



# Skyports

**Skyports Limited**

**Airspace Change – ACP-2020-055 – UAS BVLOS in Segregated Airspace (Oban-Lochgilphead)**

**Summary Report – Targeted Aviation Stakeholder Engagement [REDACTED]**

**Version 2.1 – Dated: 29 January 2021**

## Amendment record

Issue	Amendment	Date
v1.0	Initial Issue	04/01/2021
V2.0	<ul style="list-style-type: none"> <li>Updated Acronyms and abbreviations</li> <li>Addition of CAP 1827 to Referenced documents</li> <li>Addition of information about scheduled services and general aviation (4.2)</li> <li>Addition of information about activations and usage of the airspace, and changes to Upper Limits (5.1.1)</li> <li>Addition of Appendix U</li> <li>Addition of Appendix V</li> </ul>	25/01/2021
V2.1	<ul style="list-style-type: none"> <li>Amendment to mention use of Met Office Aviation Briefing services (<a href="#">5.1.1</a>; <a href="#">Additional engagement point 1</a>; and <a href="#">Additional engagement point 2</a>)</li> </ul>	29/01/2021

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If this document is updated following meetings with the Civil Aviation Authority (CAA) or for any other reason, the SUA Operator as Change Sponsor will publish a new version (redacted) on the CAA Airspace Change online portal for all to see. This is to enable the CAA to refer to the correct version if it needs to publish a determination of whether an airspace change is a relevant option to investigate.

## Referenced documents

Document	Version	Version & Date	Source
DA/TDA Policy 20200721	CAA Policy for the Establishment of Permanent and Temporary Danger Areas	Version 1.0 21 July 2020	<a href="#">DA/TDA Policy 20200721</a>
CAP 1616	Airspace Change – Guidance on the regulatory process for changing the notified airspace design and planning and planned and permanent redistribution of air traffic, and on providing airspace information	Version 3.0 22 January 2020	<a href="#">CAP 1616</a>
CAP1827	Beyond Visual Line of Sight (BVLOS) operations of unmanned aircraft systems (UAS) in unsegregated airspace: Sandbox brief	Version 1.0 1 August 2019	<a href="#">CAP 1827</a>

## Acronyms and abbreviations

ACP	Airspace Change Proposal
ADS-B	Automatic Dependent Surveillance-Broadcast
AGL	Above Ground Level
AFISO	Aerodrome Flight Information Service Officer
AIC	Aeronautical Information Circular
AMSL	Above Mean Sea Level
BVLOS	Beyond Visual Line of Sight

CAA	Civil Aviation Authority
CAP	Civil Aviation Publication
CTR	Controlled Traffic Region
DA	Danger Area
DAA	Detect and Avoid
DAAIS	Danger Area Activity Information Service
DACS	Danger Area Crossing Service
ESA	European Space Agency
EC	Electronic Conspicuity
FIS	Flight Information Service
Freq	Frequency
GA	General Aviation
HESLO	Helicopter External Sling Load Operation
HLS	Helicopter Landing Site
NHS	National Health Service
MOD	Ministry of Defence
NLB	Northern Lighthouse Board
NOTAM	Notice to Airman
LAT	Latitude
LONG	Longitude
LTD	Limited
POC	Proof of Concept
RA(T)	Restricted Area (Temporary)
SAMS	Scottish Association of Marine Sciences
SFC	Surface
SIL	Source Integrity Level
SUA	Small Unmanned Aircraft
TDA	Temporary Danger Area
TOI	Temporary Operating Instruction
UA	Unmanned Aircraft
UAS	Unmanned Aircraft System
UKSA	United Kingdom Space Agency
UTM	Unmanned Traffic Management
VFR	Visual Flight Rules

## Glossary

Aeronautical Information Publication	Long-term information essential to air navigation, including the detailed structure of UK airspace and flight procedures, which forms part of the UK Integrated Aeronautical Information Package. Sometimes informally known as the Air Pilot. Publication is the responsibility of the CAA but is carried out under licence by NATS. <a href="http://www.ais.org.uk">www.ais.org.uk</a>
Air navigation service provider	An organisation which operates the technical system, infrastructure, procedures, and rules of an air navigation service system, which may include air traffic control.
Airspace change proposal	A request (usually from an airport or air navigation service provider) for a permanent change to the design of UK airspace.

Airspace design	Together, the airspace structure and flight procedures
Airspace change process	The staged process an airspace change sponsor follows to submit an airspace change to the CAA for a decision. The process includes actions associated with implementation and post-implementation review, after the CAA or, where applicable Secretary of State, decision.
Airspace Modernisation Strategy	A co-ordinated strategy and plan for the use of UK airspace for air navigation up to 2040, including for the modernisation of the use of such airspace, prepared and maintained by the CAA, incorporating the previous Future Airspace Strategy. It is a requirement of the Air Navigation Directions 2017. <a href="https://www.caa.co.uk/Commercial-industry/Airspace/Airspace-ModernisationStrategy/Aboutthe-strategy/">https://www.caa.co.uk/Commercial-industry/Airspace/Airspace-ModernisationStrategy/Aboutthe-strategy/</a>
Airspace structure	<p>Designated volumes of airspace within identified characteristics, including the equipment aircraft wanting to enter that airspace must carry and actions pilots must carry out before entering that airspace.</p> <p>The volumes of airspace are designed to ensure the safe and optimal operation of aircraft.</p> <p>Airspace structures consist of:</p> <ul style="list-style-type: none"> <li>(a) controlled airspace, namely control zones, control areas, terminal control areas and airways;</li> <li>(b) airspace restrictions, namely danger, restricted and prohibited areas;</li> <li>(c) radio mandatory zones, transponder mandatory zones;</li> <li>(d) other airspaces specified by the CAA when defining the airspace change process, such as, for example, flight information zones, aerodrome traffic zones, temporary segregated areas, temporary reserved areas or free-route airspace.</li> </ul>
Beyond Visual Line of Sight (BVLOS)	An operation in which the remote pilot or observer does not use visual reference to the remotely piloted aircraft in the conduct of flight.
Consultation	Formal process seeking input into a decision, undertaken in line with the Gunning Principles, and government guidance
Danger Area	Airspace within which activities dangerous to the flight of aircraft may exist at notified times.
Design principles	The principles encompassing the safety, environmental and operational criteria and the



	strategic policy objectives that the change sponsor seeks to achieve in developing the airspace change proposal. They are an opportunity to combine local context with technical considerations, and are therefore drawn up through discussion with affected stakeholders.
Engagement	Catch-all term for developing relationships with stakeholders, covering a variety of activities including but not limited to consultation, information provision, regular and one-off meetings and fora, workshops and town hall discussions.
Feedback	Informal response to engagement – change sponsors may be expected to seek feedback from stakeholders in addition to formally consulting them.
Military operations	Operations undertaken by military aircraft, or military aerodromes.
Overflight	For the purposes of airspace changes, overflight is defined according to the CAA's report, CAP 1498 which outlines a measurement based upon community perception. It does not portray noise impacts. <a href="http://www.caa.co.uk/cap1498">www.caa.co.uk/cap1498</a>
Portal	The CAA's airspace change portal – an online portal containing details of all current and previous airspace changes, including the ability to respond to consultations. <a href="https://airspacechange.caa.co.uk">https://airspacechange.caa.co.uk</a>
Representative group	Stakeholder group that gathers together those with similar interests in a proposal. It could be at an industry level (for instance the Airport Operators Association), national level (for instance the Aviation Environment Federation) or local level (for instance HACAN).
Sponsor (or change sponsor)	An organisation that proposes, or sponsors, a change to the airspace design in accordance with the CAA's airspace change process.
Stakeholder	An interested third party in an airspace change or PPR proposal.
Statement of Need	The means by which the change sponsor sets out what airspace issue or opportunity it is seeking to address and what outcome it wishes to achieve, without specifying solutions, technical or otherwise.
Uncontrolled airspace	Airspace in which aircraft are able to fly freely through the airspace without being constrained by instructions in routeing or by air traffic control, unless they require an air traffic control service.
Unmanned aircraft system (UAS)	An Unmanned Aircraft System (UAS) comprises individual 'System Elements' consisting of the Unmanned Aircraft (UA) and any other System Elements necessary to enable flight, such as a Remote Pilot Station, Communication Link and

	Launch and Recovery Element. There may be multiple UAs, RPS or Launch and Recovery Elements within a UAS.
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# 1 Introduction

Skyports (the change sponsor) is seeking a Temporary Danger Area (TDA) complex to be established during notified periods to enable the safe testing and demonstration of UAS BVLOS operations during a trial operation for up to 8 weeks commencing on 8 February 2021 to transport medical equipment to transport medical equipment, medical samples (including dangerous goods) and medicine by small unmanned aircraft (SUA) to and from multiple healthcare facilities in Argyll & Bute on the west coast of Scotland. Specifically, Skyports will be transporting COVID-19 testing kits and COVID-19 testing samples for analysis.

