



# Addition of TDA to Burbo Bank TMZ for Beyond Visual Line of Sight operations

## ACP-2025-001 Updated Engagement Material

### 1. Introduction

Airspection are an Uncrewed Aircraft System (UAS) service provider, specialising in providing reliable and safe UAS services for offshore infrastructure. Airspection launch from shore to offshore infrastructure conducting inspections, improving safety, reliability and environmental impact, with key benefits including:

- Efficient, fast and low carbon inspections.
- Reliable access in challenging weather conditions/sea states.
- Rapid post storm or fault analysis.
- No Seabourne or Airbourne personnel put at risk offshore.

This ACP aims to establish a Temporary Danger Area (TDA) within the confines of Burbo Bank Transponder Mandatory Zone (TMZ) to enable the UAS to safely operate Beyond the Visual Line of Sight (BVLOS) between October 2025 and March 2026, with a possibility of operations extending for a period of up to 12 months with further regulatory approval.

The intention is for a staged process, the UAS will initially operate from an offshore vessel, progressing to launching from shore and transiting to the BURBO BANK TDA via a corridor in the form of a separate TDA.

### 2. Objectives of Engagement and this Document

In accordance with CAP 1616g, Airspection has been engaging with aviation stakeholders to gather feedback on the safety and operational implications of the previously proposed Temporary Reserved Area (TRA). This initial engagement took place over a six-week period from 14 March to 25 April 2025. Following a revision to the proposal—specifically, the reclassification of the airspace to a Temporary Danger Area (TDA), the inclusion of a Special Use Airspace Activity Information Service (SUAAS) being provided by London Information and an updated timeline—we are now conducting a brief additional engagement period to inform you of these changes. We kindly ask that you review this updated document and submit any

feedback by 09 June 2025. All responses will be reviewed carefully and included in the final submission to the Civil Aviation Authority.

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

- MOD-DAATM
- SAR
- General Aviation – GAA, BGA, LAA
- ANSP
- Natural England
- All other organisations present on the CAA’s NATMAC list are considered a stakeholder for the purpose of this ACP.

Airspection 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 [engagement@blackswansl.com](mailto:engagement@blackswansl.com).

### 3. Type of operation

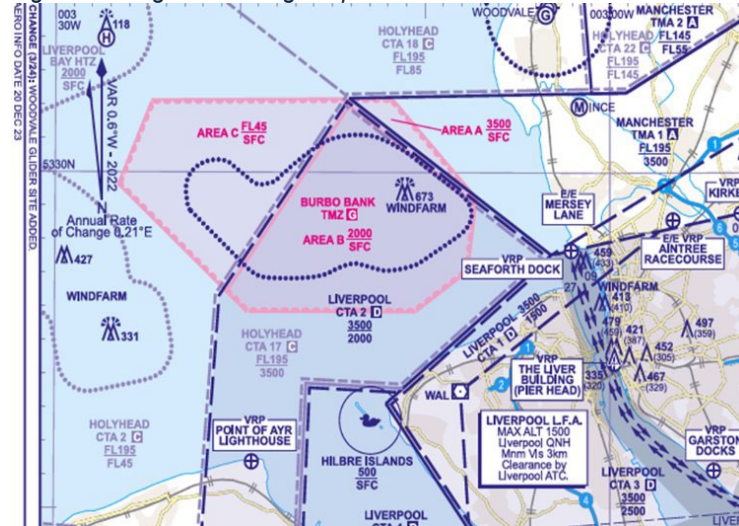
The purpose of the flights is to conduct inspections of wind turbines within Burbo Bank TMZ, Liverpool Bay. The proposal is for inspections to be carried out using an uncrewed aircraft conducting BVLOS within a TDA. The operation will evolve into shore-based flights which will connect with the TDA via a corridor, also in the form of a TDA.

### 4. Current Day Scenario

#### Airspace

The proposed Operation is within Class G airspace overlaid by an established, permanent TMZ (SFC – 2000’) with Liverpool CTA above 2000’. There are no fixed VFR/IFR routes and the existing TMZ being managed by BAe WARTON. Existing Traffic does not operate at a Low Level within the TMZ due to the Windfarm Structures. There is potential for interaction with GA Traffic, Military Flights, Emergency Services Helicopters. GA Traffic is likely to utilise the coastline for transits above 500ft AMSL.

