-off and landing – entering the TDA before going BVLOS over the sea.
4. Hay Farm was chosen for the following reasons:
 - Hay Farm is clear of nearby existing Danger Areas and other notified airspace such as noise sensitive areas and bird sanctuaries.
 - Hay Farm is situated directly next to the sea, therefore the travel of the UAS over land is at an absolute minimum reducing risk to those on the ground and will be conducted VLOS.
 - Hay Farm is a private site with no crewed aviation on site.
 - Hay Farm is free of significant ground-based obstacles such as power lines.
 - Hay Farm is 15nm from Aberdeen/Dyce and its associated CTR which poses little impact to existing operations. Longside Aerodrome (Unlicensed) is 7nms to the Northwest.
5. Avoid areas where other aircraft operate below 1,500ft – for example airfields and ATZs.
6. Keep the design of the TDA as simple as possible, to make it easy to communicate to others and reduce the chance of error, for example when inputting as a geofence into the UAS autopilot. Tactically manage the TDA through NOTAMS to ensure only the TDA segments required are activated.

5.1 Proposed Design

For illustration purposes only, final co-ordinates may be subject to minor changes but will be published in the final submission.

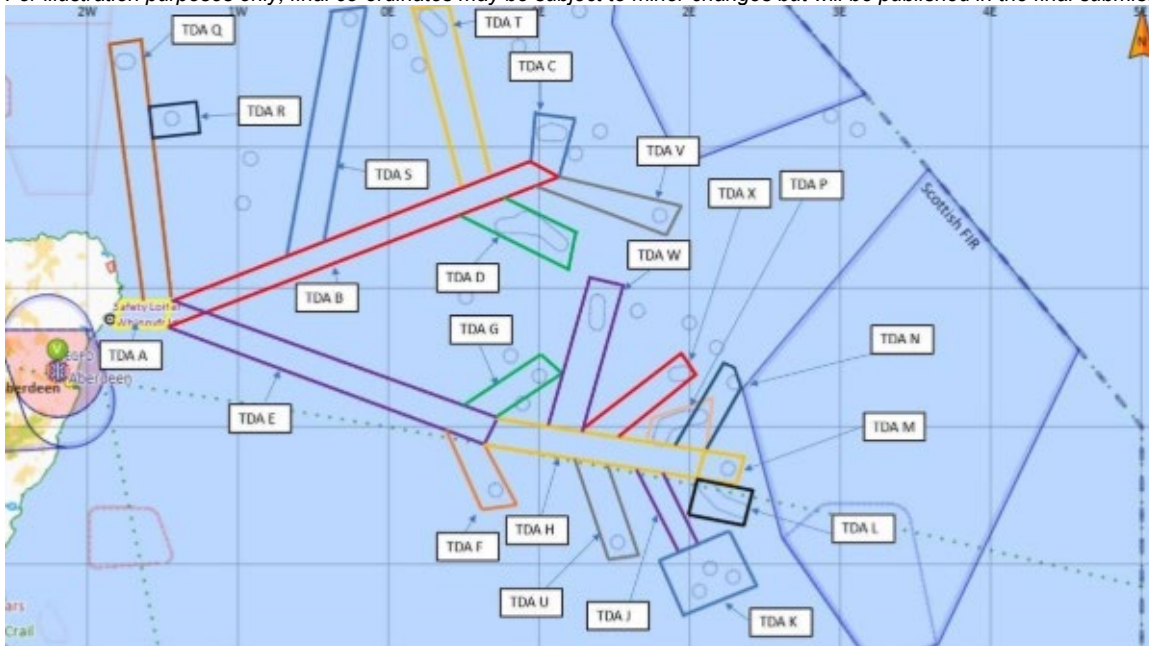


Figure 3. Map of TDA Proposal (SkyDemon and Published Facility LAT/LONG)

The proposed TDA is separated into 22 segments. Segment A commences off the coast of Cruden Bay. There may be minor changes to this design depending on Customer requirements and Take-off and Landing Point (TOLP) locations, but the fundamental design will remain unchanged.

All TDA segments are established between SFC – 1300ft AMSL.