The operation is a response to a written request from the National Health Service (NHS) in Scotland for assistance with the response to COVID-19. The project is part funded through a joint initiative by the European and UK Space Agencies for the utilisation of space-enabled technology to assist with the COVID-19 response.

The [CAA Policy for the Establishment of Permanent and Temporary Danger Areas – 20200721](#) (a scaled down version of [CAP1616](#)) includes a statutory obligation to engage aviation stakeholders and other relevant stakeholders and give due consideration to the potential positive and negative impacts of the change on the airspace users.

Following an Assessment Meeting with CAA Airspace Regulation on 13 August 2020 to discuss Skyports Statement of Need, it was agreed that to facilitate its operations a TDA would be required, the proposals for which would be subject to a targeted aviation stakeholder engagement exercise in accordance with the CAA Policy for the Establishment of Permanent and Temporary Danger Areas.

This document provides a summary of Skyports targeted aviation stakeholder engagement exercise that Skyports completed between 20 August 2020 and 13 September 2020 to allow aviation stakeholders to comment on Skyports TDA design and operational proposals. Additional engagement with some stakeholders continued beyond the deadline for the development of a Temporary Operating Instruction (TOI), evidence from which has been captured in a separate summary document.

## 2 Methodology

### 2.1 Stakeholder identification

Skyports engaged aviation stakeholders considered to be directly affected and potentially impacted as well as those that would likely have an interest in the ACP. In particular, Skyports referred to the National Air Traffic Management Advisory Committee to assist with the identification of relevant stakeholders. See [7 Stakeholders](#).

### 2.2 Engagement material

Skyports shared the engagement material containing details and a map of the proposed TDA, as well some details of operation of that TDA.

Materials containing technical information were presented in an accessible way as possible so as not to create a barrier to the provision of feedback.

The engagement material was approved by CAA Airspace Regulation before distribution to stakeholders.

### 2.3 Communications

Skyports shared engagement material with stakeholders via email, which was completed on 20 August 2020, consistent with the original Timeline Agreement Skyports made with CAA Airspace Regulation

Skyports wished to encourage a good level of engagement with the process from stakeholders, and reminder communications were provided by email to those that had not responded by these dates on 1 September 2020 and 7 September 2020. Individual reminder emails to those stakeholders that had not provided a response by 11 September were issued on the same day as the closing date for feedback was 13 September 2020.

## 2.4 Feedback

Where stakeholders asked that we share their feedback in full with the CAA, Skyports has done this in this document and will share this information at the Step 3d Collate & Review Responses stage of the ACP.

All feedback was collated and stored on Skyports secure server as a record of the activity and ready for sharing with the CAA when necessary.

Where stakeholders requested that Skyports keeps them up-to-date with progress of the airspace change and the final designs agree with the CAA, Skyports will do this at the soonest opportunity within the airspace change process.

# 3 Original change proposals

## 3.1 TDA complex

Skyports requires a volume(s) of segregated airspace within which to safely execute its operations and presented the following proposed airspace design to local airspace users:

*Five adjacent TDAs are required to facilitate our operations and are designed to minimise the impact on other aviation stakeholders in the area.*

### 3.1.1 TDA 1

Identification and Lateral Limits			Upper Limit	Remarks
			Lower Limit	
	Area bounded by straight lines joining		Lower Limit: SFC	Activity: UAS Beyond Visual Line of Sight (BVLOS)  Hours: When notified  Sponsor: Skyports
WP	LAT (N)	LONG (W)	Upper Limit: 900ft AMSL	
1	56.40895751	-5.46393772		
2	56.38328339	-5.44895828		
3	56.34437320	-5.50093869		
4	56.34785359	-5.53365689		
5	56.38524296	-5.48280026		
6	56.40484352	-5.49266643		

### 3.1.2 TDA 2

Identification and Lateral Limits			Upper Limit	Remarks
			Lower Limit	
	Area bounded by straight lines joining		Lower Limit: SFC	

WP	LAT (N)	LONG (W)	Upper Limit: 600ft AMSL	Activity: UAS Beyond Visual Line of Sight (BVLOS)  Hours: When notified  Sponsor: Skyports
1	56.34437320	-5.50093869		
2	56.28852161	-5.57479097		
3	56.27319425	-5.57855364		
4	56.27396934	-5.61393607		
5	56.30259255	-5.61456784		
6	56.32024970	-5.57173153		
7	56.34785359	-5.53365689		

### 3.1.3 TDA 3

Identification and Lateral Limits			Upper Limit	Remarks
			Lower Limit	
	Area bounded by straight lines joining		Lower Limit: SFC	Activity: UAS Beyond Visual Line of Sight (BVLOS)  Hours: When notified  Sponsor: Skyports
WP	LAT (N)	LONG (W)	Upper Limit: 400ft AMSL	
1	56.04282641,	-5.40002392		
2	56.03067154,	-5.41551182		
3	56.04199022,	-5.44905626		
4	56.13102675,	-5.62917346		
5	56.20386653,	-5.60499405		
6	56.24436628,	-5.61510390		
7	56.27396934,	-5.61393607		
8	56.27319425,			
9	56.24614443,	-5.58502795		
10	56.20590775,	-5.56921938		
11	56.15642974,	-5.58869110		
12	56.11665281,	-5.55699443		

### 3.1.4 TDA 4

Identification and Lateral Limits			Upper Limit	Remarks
			Lower Limit	
	Area bounded by straight lines joining		Lower Limit: SFC	
WP	LAT (N)	LONG (W)	Upper Limit: 720ft AMSL	

1	56.37959	-5.49105		Activity: UAS Beyond Visual Line of Sight (BVLOS)  Hours: When notified  Sponsor: Skyports
2	56.38518	-5.48278		
3	56.40483	-5.49263		
4	56.43249	-5.55032		
5	56.41295	-5.57852		

### 3.1.5 TDA 5

Identification and Lateral Limits			Upper Limit	Remarks
			Lower Limit	
	Area bounded by straight lines joining		Lower Limit: SFC	Activity: UAS Beyond Visual Line of Sight (BVLOS)  Hours: When notified  Sponsor: Skyports
WP	LAT (N)	LONG (W)	Upper Limit: 400ft AMSL	
1	56.43249	-5.55032		
2	56.41295	-5.57852		
3	56.47841	-5.7419		
4	56.49813	-5.7031		





**FIGURE 1: TOP DOWN VIEW OF ORIGINAL PROPOSED AIRSPACE DESIGN**

### 3.1.6 Notification

CAA Airspace Regulation will promulgate TDA activations by NOTAM on the days of planned use.

### 3.1.7 TDA activation

Date	Time
Monday 8 February 2021 to Wednesday 31 March 2021 (including Saturdays and Sundays)	Daylight hours and outside of daylight hours

### 3 Summary of feedback

Skyports received feedback in written form from 13 stakeholders. Stakeholders were broadly supportive (two stakeholders actively supportive), raised no issues and/or willing to work with Skyports to find a workable solution that enables a safe manned and unmanned mix of operations.

Emergency service operators initially expressed opposition to the proposals, seemingly in relation to the airspace use and, upon further inquiry, mostly in relation to the concurrent ACP (ACP-2020-048 Bute Region). No suggestions were received on alternative airspace designs.

Emergency services and their operators are understandably concerned about how Skyports operations will safely deconflict with their operations, given their need for airspace primacy at all times and at very short notice. Skyports acknowledges that more information on draft plans (even if not able to be confirmed) for tactical airspace deconfliction should have been provided to stakeholders to provide assurance that operations would be safe, and that Skyports was intent on producing a Temporary Operating Instruction (TOI) with their agreement and approval.

Skyports has learnt from this experience and will provide more details about plans for safe deconfliction – even if unconfirmed – to show earlier on that we have at least thought about this important aspect of the airspace change process and that we are capturing and taking into account the operational requirements of others. Skyports has been dealing with emergency services and their air operators on the development of the TOI for ACP-2020-055 and have come to a mutually agreeable arrangement. Skyports has included email confirmations of agreement/acceptance in a separate Stakeholder Summary Report – Targeted Aviation Stakeholder Engagement – Temporary Operating Instruction.