Figure 1. Image of Existing airspace. Source: UK AIP



## 5.Design Principles

When designing the TDA, Airspection considered the following design principles, as laid down in the SUA Policy (12 February 2024):

- It should be as small as practicable and should be contained within simple geometric limits to allow for easy reference to all concerned parties.
- The lateral and vertical limits should consider adjacent airspace and endeavour to minimise the impact to other airspace users.
- Activation times should be the minimum required to facilitate the requirements for the SUA.

In terms of the Airspace Modernisation Strategy (AMS) CAP 1711 the proposed design meets the following objectives.

- **Safety:** By replacing crewed aviation with uncrewed systems for the same functions.
- **Integration:** Using new UAS technologies and data collection to enable the seamless operation of both crewed and uncrewed aircraft in unsegregated airspace.
- **Simplification:** By driving innovation and data collection to facilitate the integration of UAS into standard air traffic, reducing the need for segregated airspace.
- **Environment:** By employing more efficient and environmentally sustainable air systems and equipment for survey and monitoring tasks, replacing crewed air and sea vessels with uncrewed systems.



## 6. Proposed Design

Airspection will initially conduct operations from offshore, launching from a crewed vessel and then progressing the launching from land, transiting to the windfarm via a corridor.

Airspection proposes the design is contained within the already established Burbo Bank TMZ B. Operations will be conducted, not above 1000ft AMSL throughout. The TDA will coincide with the lateral dimensions of the existing TMZ. The area would be activated by NOTAM more than 24 hours in advance and the actual operating times will be captured in the text of the NOTAM.

When the BVLOS operation becomes shore based the connecting transit corridor will be in the form of a TDA. The airspace will be a maximum of 500ft AMSL and the minimum lateral limits required to contain the activity. The area would be activated by NOTAM more than 24 hours in advance and the actual operating times will be captured in the text of the NOTAM. The actual launch site is to be confirmed but it will be on the North Wirral Coastline and immediately adjacent to the coast.

Figure 2 shows a Dark Green area which is Burbo Bank TMZ B which laterally will match the lateral limits of the proposed TDA, with vertical limits of Surface to 1000ft AMSL. The Lighter Green area depicts the connecting corridor from the North Wirral Coast to the BURBO BANK TDA. The proposed vertical limits will be Surface to 500ft AMSL with the final lateral dimensions defined by the requirements of Operational Risk Assessment and external input received from this Targeted Engagement.

Figure 2. Image of proposed TDA.



For reference these are the existing details of Burbo Bank TMZ as captured in the UK AIP.

Figure 3. Burbo Bank TMZ. Source: UK AIP

<p>Burbo Bank TMZ (Area B)</p> <p>533213N 0031406W – 532916N          0030709W – 532704N 0030737W –          532550N 0031030W – 532550N          0031939W – 532631N 0032055W –          533213N 0031406W.</p>	<p>2000 FT</p> <p>————</p> <p>SFC          (Class G)</p>	<p>Warton APP (129.530 MHz)          between Mon-Thu 0730-1900          (0630-1800), Fri 0730-1700          (0630-1600).</p>
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## 7.Planning and Notification

BVLOS operations are proposed for a six-month period, to run between 01 October 2025 and 31 March 2026, with the possibility of operations extending for up to 12 months subject to further regulatory approval.

The TDA will be activated via NOTAM more than 24 hours in advance and the actual operating times will be captured in the text of the NOTAM.