Flylogix is aiming to meet the AIC publication date of 5 Feb 2026 for CNS1 and 25 June 2026 for CNS2. The AICs will be valid for 90 days. Only the relevant TDA segments will be activated as required during that period. There is a potential that the period might change, and notification will be given of this in the final submission, and activity will be cancelled before the end of the period if all operations are completed.

Flylogix will engage with Aberdeen Radar (NATS) to provide SUACS during the periods the relevant TDAs are active. The frequency for the service will be published on the NOTAM and in the AIC along with Flylogix contact details.

Flylogix will be available for direct contact by telephone before and during operations if additional information is required.

6. PLANNING AND NOTIFICATION

Flights will be between 3 hours and 6 hours long. The TDA activation time will be scheduled to include 30 minutes before take-off and end up to 3 hours after the last scheduled landing time. This contingency will be determined by the weather forecast and allowing for deconfliction with any planned helicopter flights and other operations at these facilities. If the UAS lands before the end of the TDA activation, Flylogix will inform ATC and cancel the TDA activation. FLYLOGIX will also inform relevant stakeholders of the cancelled operations.

Flylogix may conduct multiple flights in a single day. During the 90-day period in which the TDA will be published and anticipate up to 20 flights.

To activate the TDA, a NOTAM will be published via CAA AROps at least 24 hours in advance of planned flights detailing activations times. If UAS activity is cancelled for any reason the NOTAM will be cancelled via AFPEX.

If direct notification is required in addition to the NOTAM publication, please make note of this in your feedback.

7. NOISE ASSESSMENT AND IMPACT ON OTHER AIRSPACE USERS

- CAP1616g para 3.23 – the change sponsor must describe the current day scenario.
- CAP1616g para 4.11 – the change sponsor must consider and undertake an assessment of the noise impacts of a temporary or trial airspace change proposal that affects the distribution of air traffic below 7,000ft.

TOLP MAP AND GRID REFERENCE

NK 07683 35035

572420N 00152W



Figure 2. Hay Farm TOLP (outlined in Red). Source: Flylogix and Ordinance Survey

Current Day Scenario

The requirement for the TDA stems from the need to conduct the flights BVLOS out to the assets and is for a fixed temporary duration. The TDA will only be activated for the duration of the activity and should that activity be cancelled then a request to cancel the NOTAM will be raised. When the total flights have been concluded the AIC will be cancelled.

Hay Farm is immediately adjacent to the coast and approximately 15nms North of Aberdeen/Dyce and 7nms Southeast of Longside Aerodrome (Unlicensed). For this ACP all operations are below 7000ft, are situated in CLASS G airspace and have no effect on any published VFR or IFR Routes.

There is a potential for Air Traffic to route down the adjacent coastline at 1-2000ft for sightseeing. The VLOS section of this operation and the TDA dimensions will be designed to minimise the impact for such flights, especially when combined with a SUACS from NATS Aberdeen. Feedback from NATS Aberdeen in relation to this says that no issues were reported during previous operations.

Offshore the proposed TDA network will mean interaction with Crewed Rotary Wing Traffic on Helicopter Main Route Indicators (HMRI) from Aberdeen to Oil/Gas Rigs. NATS Aberdeen have reported that provision of SUACS is very achievable, and no conflict issues have arisen during this and similar operations over the last 2 years.

The TDA, as demonstrated at Fig 3 above extends from 1km offshore from Hay Farm out to the assets. A review of Plane Finder Data and experience through operations over the last 2 years has shown little GA traffic (although it is accepted that non transponding traffic will not be detected) over the area of interest and therefore it is not anticipated that there will be any changes to traffic patterns. Should the commercial rotary wing traffic wish to transit out at any point which conflicts with the TDA, then the appropriate NATS Aberdeen Sector will be able to approve the aircraft into the area once the UAS has vacated it, and in accordance with the TOI.

NATS Aberdeen are expected to be able to provide SUACS for this ACP and therefore access

will always be able to be made available for both scheduled Helicopter activity and Emergency Helicopter on SAROPS or similar.