Skyports provides the following summary of responses from aviation stakeholders on the TDA complex proposals. Full, unredacted versions of the 13 written responses to the formal targeted aviation stakeholders engagement exercise can be viewed in section [8 Appendices](#):

#### 4.1 Emergency service operations

- Aerial emergency services or providers of aerial emergency services required routine access to the airspace in question, sometimes with minimal or no notice. Emergency services and military aircraft would still need to use this route below 500ft in poor weather and poor visibility. In poor weather and with low visibility, the pilot decides on the safest route. A robust procedure must be in place and agreed with the Emergency Services so that they can gain access to the airspace in question at short notice.
- The helicopter landing site (HLS) at the Lorn & Islands Hospital in Oban is in frequent use; procedures should be in place such that emergency service aircraft are not denied access to Oban HLS.
- Emergency tasking may require transit along the Fifth of Lorn below 400ft AMSL.
- Clearance into the TDA must be available to emergency service aircraft with as little as 10 minutes notice, including when emergency service aircraft are already airborne.
- More specific or reduced TDA activation times would reduce the burden on emergency services.
- If short-notice clearances are not available, more pre-emptive clearances whenever emergency aircraft are tasked into the area would be required when weather is poor.

- PDG Aviation Services regularly operate down to ground level in the airspace in question for HESLO operations, powerline patrolling, lighthouse support operations, as well as routine transit.
- Emergency services fly when their own ADS-B is not working. They also have a mode-C transponder on board.

#### 4.2 Scheduled services and general aviation

- The proposals would not directly affect The Oban & The Isles Airport itself.
- The proposed TDA does take place in an area known to be on the approach to the airport, particularly flights still being carried out by VFR scheduled aircraft operating to the isles of Coll, Tiree, Colonsay and Islay to the west of Oban. High terrain to the north and east of Oban means that the only safe VFR arrivals is from the south and west, through the proposed TDA 4. Departures are regularly flown to the north and west through TDA 5.
- Air transport services to the islands are essential during the ongoing emergency. Scheduled weekend 'scholar' flights are a regular occurrence, transporting young people to and from the mainland to attend school. Charter operations also take place at the weekends. Commercial air transport activity levels are much higher than in Skyports previous trial and include regular weekend flights.
- VFR scheduled service aircraft are regularly required to operate as low as 500ft AMSL over the sea to satisfy VFR criteria, remaining clear of cloud with surface sight. A scheduled service provider suggests that Skyports operating at the near the top of the TDA, would increase the scheduled service operating minima and its ability to deliver their schedule and provides proposed mitigations. The operator suggests raising the top of the TDA to allow for a 500ft vertical separation from the operating altitude of the UAS – so an upper limit of 900ft AMSL.
- The scheduled service provider recommended that UAS activity should cease and the TDA to be declared inactive whenever commercial passenger operations to and from Oban airport are scheduled, with the application of an appropriate safety margin either side of planned departure and arrival in case of poor weather, and a resultant need to return to Oban or delay due to poor weather. The operator would prefer no UA activity to be live when intra-island services are operating but concede that this would constrain vital COVID-19 response.
- VFR light aircraft may legally fly below 500ft AMSL over the sea which is essential for safe VFR operations in the event of poor weather conditions and presence of a low cloud base, enabling aircraft to avoid the high terrain surround proposed operating locations over the sea. For maximum freedom of movement, VFR light aircraft must be able to access an active TDA for any reason, especially in an emergency when an aircraft may have a requirement to cross a TDA.
- Light aircraft could be operating from the airport for maintenance purposes, which allows them to fly for 30min at 10NM from the airport.
- Northern Lighthouse Board (NLB) have a helicopter landing area on the south side of the bay which is used by PDG Aviation Services for maintenance. These are infrequent but possible during the times of operations.

#### 4.3 Deconfliction

- All stakeholders expected to see a deconfliction process addressed in a mutually agreed TOI, especially for the emergency services and military.
- Many stakeholders recommended that Oban Airport should provide a DAAIS and/or DACS services to enable information on the status of UAS activity to be passed in real time between the UAS Operator and pilots/manned aviation operators, in particular to help emergency services, scheduled services and private aircraft to gain access to the TDA at short notice.
- One stakeholder recommended that Skyports should publish a daily flying programme for our activity alongside the NOTAM.

### 5. Skyports response

#### 5.1 Skyports responses to change proposal feedback

Skyports appreciates the feedback that aviation stakeholders took the time to provide and looks forward to working with them (and the CAA) to agree an airspace design and robust deconfliction process that satisfies everyone where reasonably practicable.

Having reviewed this valued feedback, Skyports considers and/or proposes the following:

##### 5.1.1 Airspace change

- TDA Upper Limits have been amended to better represent the route required and the requirements of the vehicle being operated.
  - TDA 1 Upper Limit has been decreased to 800ft AMSL;
  - TDA 2 Upper Limit has been increased to 750ft AMSL;
  - TDA 3 Upper Limit has been increased to 550ft AMSL;
  - TDA 4 Upper Limit has been decreased to 600ft AMSL; and
  - TDA 5 Upper Limit has not changed.

*NB: The SUA will be flying below 400ft AGL at all points during the flight.*

- TDA 1-3 waypoints have been very slightly adjusted to better reflect the airspace required for the intended routes.
- TDA3 WP8 has now been added as this was missing in original proposal.
- As recommended in the stakeholder engagement feedback about changing the ceilings of the TDAs to allow a minimum separation of 500ft from the maximum operating height of the SUA to more accurately represent the impact of the TDA and provide a safe margin of separation for crossing traffic, this is a matter for the CAA as a policy decision.
- Due to operational imperatives, Skyports intends to operate at the weekends. Skyports will notify in the same way and follow the same processes for deconfliction as between Monday and Fridays, based on how we know the airspace is used. This will be communicated to aviation stakeholders once the final change designs have been approved by the CAA.

- Oban Airport will provide a DAAIS service during opening hours of Oban Information (see [5.1.2 Deconfliction Process](#)). Scottish Information will also provide a similar service should aircraft already be on their frequency.
- Skyports will work with Air Task Group using the previously reliable deconfliction processes whereby all UAS activity will cease during the times requested when Hebridean services depart from and to Oban Airport.
- Skyports will also cease operations when commercial services are taking place between islands as can appreciate companies such as PDG aviation provide an emergency response in the event of a lighthouse malfunction for example.
- Skyports will only activate parts of the TDA complex needed to facilitate routes to be flown. All other TDAs will not be activated. In addition, TDAs will not be activated for the duration of proposed operations. Skyports will only activate a TDA(s) when required, for the minimum duration necessary and will deactivate TDAs outside of notified hours.
- In the event of poor weather, Skyports will mutually agree weather limits with Air Task Group and apply these limits in the TOI. The approach of sharing planned movements between Skyports and Air Task Group the day before and on the day of UAS operations worked well during the previous trial, and Skyports will pursue the same approach with Air Task Group during these trials.
- Skyports will put in place a robust deconfliction and airspace management process, to be mutually agreed with other key airspace users.
- Skyports acknowledges the primacy of commercial schedule air transport operations and emergency service operations and this will be reflected in the deconfliction and airspace management process/TOI to be agreed with other airspace users.
- Skyports acknowledges that VFR operated aircraft (scheduled and general aviation) may need to operate below 500ft AMSL over the sea, especially in the event of poor weather and visibility and to avoid the surround high terrain, and therefore will require the freedom to access to an active TDA, including at short notice.
- Skyports will make telephone numbers available of Skyports Flight Crew on the NOTAM(s) so that the team can be contacted at all times if access to an active TDA is sought and no SUA is already airborne. In the event that using a telephone is not possible, Skyports will enable requests to be made via radio via Oban and/or Scottish Information, who will relay the information to Skyports via telephone. DAAIS information will be included on the NOTAM. (see 5.1.2)
- Skyports will not operate if the cloud base is below 1500ft AMSL. Skyports will use [Met Office Aviation Briefing Services](#) and other applications for tactical decisions to determine the cloud base before commencing and throughout operations.
- The SUA to be operated during the proposed period of operations is fitted with ADS-B IN and OUT, which can process uncertified ADS-B signals (SIL/SID=0) will be visible to others with ADS-B in and Skyports will be able to track aircraft that are broadcasting. Further, the SUA is fitted with an automatic collision avoidance system. In the event that a TDA boundary is breached accidentally or in an emergency by an aircraft carrying ADS-B and broadcasting out, the SUA will automatically respond sufficiently early to avoid that other aircraft, based on the assumption that the other aircraft maintains their speed and heading.