The proposed operating period is based on the following Airspection Trial Plan:

Table 1. Trial Plan

	<b>Phase 1 Onsite Demonstration (VLOS)</b>	<b>Phase 2.1: BVLOS (offshore) TMZ B + TDA</b>	<b>Phase 2.2: BVLOS (offshore) TMZ B + TDA</b>	<b>Phase 3: BVLOS (Shore)  TMZ B + TDA + TDA for connecting corridor</b>
<b>Date</b>	July 2025 – October 2025	October 2025 – December 2025	December 2025 – February 2026	January 2026 – March 2026
<b>Aim</b>	Demonstrate BVLOS procedures in VLOS environment.	Verify and demonstrate BVLOS operational & emergency procedures for accommodating aircraft.	Demonstrate BVLOS operations in either an accommodated or segregated air environment, in alignment with CAP2533 (depending on the outcome of this engagement and ACP approval)	Demonstrate BVLOS operations in either an accommodated or segregated air environment, in alignment with CAP2533 (depending on the outcome of this engagement and ACP approval).
<b>Location</b>	Burbo Bank offshore wind farm.	Burbo Bank offshore wind farm.	Burbo Bank offshore wind farm.	Burbo Bank offshore wind farm with a corridor connecting the wind farm to shore where the Remote Pilot is stationed.
<b>Airspace requirement</b>	Within existing TMZ	TDA activated by NOTAM - no aircraft will be permitted to enter during this phase.	TDA activated by NOTAM aircraft may be permitted to enter during this phase depending on the outcome of this engagement and the ACP approval.	TDA's activated by NOTAM aircraft may be permitted to enter during this phase depending on the outcome of this engagement and the ACP approval.

## 8.ANSP

BAE Systems Warton is the Controlling Authority for the existing TMZ B (see Section 4). However, in accordance with CAA Special Use Airspace (SUA) policy, London Information will provide the Special Use Airspace Activity Information Service (SUA AIS) to support situational awareness for other airspace users. AIRSPECTION will act as the SUA Authority for the proposed TDA and will be responsible for managing the airspace. The TDA will be fully segregated during periods of NOTAM-published activity, ensuring that operations are safely contained and do not conflict with other airspace users.

## 9.Impact on Other Airspace Users.

The proposed Operation is within Class G airspace overlaid by an established, permanent TMZ (SFC – 2000') with Liverpool CTA above 2000'. There are no fixed VFR/IFR routes and the existing TMZ being managed by BAe WARTON. Existing Traffic seldom operates at a Low Level within the TMZ due to the Windfarm Structures. There is potential for interaction with GA Traffic, Military Flights, Emergency Services Helicopters. GA Traffic is likely to utilise the coastline for transits above 500ft AMSL.

Therefore, we expect the impact on airspace users to be negligible. The two key areas are:

- Enabling access to the active TDA at short notice for CAT A flights, ie. SAR/HEMS/POLICE when on operational missions.
- Limiting impact on GA when in transit along the North Wirral Coast when the connecting transit corridor is activated.

Through this Targeted Engagement we hope to understand if these are issues and if they are then collaboratively finding an operational solution.

## 10.Noise Assessment

From CAP 1616i:

“Temporary and Trial Airspace Change Proposals For all temporary and trial airspace change proposals less than three months in duration, change sponsors must present an assessment of noise impacts from the RPAS operations as LASmax noise levels at key locations. Noise assessments for LAeq,16h are not required.”

From Noise Data Assessment flights the Foxtech UAS measured the following LASmax dB levels:

- 30m: 64dB
- 100m: 53 dB
- 200m: 47 dB

For comparison the following table measures the LASmax dB levels from differing aircraft types.

Table 2. LASmax comparison table

Distance (m) From the Source	Noise Level (dB) by Manufacturer			
	Manned Helicopter	Austars (Hybrid Engine)	Foxtech	Octocopter
1-5	135	95	80	90
30	105	79	64	60
100	95	68	53	50
200	88	62	47	43
300	85	59	44	40
500	81	55	40	36
1000	75	48	33	30

## 11. Habitat Regulations Assessment (HRA)

### 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**

There are no published VFR or IFR routes in the vicinity of the proposed operation so there is very little change expected. There is the potential for ad hoc activity from GA, Military and Emergency Services flights. As the proposed airspace will be only notified for bespoke periods and will be well publicised via AIC and NOTAM it will be easy to plan against, avoid or get a SUAIS/SUACS from Warton. So, there may be minor and subtle changes to traffic patterns but no expected increase in traffic movements.

**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, SPACs, RAMSAR, NNRs sites and numerous coastal/estuarine SSSIs within 18km of the TOLP. The most relevant relate to the North Wirral Coastline where the UAS will be operating from. Notably the North Wirral Foreshore SPA and SSSI.