Noise Assessment

According to previous measurements, the mean maximum sound pressure level (LASmax) of the aircraft when the UAS is cruising at a height of 400ft AMSL is $\leq 45\text{Db}$, which is virtually undetectable from ground. The most audible part of the flight, i.e., take-off and landing will take place at Hay Farm where there are negligible uninvolved persons, and the aircraft will lift and transit directly out over the sea not above 400ft AMSL into the subsequent portions of the TDA climbing to a transit altitude of 600 – 800ft AMSL. It is believed that the noise impact with such a short span of time, and small noise footprint, is negligible.

7.1 The Habitats Regulations Assessment

In accordance with CAP1616i para 9.8 to 9.10. and CAP1616g para 4.21 to 4.23- The Habitats Regulations Assessment – Early Screening was conducted using MagicMaps. The following images show the combined VLOS and BVLOS operating area, and the elements depict a narrow field of view adjacent to the Hay Farm take-off and landing site. The UAS will initially operate VLOS up to 400ft AGL and once 1km offshore will enter the TDA at between 600-800ft AMSL.

The HRA highlighted the environmentally designated areas in the vicinity. With the plan to operate approximately 15 return flights offshore over a 3-month period i.e., crossing the coastline 30 times, and for very short periods, we assess that the impact on the areas is negligible. Over the Intertidal SPA the UAS will be at an altitude of approximately 650ft AGL/AMSL and we assess the impact on that zone as nil. Operations during 2025 showed no adverse impact or interactions with birds.

Flylogix will continue to comply with the following conditions, as previously agreed with NatureScot in earlier submissions:

- The take-off and landing site must be at least 100m from the coastal edge.
- When the UAS flies over the coastal edge it must be at a height of at least 120m.
- Flights should not take place within one hour of dawn or dusk, or at night.

Habitats Regulations Assessment – Early Screening Criteria

Q1. Are there any changes to air traffic patterns or number of movements expected below 3,000 feet due to the airspace change proposal? YES

The TDA begins 1 km offshore, extending from the surface to 1300 ft AMSL. Aircraft needing to cross the TDA can contact NATS Aberdeen for SUACS, subject to the UAS location. Within 1 km of the coast, UAS operations are conducted under VLOS, posing no limitations to other aircraft. No changes to air traffic patterns or the number of movements are anticipated.

If the answer to Q1 is ‘no’ then habitats regulations assessment is no longer required.

If the answer to Q1 is ‘yes’ then proceed to Q2 below.

Q2A. Are there any European sites within a radius of 18 km of each runway end? YES

An assessment using magic-maps revealed SPAs, SAC and coastal SSSIs within 18km of the TOLP. They are all related to the immediate coastline.

All sites are outside of the BVLOS TDA but will be overflown whilst operating VLOS.

Q2B. Are any European sites identified in Q2A overflown (i.e. plane passing directly overhead or within 2,655 feet of the boundary of a European site at 3,000 feet or below) by proposed flight routes? YES

The SCA, SSSI and SPA will inevitably be overflown as the UAS routes VLOS from the operating

site out to the TDA. There are 15 flights planned so the site would be overflowed up to 30 times during the 90-day period. Overflight would be above 400ft AGL climbing to an operating band of 600-800ft.

Flylogix will continue to comply with the following conditions, as previously agreed with NatureScot in earlier submissions:

- The take-off and landing site must be at least 100m from the coastal edge.
- When the UAS flies over the coastal edge it must be at a height of at least 120m.
- Flights should not take place within one hour of dawn or dusk, or at night.

Potentially any transit aircraft would overfly the area but the level and impact of that is unknown and unchanged, and the frequency or height of those aircraft is unaffected by the proposed TDA.

If the answer to Q2A and Q2B are both ‘no’ then habitats regulations assessment is no longer required.

If the answer to Q2A or Q2B is ‘yes’ then proceed to Q3 below.

Q3A Will the airspace change proposal reduce the number of movements overflying one or more European sites, while not increasing them over another?

NO

There is no reason to believe that there would be a reduction in aircraft overflying the two identified sites. The TDA will not reduce the existing traffic and the VLOS element will have no impact at all.