- Skyports successfully deconflicted with PDG Aviation Services during our May/June POC; however, they were not included in the stakeholder list for this ACP. Skyports has contacted PDG to seek their views on the ACP and to inform them of plans to produce and share with them in advance the deconfliction process and TOI. Given our previous experience of working with PDG Aviation Services, Skyports planned deconfliction process will likely be satisfactory but we will share information as soon as possible to ensure they are aware of the proposed changes and they can comment.

#### 5.1.2 Deconfliction process

- Skyports has revised its deconfliction process and has produced a TOI that has secured the approval of relevant stakeholders.
- Skyports acknowledges the primacy of commercial schedule air transport operations and emergency service operations and this is reflected in the deconfliction and airspace management process/TOI agreed with other airspace users.
- Skyports is willing to produce a daily flying programme of our activity in advance and alongside the NOTAM to be issued 24hrs ahead of the start of operations; however, Skyports operations do not follow rigid schedules due to the highly changeable nature of the weather and because Skyports will be operating an on-demand service for the NHS. During Skyports' May/June proof of concept, some other airspace users appreciated an indicative plan of activity for the following day whereas others did not as it was subject to change. Skyports will start by producing an indicative schedule of daily activity and will either continue or cease producing this schedule depending on the usefulness to other airspace users.
- Skyports accepts a recommendation by a stakeholder to employ Oban Information and Scottish Information as a DAAIS service when the TDA is active as a robust means of deconfliction, if contact by telephone is not possible. Skyports will aim to use both Scottish Information and Oban Information during their operating times. In all circumstances, Skyports will respond through the medium they have been contacted on (telephone, Scottish Information or Oban Information). Skyports will advertise details of the DAAIS on the NOTAM.
- Oban and the Isles Airport does not have a license from the CAA to offer a DACS, so Skyports is not in a position to provide this service and considers a DAAIS service to be satisfactory for our type of operation and as a means of communication through which to relay information.
- Skyports will be using and will make available to all other stakeholders who wish to use it, a UTM platform to provide real-time situational awareness of UAS activity – which is fitted with a tracking device – within the TDA complex and the movements of other conspicuous aircraft. The service will be available through an online portal and includes an additional notification of each take-off and landing. Skyports will be monitoring the system throughout UAS operation, which will provide Skyports with additional situational awareness and more notice than if reliant solely on the telephone in order to clear the airspace. **Nevertheless, and it is important to note, the UTM system is not being applied as a tactical air risk mitigation and will only be applied in conjunction with telephone calls (as the tactical air risk mitigation) directly with operators or via an information service.**

## 6 Final change proposals

### 6.1 TDA Complex

Skyports requires volumes of segregated airspace within which to safely execute its operations and present the following proposed airspace design to local airspace users.

A TDA complex of five adjacent TDAs are required to facilitate our operations, the design of which has been chosen to minimise the impact on other aviation stakeholders that operate or may operate in the area.

#### 6.1.1 TDA 1

Identification and Lateral Limits			Upper Limit Lower Limit	Remarks
	Area bounded by straight lines joining		Lower Limit: SFC  Upper Limit: 800ft AMSL	Activity: UAS Beyond Visual Line of Sight (BVLOS)  Hours: When notified  Sponsor: Skyports
WP	LAT (N)	LONG (W)		
1	56.40895	-5.46396		
2	56.38327	-5.44896		
3	56.34426	-5.50079		
4	56.34785	-5.53369		
5	56.38518	-5.48278		
6	56.40483	-5.49263		

#### 6.1.2 TDA 2

Identification and Lateral Limits			Upper Limit Lower Limit	Remarks
	Area bounded by straight lines joining		Lower Limit: SFC  Upper Limit: 750ft AMSL	Activity: UAS Beyond Visual Line of Sight (BVLOS)  Hours: When notified  Sponsor: Skyports
WP	LAT (N)	LONG (W)		
1	56.34426	-5.50079		
2	56.28848	-5.57479		
3	56.27383	-5.6138		
4	56.27323	-5.57847		
5	56.30255	-5.61453		
6	56.32019	-5.57166		
7	56.34785	-5.53369		

### 6.1.3 TDA 3

Identification and Lateral Limits			Upper Limit	Lower Limit	Remarks
	Area bounded by straight lines joining		Lower Limit: SFC  Upper Limit: 550ft AMSL		Activity: UAS Beyond Visual Line of Sight (BVLOS)  Hours: When notified  Sponsor: Skyports
WP	LAT (N)	LONG (W)			
1	56.04274,	-5.39995			
2	56.03066	-5.41549			
3	56.04193	-5.44905			
4	56.131,	-5.62916			
5	56.20359	-5.60485			
6	56.24544,	-5.61635			
7	56.27383,	-5.6138			
8	56.27323	-5.57847			
9	56.24615	-5.58492			
10	56.20566	-5.569			
11	56.15634	-5.58852			
12	56.11651	-5.55694			

### 6.1.4 TDA 4

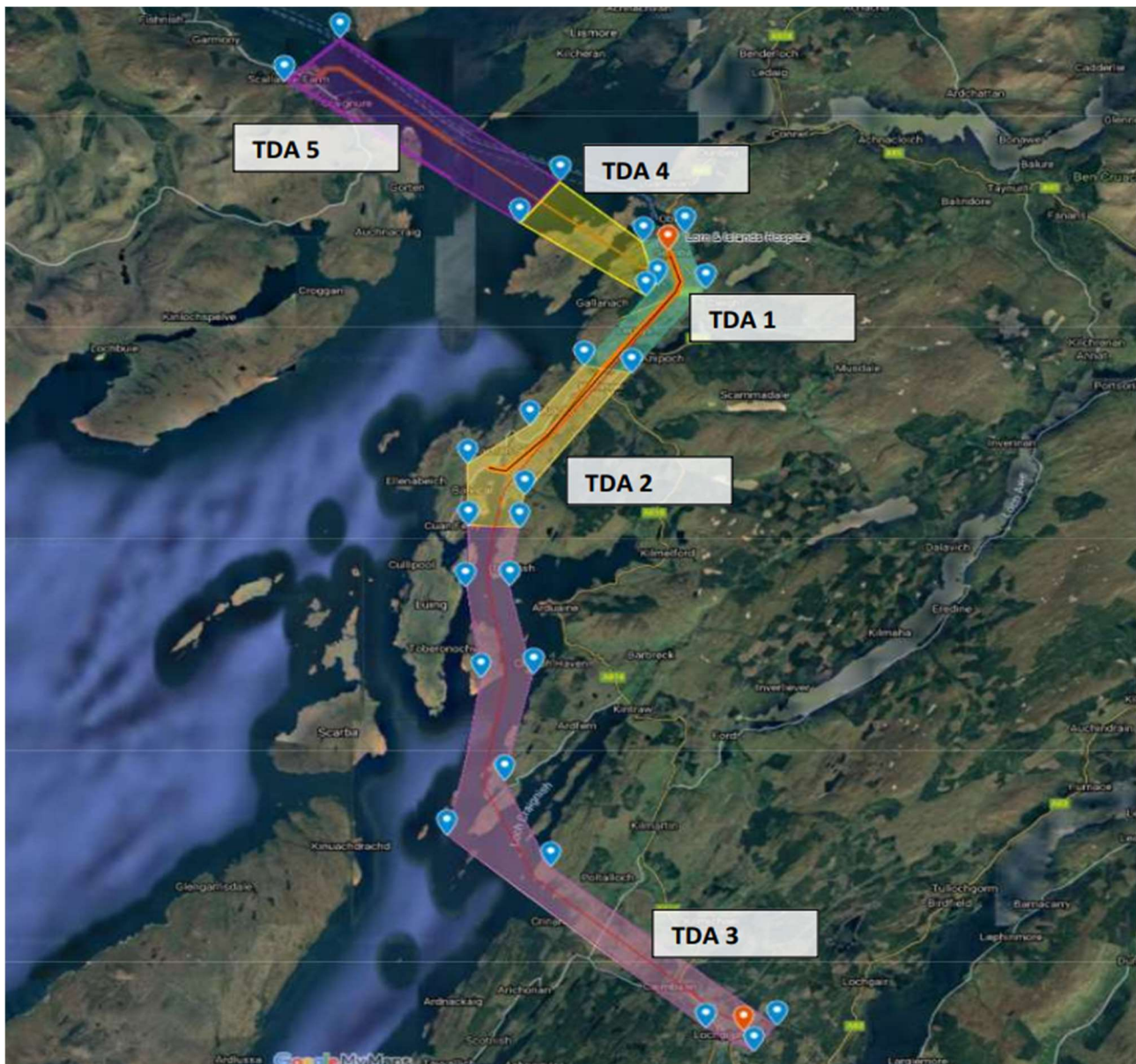
Identification and Lateral Limits			Upper Limit	Lower Limit	Remarks
	Area bounded by straight lines joining		Lower Limit: SFC  Upper Limit: 600ft AMSL		Activity: UAS Beyond Visual Line of Sight (BVLOS)  Hours: When notified  Sponsor: Skyports
WP	LAT (N)	LONG (W)			
1	56.37959	-5.49105			
2	56.38518	-5.48278			
3	56.40483	-5.49263			
4	56.43249	-5.55032			
5	56.41295	-5.57852			