**Q2B. Are any European sites identified in Q2A overflowed, (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 Take Off and Landing Point will be situated centrally on the North Wirral Coast, within 100M of the shore and after departure will route directly out to sea. Therefore, the only identified areas that could be affected are the North Wirral Foreshore SPA and SSSI.

**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**

No significant change is anticipated in the number of movements.

**Q3B Will the airspace change proposal increase the altitude of aircraft overflying one or more European sites, whilst not decreasing altitude over another?**

**NO**

No significant change is anticipated in altitude of overflying aircraft.

**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 4. Proposed area of operation. Source: Magic Maps

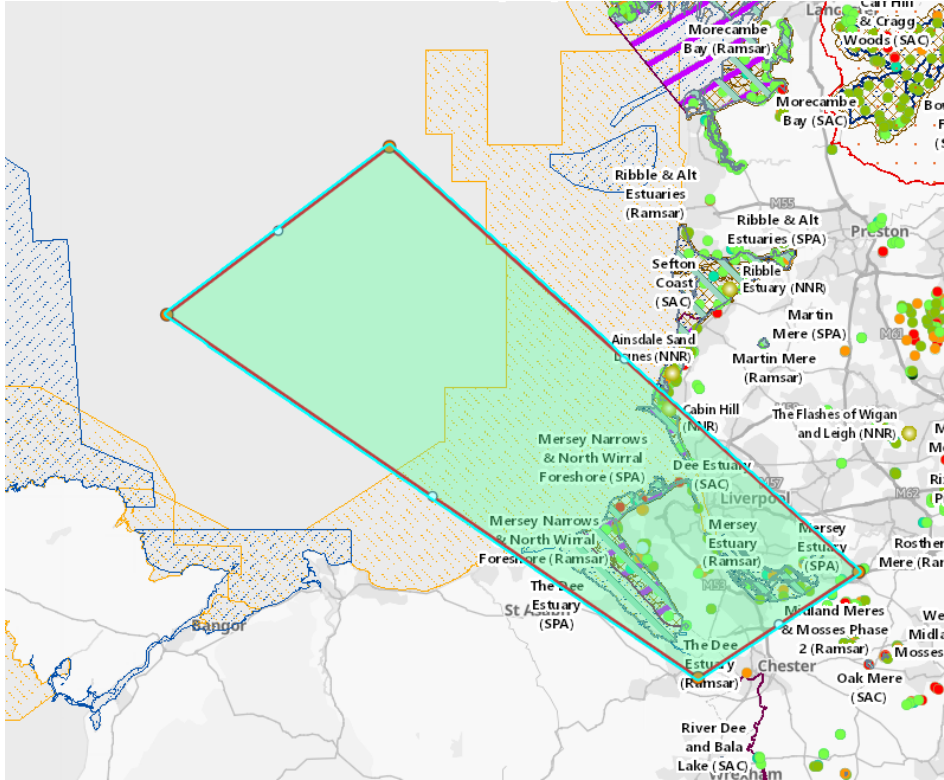
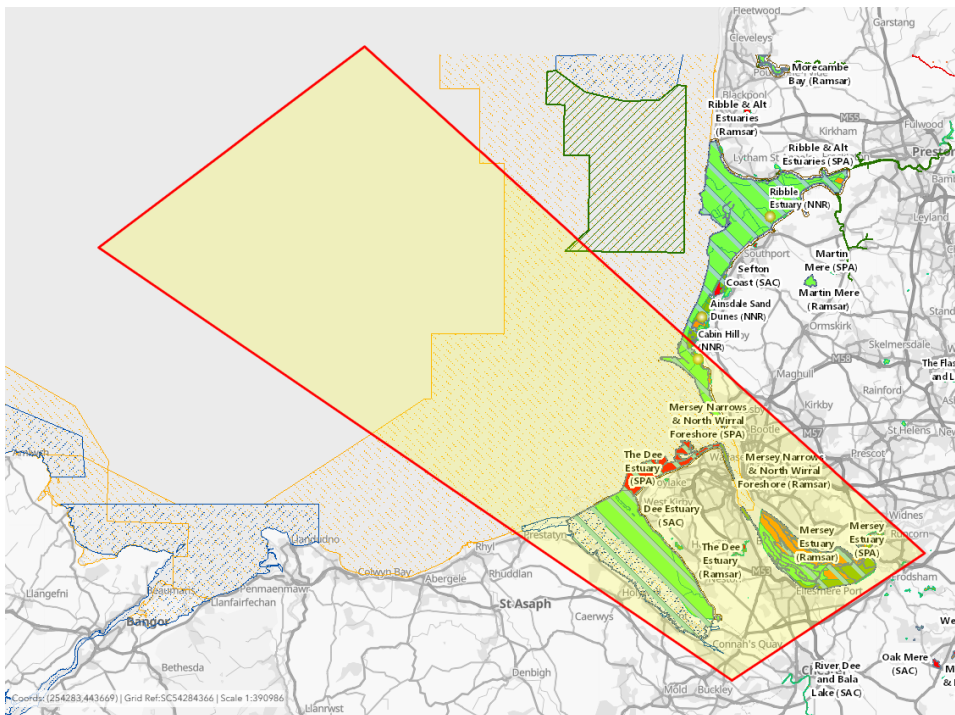