Q3B Will the airspace change proposal increase the altitude of aircraft overflying one or more European sites, whilst not decreasing altitude over another? NO

The ACP is unlikely to alter the height of any transit traffic either higher or lower. The VLOS element can be overflowed without any issue. The TDA may cause an increase in height of transit traffic to over 1300ft AMSL but at that point the identified sites would not be overflowed as it would be a minimum of 1km offshore.

If the answer to Q3A and Q3B are both ‘yes’ then habitats regulations assessment is no longer required.

If the answer to Q3A or Q3B is ‘no’ then secondary screening will be required.

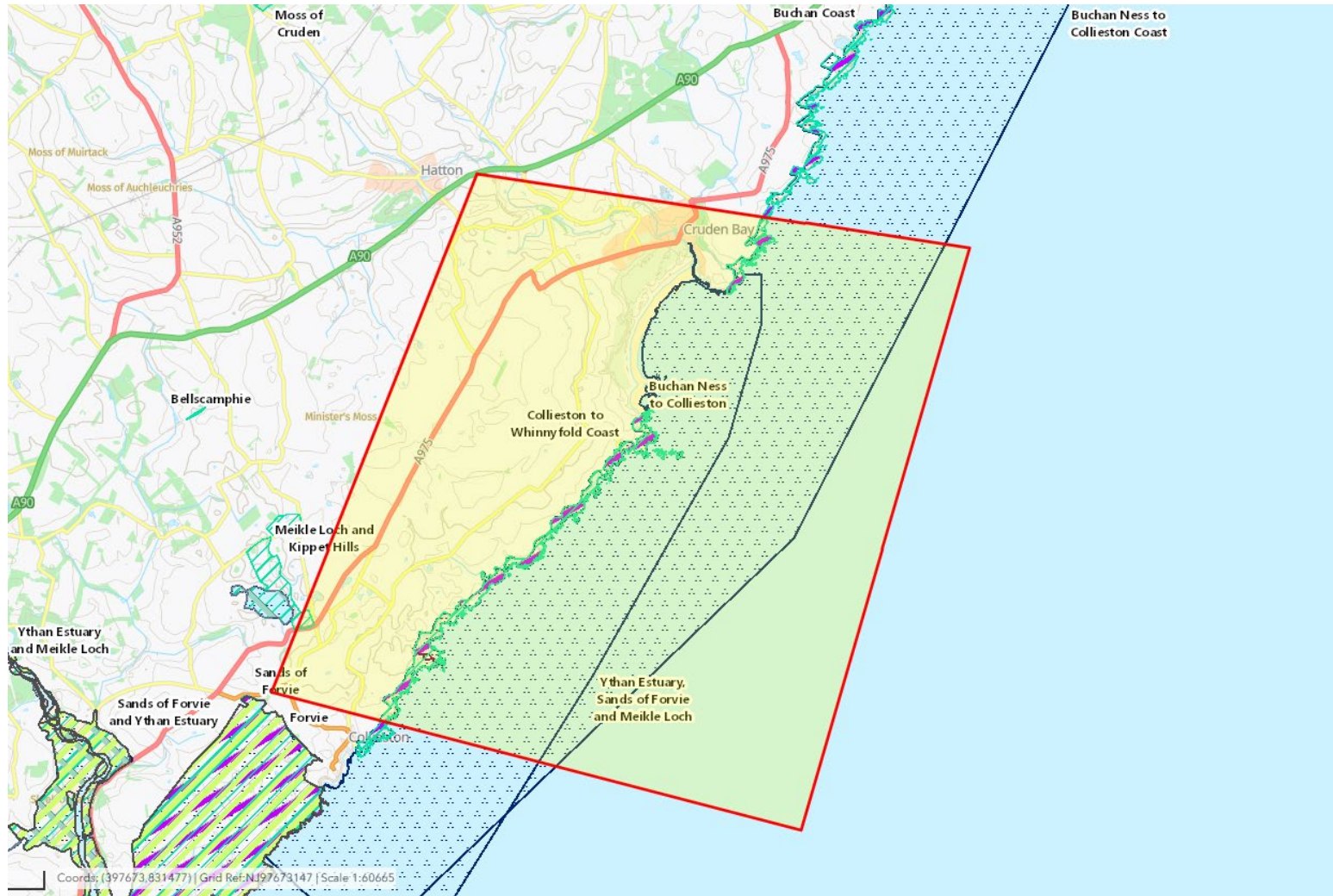


Figure 5. Site Check results. Source: Magic Maps

Site Check Results

Site Check Report generated on Mon Aug 25 2025

The following features have been found in your search area:

You selected the location: Centroid Grid Ref: NK08153234

Special Protection Areas (Scotland)

NAME	Ythan Estuary, Sands of Forvie and Meikle Loch
STATUS	Current
SITE_HA	7062.03
EUROPEAN_C	UK9002221

NAME	Buchan Ness to Collieston Coast
STATUS	Current
SITE_HA	5400.94
EUROPEAN_C	UK9002491

Special Areas of Conservation (Scotland)

NAME	Buchan Ness to Collieston
STATUS	Current
SITE_HA	206.03
EUROPEAN_C	UK0030101

Biosphere Reserves (Scotland)

No Features found

Biosphere Reserves (Scotland) - points

No Features found

Special Protection Areas (Scotland) - points

No Features found

Special Areas of Conservation (Scotland) - points

No Features found

Sites of Special Scientific Interest (Scotland) - points

No Features found

Ramsar Sites (Scotland)

No Features found

Ramsar Sites (Scotland) - points

No Features found

National Nature Reserves (Scotland)

No Features found

National Nature Reserves (Scotland) - points

No Features found

Sites of Special Scientific Interest (Scotland)

NAME	Bullers of Buchan Coast
TYPE	MIXED
STATUS	Current
SITE_HA	104.54
GEO_LOC	MIXED

NAME	Meikle Loch and Kippet Hills
TYPE	MIXED
STATUS	Current
SITE_HA	73.15
GEO_LOC	TERRESTRIAL

NAME	Collieston to Whinnyfold Coast
TYPE	MIXED
STATUS	Current
SITE_HA	102.45
GEO_LOC	MIXED

Figure 6. Site Check results. Source: Magic Maps

8. ENGAGEMENT PERIOD

The methane measurement work being carried out is a vital part of reducing the greenhouse gas emissions of the North Sea oil and gas industry. This is supported by both the UK government, through BEIS, and the oil and gas operators.

The target Aeronautical Information Circular (AIC) publication dates are 5 February 2026 for ACP-2025-033 and 25 June 2026 for ACP-2025-035, aligned with client oil and gas platform schedules. To meet these timelines, ACP-2025-033 must pass the CAA's decision gateway by 10 December 2025, and ACP-2025-035 by 06 May 2026.

Flylogix's rationale to support effective engagement within a 6-week engagement period is as follows:

- Flylogix is proactive in engaging directly with stakeholders via email followed up by telephone calls.
- Flylogix has previously engaged with all listed stakeholders for ACP-2024-005, 034 and 055, therefore the stakeholders are familiar with the type of operation.
- Due to Flylogix's experience of operating in this area and the limited number of air users around Hay Farm, we are able to engage directly with the relevant individuals.

Stakeholders will be contacted on 01 September 2025 and invited to provide feedback by 10 October 2025. As ACP-2025-033 and ACP-2025-035 are being consulted on together during this engagement period, only one response is needed to cover both proposals.

9. YOUR FEEDBACK

The CAA requires evidence of engagement with other air users as part of the airspace change request process. We would therefore value your feedback by Friday 10 October 2025 so that we can include this in our submission to the CAA. Please state in your feedback which ACP you are referring to.

Feedback can be submitted in the following ways:

1. An email to engagement@blackswansl.com detailing any recommended changes to the TDA to improve safety or reduce impact on you.
2. An email to engagement@blackswansl.com saying that you understand and agree with the proposed approach.
3. Setting up a call with us to give your feedback. We will take minutes of the call and get your approval of these minutes before submitting them to the CAA. Email to engagement@blackswansl.com
4. Where possible, if feedback could be sent in advance of the end of the engagement period this would be greatly appreciated. This affords Flylogix more time to work with you on any recommended changes to the TDA and collate your responses into a summary report for the CAA. Flylogix will send periodic reminders during engagement if no response has been received.