### 6.1.5 TDA 5

Identification and Lateral Limits			Upper Limit	Lower Limit	Remarks



	Area bounded by straight lines joining		Lower Limit: SFC Upper Limit: 400ft AMSL	Activity: UAS Beyond Visual Line of Sight (BVLOS)  Hours: When notified  Sponsor: Skyports
WP	LAT (N)	LONG (W)		
1	56.43249	-5.55032		
2	56.41295	-5.57852		
3	56.47841	-5.7419		
4	56.49813	-5.7031		



**FIGURE 2: TOP DOWN VIEW OF FINAL CHANGE PROPOSALS**

## 7 Stakeholders

### 7.1 Civil Aviation Authority

The CAA is being engaged at every stage of the ACP.

## 7.2 Aviation stakeholders

Stakeholder	Type of Organisation	Initial Distribution (20/08/20)	First Reminder Distribution (01/09/20)	Second Reminder Distribution (07/09/20)	Personalised Final Reminder (10/09/20)	Response (Y/N)
Airspace4 All	Representative	Yes	Yes	Yes	Yes	No
Air Task Group (for Hebridean Air Services	Air transport operator	Yes	Yes	Yes	Not required	Yes
Airfield Operators Group (AOC)	Representative	Yes	Yes	Yes	Yes	No
UK Association of Remotely Piloted Aircraft Systems (ARPAS UK)	Representative	Yes	Yes	Yes	Not required	Yes
Babcock Mission Critical Services Onshore Ltd	Aviation service provider	Yes	Yes	Not required	Not required	Yes
British Balloon and Airship Club	Representative	Yes	Yes	Yes	Yes	No
British Business Aviation and General Aviation Association	Representative	Yes	Yes	Yes	Not required	Yes
British Gliding Association	Representative	Yes	Not required	Not required	Not required	Yes
British Hang Gliding and Paragliding Association	Representative	Yes	Yes	Yes	Yes	No
British Helicopter Association (BHA)	Representative	Yes	Yes	Yes	Not required	Yes
British Microlight Aircraft Association / General Aviation Safety Council (GASCo)	Representative	Yes	Yes	Yes	Yes	No

British Skydiving	Representative	Yes	Yes	Yes	Yes	No
Gama Aviation	Aviation service provider	Yes	Not required	Not required	Not required	Yes
General Aviation Alliance (GAA)	Representative	Yes	Yes	Yes	Yes	No
Glenforsa Airfield	Airfield	Yes	Yes	Yes	Yes	No
Helicopter Club of Great Britain (HCAB)	Representative	Yes	Yes	Yes	Yes	No
Lanark and Lothian Soaring Club	General Aviation	No	No	No	No	Yes
Light Aircraft Association (LAA)	Representative	Yes	Yes	Yes	Yes	No
Maritime and Coastguard Agency	Emergency service provider	Yes	Yes	Yes	Not required	Yes (via Babcock Mission Critical Services Onshore Ltd and Gama Aviation)
Ministry of Defence	Military	Yes	Yes	Yes	Not required	Yes
NATS	Air Navigation Service Provider	Yes	Yes	Yes	Yes	Yes
Oban & The Isles Airport	Airport operator	Yes	Yes	Yes	Yes	Yes – Written and Phone
PDG Aviation Services	Aviation service provider	No	No	No	Yes	Yes
Police Scotland	Emergency service provider	Yes	Yes	Not required	Not required	Yes (also via Babcock Mission Critical Services Onshore Ltd)
Scottish Air Ambulance	Emergency service provider	Yes	Yes	Yes	Not required	Yes (via Babcock Mission Critical Services Onshore Ltd and Gama Aviation)
Scottish Association of Marine Sciences	Association	Yes	Yes	Not required	Not required	Yes

Scottish Ambulance Service	Emergency Service Provider	Yes	Yes	Yes	Not required	Yes
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# 8 Appendices

## Appendix A: Air Task Group (for Hebridean Air Services)



ACP-2020-055 - UAS BVLOS in Segregated Airspace  
Targeted Engagement with Aviation Stakeholders  
Response Form

Name	[REDACTED]
Organisation name	Airtask Group
Position in the organisation	[REDACTED]
Email	[REDACTED]

Feedback:



#### Background

Airtask's Hebridean Air Services operation is an AOC operation under EASA Part CAT regulation. Hebridean provides scheduled and charter lifeline services with Britten-Norman BN2B Islander aircraft to the communities of the islands under a PSO contract to Argyll and Bute council. These services have been recognized as essential during the current emergency. A copy of the current schedule can be found at the attached link. <https://www.hebrideanair.co.uk/timetables>.

Note that scheduled weekend 'scholar' flights are a regular occurrence; these transport young people to and from the mainland to attend school. We also regularly fly charter operations at the weekend.

#### Analysis

The high terrain to the north and east of Oban airport effectively means that the only safe VFR arrival is from the south and west, through the proposed TDA area 4. Departures are regularly flown to the north and west through TDA area 5. There are no IFR arrivals, departures or approaches to Oban. The nature of the weather in the Western Isles is such that aircraft are regularly required to operate as low as 500 ft amsl over the sea to allow them to satisfy VFR criteria, remaining clear of cloud with surface in sight. Our standard operating weather limits for the Hebridean operation are a minimum cloudbase of 550 ft and 3000m visibility.

UAS operations to the south overland in TDAs 1-3 are less likely to have impact on our operations.

I note that the UAS will operate at up to 400 agl, which is the current vertical limit of the proposed TDA. To provide an adequate safety margin I would expect any aircraft crossing the TDA to apply a minimum vertical separation of 500 ft. This in effect drives a minimum altitude of 900 ft and cloudbase of 1000 ft. This represents a significant increase to our operating minima, which is likely to impact on our ability to deliver our schedule.

Our proposed mitigations build on the work conducted by already shared by Skyports, and reflects consultation with the Hebridean Air Services pilot and Airtask Chief Training Captain, in addition to Operations, Flight Operations and Safety Manager.

#### Mitigations and Proposals

1. The upper limit of the TDA be raised to allow for a 500 ft vertical separation from the maximum proposed operating altitude of the UAS. I understand that this is 400 agl when the UAS enters its emergency mode, therefore an upper limit of 900 ft agl would seem appropriate (therefore 900 ft amsl in TDA2, the western overwater segment) This more adequately represents the impact of the TDA, and provides a margin of separation for crossing traffic. **This should be a matter for CAA policy. To the best of my knowledge the promulgated upper limit for danger areas should allow for safe transit at that height.** For example, I would expect to be able to safely transit a promulgated rifle range DA with an upper limit of 2000 ft agl at 2001 ft. This is not the case for the TDAs in this proposal, where the UAS could be operating at a GPS-derived height of 400 ft agl in its return to base mode. Given the well understood discrepancies in aircraft barometric altimeter derived height – pressure error, orographic error and temperature error to name 3 – **it is essential to safety that standard 500 ft separation should be applied against an air vehicle operating BVLOS without detect and avoid capability.**
2. Oban Airport should provide a Danger Area Activity Information Service to enable information on the status of UAS activity to be passed in realtime. Robust communications arrangements should be put in place between the airport and the UAS

operator. Alternatively, the UAS operator should provide a DAAIS directly on a promulgated VHF frequency; however we consider the airport option to be preferable. We regard a DAAIS or equivalent as essential to accommodate changes of schedule by either party, and to provide information to aircraft in distress, diversion or operating on behalf of the emergency services. [These arrangements worked well in the previous 2020-038.](#)

3. UAS activity should cease and the TDA be declared inactive whenever commercial passenger operations to and from Oban airport are scheduled and [visibility and cloudbase are forecast or observed as poor](#). An appropriate safety margin should be applied either side of planned departure and arrival times. [For our scheduled and commercial charter operations we request that UAS activity ceases as follows:](#)

- a. FROM Oban: ETD Oban -15 min to ETA Destination +15 min; or until confirmation received from Oban Information that aircraft has landed
- b. TO Oban: ETD Airfield of Departure -10 min to clearance of TDA confirmed to UAV operator by Oban Information

These margins are to allow for the possibility of the aircraft encountering poor weather and having to return to Oban, or for reroute and delay due to poor weather being encountered en-route. [Weather limits will be mutually agreed and applied in the Tactical Operating Instruction.](#)

Note that our services also operate intra-island, for example from Islay to Coll. We would **prefer** the UAS to be grounded during these flights also, to allow for the possibility of diversion to Oban. However, recognizing the importance of this UAS trial during the current emergency, we are content for UAS activity to continue during intra-island flights, provided the DAAIS is provided as described above.