Figure 5. Proposed area of operation. Source Magic Maps





## Site Check Results

Site Check Report generated on Mon Feb 10 2025

The following features have been found in your search area:

You selected the location: Centroid Grid Ref: S.J15949556

**Special Protection Areas (Marine Components GB)**

SITECODE	UK9005131
SITENAME	Mersey Estuary
SITESTATUS	SPA
STATUS	Classified
COUNTRY	England inshore
CP2REGION	Irish Sea
AREAHA	1848.12474125
CONSLTDATE	
CLASSDATE	01/12/1995
AGENCY	NE
WDPACODE	555541775
LONG	-2.85455416974
LAT	53.3186618269

SITECODE	UK9005103
SITENAME	Ribble and Alt Estuaries
SITESTATUS	SPA
STATUS	Classified
COUNTRY	England inshore
CP2REGION	Irish Sea
AREAHA	12450.0188562
CONSLTDATE	
CLASSDATE	01/02/1995
AGENCY	NE
WDPACODE	555541773
LONG	-3.01082763447
LAT	53.6760903939

SITENAME	The Dee Estuary
SITESTATUS	SPA
STATUS	Classified
COUNTRY	England inshore & Wales inshore
CP2REGION	Irish Sea
AREAHA	13119.6386164
CONSLTDATE	
CLASSDATE	01/07/1985
AGENCY	NE and NRW
WDPACODE	555541844
LONG	-3.17934494742
LAT	53.3156620523

SITECODE	UK9020287
SITENAME	Mersey Narrows and North Wirral Foreshore
SITESTATUS	SPA
STATUS	Classified
COUNTRY	England inshore
CP2REGION	Irish Sea
AREAHA	1788.42550255
CONSLTDATE	
CLASSDATE	01/07/2013
AGENCY	NE
WDPACODE	555577866
LONG	-3.1468914163
LAT	53.4179649294



SITECODE	UK9020294
SITENAME	Liverpool Bay / Bae Lerpwl
SITESTATUS	SPA
STATUS	Classified
COUNTRY	England inshore & England offshore & Wales inshore
CP2REGION	Irish Sea
AREAHA	252757.73
CONSLDATE	18/10/2016
CLASSDATE	31/10/2017
AGENCY	NE, NRW & JNCC
WDPACODE	555541883
LONG	-3.422112
LAT	53.610098

#### Special Areas of Conservation (Marine Components GB)

SITECODE	UK0030131
SITENAME	Dee Estuary/ Aber Dyfrdwy
SITESTATUS	SAC
STATUS	Designated
COUNTRY	England inshore & Wales inshore
CP2REGION	Irish Sea
AREAHA	15805.27
CONSLDATE	
CSACDATE	01-08-2007
SCIDATE	01-12-2008
SACDATE	01-12-2009
AGENCY	NE & NRW
WDPACODE	555536021
LONG	-3.216111
LAT	53.328333