4. A robust deconfliction and airspace management process needs to be in place to enable ourselves and other operators to signal our schedules and airspace requirements in advance. As suggested by Skyports, the process could require operators to submit planned movements by an agreed time the previous working day, with an agreed protocol to update planned movements on the day of operation. [These arrangements worked well in the previous 2020-038 and we are content with this proposal provided similar arrangements are in place.](#)
5. We would wish to see an explicit recognition of the **primacy** of commercial scheduled air transport operations, provided these have been notified through the agreed process the previous working day. This is to enable us to provide confidence to our passengers that a given service will operate. If this recognition is not forthcoming, we would wish to see some form of independent arbitration to decide tactical airspace use.

We would expect that the above points will be addressed in a mutually agreed Tactical Operating Instruction.

#### Remarks and Conclusion

Subject to the caveats above, Airtask is confident that, provided the measures suggested above are implemented, that it should be possible to safely and efficiently mix manned and unmanned air operations without significant detriment to both. [While our activity levels are considerably](#)

higher than in the previous trial, and include regular weekend flights, provided that with continued flexibility, goodwill and close liaison between operators, we are broadly content that operational and safety impacts can be managed to tolerable levels.

We understand the potential benefits of unmanned deliveries to the communities we support, and, subject to implementation of the caveats and procedures suggested above, are fully supportive of this initiative.



**Personnel Consulted:**

[REDACTED]  
[REDACTED]  
[REDACTED]  
[REDACTED]

## Appendix B: Response form

<b>Name</b>	██████████
<b>Organisation name</b>	ARPAS UK
<b>Position in the organisation</b>	██████████
<b>Email</b>	████████████████████

### Feedback

ARPAS UK actively supports this application for the following reasons:

- 1) This is a COVID 19 related initiative,
- 2) Undertaking this trial will help inform the process of reducing the impact of TDAs for the purpose of Beyond Visual Line of Sight operations, for the Search and Rescue, Air Ambulance and other General Aviation communities.
- 3) The TDA sponsor has undertaken to put in place a DAAIS and DACS crossing service, in order to minimise the inconvenience of other airspace users.

## Appendix C: Babcock Mission Critical Services Onshore Ltd

[REDACTED]

---

**From:** [REDACTED]  
**Sent:** 03 September 2020 02:40  
**To:** [REDACTED]  
**Cc:** [REDACTED]  
**Subject:** Re: CAUTION: External email - Reminder - Airspace Change ACP-2020-055 UAS BVLOS in Segregated Airspace (Oban-Lochgilphead) – Targeted Aviation Stakeholder Engagement

Dear [REDACTED],

Many thanks for your reply.

All understood and I appreciate you recognising that the manner in which the proposals have been made up to this point could possibly have been handled better.

I understand that you have been in contact with [REDACTED] from the Scottish Ambulance Service and there has been a meeting between all emergency aviation service providers and Skyports proposed to discuss the matter which I fully welcome.

From a Babcock perspective, [REDACTED] and/or myself will provide representation in any future meetings or consultation regarding the proposals.

Regards,

[REDACTED]

[REDACTED]  
[REDACTED]  
Mission Critical Services Onshore [Aviation]  
Babcock International Group

[REDACTED]  
[REDACTED]  
[www.babcockinternational.com](http://www.babcockinternational.com)

[REDACTED] | [REDACTED]  
Mission Critical Services Onshore | Aviation  
Babcock International Group

[REDACTED]  
[REDACTED]  
[www.babcockinternational.com](http://www.babcockinternational.com)

**babcock**<sup>TM</sup>

 Please consider the environment before printing this email

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**From:** [REDACTED]

**Sent:** 02 September 2020 17:04:55

**To:** [REDACTED]

**Cc:** [REDACTED]

**Subject:** RE: CAUTION: External email - Reminder - Airspace Change ACP-2020-055 UAS BVLOS in Segregated Airspace (Oban-Lochgilphead) – Targeted Aviation Stakeholder Engagement

Dear [REDACTED]

Thank you for your email and feedback.

Firstly, as per your request, I acknowledge receipt of your objection and, as stated before, we will share all feedback we get with the CAA.

Secondly, we do understand the nature of emergency service operations and the reactive nature of your tasking as well as emergency services having airspace primacy at all times regardless of notified airspace. We in no way challenge this essential principle. We developed a good understanding of this as we prepared for our proof-of-concept operations between Oban-Mull during May/June and agreed the deconfliction process with other airspace users, especially emergency services, using Oban Information as a DAAIS to enable communication between emergency service pilots already en route and us on the ground. I can assure you that we have had dialogue with the emergency services and operators to understand more about their operations before this formal process started to build a picture of the airspace and other users requirements.

Thirdly, and this is where I might have failed to provide more detail yet on how we intend to provide safe deconfliction so that your operations are not hindered and remain safe. In our proposed and updated airspace designs (informed by the feedback we received during informal conversations and emails), I have not gone into detail yet about how the deconfliction process might work. However, we are making progress on that. You might recall that originally I approached you about briefing on how a UTM-based system might help and that we were keen on trialling this. I respect your decision not to have the call give your opposition to the airspace design. We are still considering such a system but I can update you more on our thinking, especially following our ACP Assessment Meeting with CAA AROps. Given how it worked using Oban Information as a DAAIS service, we are looking to provide that service again. We are also in conversations with NATS at Prestwick about them providing the same DAAIS service for our operations around the Bute Area. We haven't confirmed anything with NATS yet formally but once I'm in a position to share an update, I'll let you know. Once this is hopefully confirmed soon, it will be codified in a full proposed deconfliction process document, the same as we produced for Oban-Mull, on which we will be seeking feedback from you and all other relevant airspace users. The agreed deconfliction document is key to us securing our BVLOS exemption from the CAA as well as being able to secure approval for the airspace change.

I hope that update provides some useful information and apologies if it would have been helpful to have some of this information sooner. We are very keen to work closely with you to ensure that our proposed operations are safe and the do not compromise safe emergency service operations and respect the primacy of your operations at all times.

If you have any questions or queries in the meantime, please let me know.

Many thanks again and kind regards

[REDACTED]

[REDACTED]  
[REDACTED]  
[REDACTED]  
[REDACTED]

[skyports.net](https://skyports.net)



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**From:** [REDACTED]

**Sent:** 02 September 2020 01:31

**To:** [REDACTED]

**Cc:** [REDACTED]

**Subject:** Re: CAUTION: External email - Reminder - Airspace Change ACP-2020-055 UAS BVLOS in Segregated Airspace (Oban-Lochgilphead) – Targeted Aviation Stakeholder Engagement

Dear [REDACTED],

As per my previous email correspondence, I have no choice other than to register a formal objection to both ACP-2020-055 and ACP-2020-048 as proposed by Skyports. This objection is raised on the grounds of safety, not only to the Police ASU aircraft, but also to other emergency service aircraft which regularly utilise the airspace proposed.

The reactive nature of our tasking, and the fact that we may be operating low level, means that it may not be possible to contact your team prior to requiring entry to the TDA. The vast majority of our work involves 'treat-to-life' incidents where any delay in our tasking may have dire consequences.

Your proposal argument that the airspace change is required to accommodate 'a pressing healthcare imperative', as with the use of COVID-19 previously, in my opinion is not a valid reason to unnecessarily increase the risk to manned aircraft.

I am also disappointed that there was no communication or dialogue with any of the emergency service aviation providers other than the formal Targeted Aviation Stakeholder Engagement prior to Skyports initiating the Airspace Change Process with the CAA.

*Again, I have to reiterate, unless you can guarantee positive deconfliction with our aircraft, your proposed operation may pose a danger to our aircraft and crews which I am not prepared to accept. My objection is made with reference to Articles 68, 94 and 240 of the Air Navigation Order 2016 with regards to the safe operation of aircraft.*

I would ask that you please acknowledge receipt of my objection, and would ask that you copy in all addressees above in your response.

Yours sincerely,

[Redacted]

[Redacted]

[Redacted]

Mission Critical Services Onshore [Aviation]  
Babcock International Group

[Redacted]

[Redacted]

[Redacted]

[www.babcockinternational.com](http://www.babcockinternational.com)

[Redacted] | [Redacted]

UK Aviation | Aviation  
Babcock International Group

[Redacted]

[Redacted]

[www.babcockinternational.com](http://www.babcockinternational.com)



## Appendix D: British Business and General Aviation Association

[REDACTED]

**From:** [REDACTED]  
**Sent:** 10 September 2020 16:53  
**To:** [REDACTED]  
**Cc:** [REDACTED]  
**Subject:** RE: Airspace Change ACP-2020-055 UAS BVLOS in Segregated Airspace (Oban-Lochgilphead) – Targeted Aviation Stakeholder Engagement

[REDACTED] good afternoon,  
I have been in consultation with my industry colleagues and we feel that they merit the support of the Business Aviation Community through BBGA because:

- 1) It is a COVID 19 initiative.
- 2) The learning that will come from the trials will be an important step on the road to BVLOS with reduced TDA impact on the broader aviation community.
- 3) DAAIS and DACS will be put in place to aid crossing service for Search and Rescue, Air Ambulance and other General Aviation users.

Best Regards,



## Appendix E: British Gliding Association (BGA)

[REDACTED]

---

**From:** [REDACTED]  
**Sent:** 21 August 2020 09:44  
**To:** [REDACTED]  
**Subject:** RE: Airspace Change ACP-2020-055 UAS BVLOS in Segregated Airspace (Oban-Lochgilphead) – Targeted Aviation Stakeholder Engagement

[REDACTED]

BGA operations are not expected to be significantly impacted by this proposal.

No further comments from us, thanks.

Kind regards

[REDACTED]

BGA



## Appendix F: British Helicopter Association

[REDACTED]

**From:** [REDACTED]  
**Sent:** 08 September 2020 12:36  
**To:** [REDACTED]  
**Subject:** 'ACP-2020-055 UAS BVLOS in Segregated Airspace (Oban-Lochilphead)'

[REDACTED]

Many thanks for the email.

While the BHA has no objection in principle to the application we do have one major comment.

The airspace designated is being used by commercial operators and most importantly it also encompasses low level routes which are utilised by Emergency Service Helicopters (SAR, Police, Air Ambulance). There needs to be good liaison with these helicopters, and dare I say it, a contact telephone number where they can give the operators on the day notification that a helicopter will be conducting operations to possibly save life. It would be very helpful if you published a daily flying programme for your activity. I accept that you will be activating the Areas by NOTAM 24-hours in advance but this will not provide sufficient granularity for helicopter operators.

I am unable to enter on the return pages you sent out in the consultation as it is a Adobe file and I do not have the means to convert it to a Word document in which I can write.

Yours

[REDACTED]

[REDACTED]

[REDACTED]

British Helicopter Association

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[www.britishhelicopterassociation.org](http://www.britishhelicopterassociation.org)

## Appendix G: Gama Aviation

**From:** [REDACTED]  
**Sent:** 01 September 2020 11:04  
**To:** [REDACTED]  
**Subject:** RE: Airspace Change ACP-2020-055 UAS BVLOS in Segregated Airspace (Oban-Lochgilphead) – Targeted Aviation Stakeholder Engagement  
**Attachments:** Skyports-Oban-Mull TOI-LOA v3.0.pdf

Dear [REDACTED]

Thank you for your email and apologies for not responding sooner as I've been on leave.

Firstly, I'd like to reassure you that the advice and feedback you gave us was very helpful and we are still working things out internally because of that feedback. Picking up on your point about diversions as you do not always launch from your Glasgow base, we appreciate this characteristic of your operations and we are still considering your suggestions that might be workable and acceptable to you. Specifically, we are working out the best solution for deconfliction in the likes of an emergency scenario you describe below. We are currently in discussions about putting in place a DAAIS for when the TDAs are active so that emergency services can radio to the tower and then the tower would call us immediately to tell us you are on your way and we take the appropriate action at the time depending on whether the UA is (i.e. nr take off, near landing or mid-way). When we flew between Oban and Mull, we used Oban Information at Oban Airport as the DAAIS and that worked well for emergency services. For ACP-2020-055 (Oban to Lochgilphead) we hope to use Oban Information again. As for this Bute area (ACP-2020-048), we are exploring the DAAIS with NATS at Prestwick. I can't confirm the details yet as we are still discussing with NATS this week, but hope to fairly soon so we can agree a deconfliction process with NATS providing the DAAIS. I can now see how you would have reached the conclusion from the formal engagement document I circulated that we had ignored your advice and suggestions, since we did not go into our thinking on airspace deconfliction, so apologies for that, but your suggestions and advice certainly have not been ignored and we are taking them very seriously.

Secondly, regarding the data on air ambulance tasking, the whole period doesn't cover the whole period we would be flying and just provides a snapshot but tied in with the point above, we need to have a robust deconfliction process in place regardless to ensure that it gives you and everyone the confidence that whenever you need to enter the activated TDAs that you would be able to do so without the risk of conflict with us.

Thirdly, as you'll see from the documentation, we've also amended the airspace design into a TDA complex and reduced the amount of airspace we're seeking over the water. Further, as we won't be activating all of the complex at the same time, we will be able to deactivate certain sections of airspace when we won't be flying so that gives back the airspace, particularly over the water which you need as a corridor during poor visibility. In addition, the UA we'll be using has weather limitations, inc. icing, rain and visibility so there are likely to be many days over the winter when the environment has degraded to such an extent that we will be unable to fly anyway.

For information, I'm attaching the deconfliction processes documentation we agreed with airspace users during the Oban-to-Mull operation in May / June, including with emergency services. We will need to have a document very much like this in order to secure the airspace changes and to receive our BVLOS permission and, above all, to reassure airspace users like yourselves, that you retain airspace primacy and can safely access the airspace at all times, especially at very short notice whilst en route. Assuming we get confirmation with Oban Information and NATS that they can provide the DAAISs, then we will aim to work with you and others on a similar document.

I hope that information helps and we are definitely keen to keep working with you on an acceptable, safe and robust deconfliction process, most likely with DAAIS as the core, and apologies again for not updating you sooner on where we were with the deconfliction process.

I'll be in touch again as soon as I can confirm more details.



At this point I am also informing you that we will be seeking contact with the CAA support to our objections and with the intention to reject the proposal as put to us by you.

With kind regards,

[Redacted signature]

Sent from [Mail](#) for Windows 10

[Redacted box]

[Redacted signature]

Charter. Management. Maintenance.  
**[gamaaviation.com](#)**

## Appendix H: Lanark and Lothian Soaring Club

[REDACTED]

---

**From:** [REDACTED]  
**Sent:** 09 September 2020 19:01  
**To:** [REDACTED]  
**Subject:** Re: <https://airspacechange.caa.co.uk/PublicProposalArea?plD=274>

Thanks [REDACTED]. That's pretty clear. I'll pass the information on to our members. It's unlikely that people would be flying in that area at that time of year but we will keep an eye on the NOTAMS.

[REDACTED]

On Wed, 9 Sep 2020, 16:47 [REDACTED]

Hi [REDACTED]

Thanks for your email.

Please find attached all the information you should require.

Any further questions, please let me know.

In the meantime, and if it's ok with you, I will add your email to our stakeholder spreadsheet so that we can update you on the outcome of the stakeholder engagement exercise and the final designs etc. If you'd prefer I didn't do this, then please let me know.

Thanks again and kind regards

[REDACTED]

---

**From:** [REDACTED]  
**Sent:** 09 September 2020 15:37  
**To:** [REDACTED]  
**Subject:** <https://airspacechange.caa.co.uk/PublicProposalArea?plD=274>

Hi

Regarding the above proposals could you tell me what altitude limits are likely apply to the proposed danger areas as I have been unable to find these and wish to report back to members of our paragliding club which is the main club representing paraglider pilots in central Scotland.

Thanks

██████████

██████████

Lanark and Lothian Soaring Club

Appendix I: Ministry of Defence

[Redacted]

**From:** [Redacted]  
**Sent:** 10 September 2020 15:43  
**To:** [Redacted]  
**Subject:** ACP-2020-055 UAS BVLOS in Segregated Airspace (Oban-Lochalphead)

[Redacted],

The MOD have no objections to the TDA detailed in ACP-2020-055.