#### Wild Bird General Licence Protected Sites Condition Zone (England)

DESIGTYPE	SPA
DESIGTYPE	SPA
DESIGTYPE	SPA
DESIGTYPE	SPA

#### Special Protection Areas (England)

NAME	MERSEY NARROWS & NORTH WIRRAL FORESHORE
REF_CODE	UK9020287
MEASURE	2078.63
NAME	THE DEE ESTUARY
REF_CODE	UK9013011
MEASURE	13142.23
NAME	MERSEY ESTUARY
REF_CODE	UK9005131
MEASURE	5023.35
NAME	RIBBLE & ALT ESTUARIES
REF_CODE	UK9005103
MEASURE	12447.14

#### Special Areas of Conservation (England)

NAME	SEFTON COAST
REF_CODE	UK0013076
MEASURE	4587.84
HYPERLINK	<a href="https://sac.jncc.gov.uk/site/UK0013076">https://sac.jncc.gov.uk/site/UK0013076</a>
NAME	DEE ESTUARY
REF_CODE	UK0030131
MEASURE	8282.47
HYPERLINK	<a href="https://sac.jncc.gov.uk/site/UK0030131">https://sac.jncc.gov.uk/site/UK0030131</a>



#### Ramsar Sites (England)

NAME	MERSEY NARROWS & NORTH WIRRAL FORESHORE
REF_CODE	UK11042
MEASURE	2078.63

NAME	MERSEY ESTUARY
REF_CODE	UK11041
MEASURE	5023.35

NAME	RIBBLE & ALT ESTUARIES
REF_CODE	UK11057
MEASURE	13488.48

NAME	THE DEE ESTUARY
REF_CODE	UK11082
MEASURE	13153.67

#### National Nature Reserves (England) - points

NAME	AINSDALE SAND DUNES
REF_CODE	1006001
HYPERLINK	<a href="https://www.gov.uk/government/publications/merseysides-national-nature-reserves/merseysides-national-nature-reserves#ainsdale-sand-dunes">https://www.gov.uk/government/publications/merseysides-national-nature-reserves/merseysides-national-nature-reserves#ainsdale-sand-dunes</a>
MEASURE	491.97

NAME	CABIN HILL
REF_CODE	1006027
HYPERLINK	<a href="https://www.gov.uk/government/publications/merseysides-national-nature-reserves/merseysides-national-nature-reserves#cabin-hill">https://www.gov.uk/government/publications/merseysides-national-nature-reserves/merseysides-national-nature-reserves#cabin-hill</a>
MEASURE	28.27

#### Special Protection Areas (England) - points

No Features found

#### Special Areas of Conservation (England) - points

No Features found

#### Sites of Special Scientific Interest (England) - points

No Features found

#### Sites of Special Scientific Interest Units (England) - points

No Features found

#### Ramsar Sites (England) - points

No Features found

#### National Nature Reserves (England)

No Features found

#### Areas of Outstanding Natural Beauty (England)

No Features found

## 12.Engagement Period

Engagement Starts: 14 March 25

6-week engagement window

Engagement Ends: 25 April 25

Period of Re-engagement: 20 May – 09 June

ACP Submission: 23 June 25

CAA Decide Gateway: 23 July 25

AIC Submission: 08 August 25

AIC Published: 18 September 25

Commence operations: 01 October 25

## 13.Your Feedback

The CAA requires proof of engagement with other airspace users as part of the airspace change request process. We would therefore appreciate your feedback by **09 June 2025** so we can include it in our submission to the CAA.

You can provide feedback in the following ways:

- By email: Send your comments to [engagement@blackswansl.com](mailto:engagement@blackswansl.com), detailing any suggested changes to the TDA to enhance safety or minimise impact on you.
- By email: If you support the proposed approach, email [engagement@blackswansl.com](mailto:engagement@blackswansl.com) to confirm your understanding and agreement.
- By phone: Arrange a call with us to share your feedback. We will take minutes of the discussion and seek your approval before submitting them to the CAA. To schedule a call, email [engagement@blackswansl.com](mailto:engagement@blackswansl.com).

Whenever possible, we kindly ask that feedback be provided before the deadline, allowing us more time to collaborate on any suggested changes and compile responses into a summary report for the CAA. If no response is received, we will send periodic reminders during the engagement period.