If you require anything further, please do not hesitate to get in contact.

Regards,

[Redacted]

[Redacted] | Defence Airspace and Air Traffic Management |  
[Redacted]  
[Redacted]

## Appendix J: NATS

[REDACTED]

**From:** [REDACTED]  
**Sent:** 13 September 2020 13:46  
**To:** [REDACTED]  
**Cc:** [REDACTED]  
**Subject:** RE: Second Reminder - Airspace Change ACP-2020-055 UAS BVLOS in Segregated Airspace (Oban-Lochgilphead) – Targeted Aviation Stakeholder Engagement

**Follow Up Flag:** Follow up  
**Flag Status:** Completed

[REDACTED]

NATS response to the consultation below

<b>Name</b>	[REDACTED]
<b>Organisation</b>	NATS
<b>Position In Organisation</b>	[REDACTED]
<b>Email address</b>	[REDACTED]
<b>Feedback</b>	
<p>NATS has assessed ACP-2020-055 and concluded that it has no impact on its operation. We assume that the TDA sponsor will ensure that relevant NOTAM action is taken if the TDA is approved by the regulator.</p> <p>NATS would like to be informed of any change to the ACP submission made</p>	

Regards

[REDACTED]

**NATS**

[REDACTED]  
[REDACTED]  
[REDACTED]  
[REDACTED]





## Appendix K: Oban & The Isles Airport

[REDACTED]

---

**From:** [REDACTED]  
**Sent:** 15 September 2020 09:26  
**To:** [REDACTED]  
**Cc:** [REDACTED]  
**Subject:** Version 1 proposal [OFFICIAL]

**Classification: OFFICIAL**

Good Morning [REDACTED],

I have reviewed the document you sent for the proposal of the TDA and at the heights you are suggesting, would not normally be a problem for aircraft heading in/out of Oban Airport. Aircraft would normally be transiting at higher altitudes however the main affected parties may be helicopter operators for the emergency services such as Gama (Helimed and Police) as well as Coastguard and the Northern Lighthouse Board (NLB) who have a Helicopter Landing area on the south side of the bay. I believe they currently use PDG Helicopters for these services. Private helicopter operators should make themselves aware of any changes to the regional airspace. We also do occasionally get helicopters on the rear of private yachts (for those with significant amounts of money) and these may operate in and out of Oban Bay but are very few.

Apart from that, I doubt we would be adversely affected by the proposal.

Regards

[REDACTED]  
[REDACTED]  
Oban & The Isles Airports  
[REDACTED]  
[REDACTED]  
[REDACTED]  
[REDACTED]



[www.obanandtheislesairports.com](http://www.obanandtheislesairports.com)

## Appendix L: PDG Aviation

[REDACTED]

---

**From:** [REDACTED]  
**Sent:** 22 September 2020 10:02  
**To:** [REDACTED]  
**Subject:** RE: Skyports - ACP-2020-055 - Oban Region - Targeted Aviation Stakeholder Engagement

[REDACTED]

I was recently informed about the trials Skyports are conducting on the West coast by [REDACTED]. PDG regularly operate down to ground level in the areas covering ACP-2020-048 and ACP-2020-055 for HESLO operations, powerline patrolling, Lighthouse support operations, as well as routine transit. Could you please give me an indication of how you will notify other airspace users of the status of the TDAs (if out of radio coverage of Oban), the pre-activation notice period, the estimated duration of each activation, and how you plan to deconflict with our commercial operations?

I understand that the consultation period for stakeholders has passed for ACP-2020-055, but I would imagine that similar procedures will be put in place for both 048 & 055.

I look forward to hearing back from you.

Best regards,

[REDACTED]

## Appendix M: Police Scotland

[REDACTED]

---

**From:** [REDACTED]  
**Sent:** 15 September 2020 15:12  
**To:** [REDACTED]  
**Cc:** [REDACTED]  
**Subject:** RE: CAUTION: External email - Reminder - Airspace Change ACP-2020-055 UAS BVLOS in Segregated Airspace (Oban-Lochgilphead) – Targeted Aviation Stakeholder Engagement [OFFICIAL]

### OFFICIAL

[REDACTED]

I am back from leave and have just caught up with my emails. I note the latest update and agree that a meeting is required to discuss these proposals as they will indeed impact our police air operations. I am aware you have previously engaged with my colleague [REDACTED] of the Police Scotland Aviation Safety & Security Unit in terms of airspace restrictions etc. I am the OIC Police Scotland Air Support Unit and we operate both helicopters and remotely pilot aircraft systems. I am also the accountable manager for all Police RPAS operations in Scotland so I can hopefully provide operational context to the discussions in terms of police air operations.

Cheers

[REDACTED]

[REDACTED]  
[REDACTED]  
Specialist Operations | Air Support Unit | Dive & Marine Unit  
Air Support Unit - [REDACTED] 3  
[REDACTED]  
[REDACTED]



See also [Appendix C: Babcock Mission Critical Services Onshore Ltd.](#)

## Appendix N: Scottish Association for Marine Sciences (SAMS)

### Appendix B: Response form

Name	[REDACTED]
Organisation name	SAMS
Position in the organisation	[REDACTED]
Email	[REDACTED]

#### Feedback

SAMS  
Scottish Marine Institute

[REDACTED]  
[REDACTED]  
[REDACTED]

The Scottish Association for Marine Science (SAMS) 100% supports Skyports in its application for the proposed temporary danger area's (TDA)

Skyports has shown to be exemplary in communication, Knowledge exchange and engaging with SAMS as Stakeholder.

SAMS has long recognised the potential for beyond visual line of sight (BVLOS) testing of small unmanned aircraft (SUA) in the local area and wider Argyll and we welcome this proposal for the outlined TDA and supportive SUA operations.

[REDACTED]  
[REDACTED]  
[REDACTED]

02/09/2020

## Appendix O: Scottish Ambulance Service

[REDACTED]

---

**From:** [REDACTED] (SCOTTISH AMBULANCE SERVICE) [REDACTED]  
**Sent:** 07 September 2020 11:03  
**To:** [REDACTED]  
**Subject:** RE: Airspace Change ACP-2020-048 UAS BVLOS in Segregated Airspace (Bute Region) – Targeted Aviation Stakeholder Engagement

**Follow Up Flag:** Follow up  
**Flag Status:** Flagged

[REDACTED]

I'd suggest:-

Scottish Ambulance Service; [REDACTED]  
Police Scotland; [REDACTED]  
Gama Aviation; [REDACTED]  
Babcock MCS; [REDACTED]  
Bristow's Group (Coastguard); [REDACTED]

If you contact these individuals I'm sure they'll advise if others for their organisations should be invited. You'll note I've added the Coastguard helicopter team at Prestwick as well.

Regards,  
[REDACTED]

[REDACTED]  
[REDACTED]  
**Scottish Ambulance Service**  
[REDACTED]  
[REDACTED]  
[REDACTED]  
[REDACTED]  
[REDACTED]  
[REDACTED]

website: [www.scottishambulance.com](http://www.scottishambulance.com)



Scottish  
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**Please support the Scottish Ambulance Service's Environmental programme by not printing this document unnecessarily.**

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**The content of this e-mail may be disclosed in whole or in part under the Freedom of Information Act (Scotland) 2002 or by a Subject Access request through the Data Protection Act 1998.**

Appendix B: Response form

Name	
Organisation name	
Position in the organisation	
Email	

Feedback

## Appendix Q: Initial email to stakeholders (redacted)

**From:** [REDACTED]  
**Sent:** 20 August 2020 22:44  
**To:** [REDACTED]  
**Subject:** Airspace Change ACP-2020-055 UAS BVLOS in Segregated Airspace (Oban-Lochgilphead) – Targeted Aviation Stakeholder Engagement  
**Attachments:** ACP-2020-055 Skyports - Oban-Loch - Targeted Aviation Stakeholder Engagement.pdf

Dear Aviation Stakeholder

Skyports, a UK-based drone delivery service providers, is contacting you with regards to airspace change proposal [ACP-2020-055](#) to enable the operation of small unmanned aircraft (SUA) beyond visual line of sight (BVLOS) so that we can support the NHS in Scotland with its ongoing response to COVID-19.

Skyports is therefore contacting you in order to seek your views and feedback on these airspace designs in the form of a targeted aviation stakeholder engagement exercise required as part of [20200721 – CAA Policy for the Establishment of Permanent and Temporary Danger Areas](#) (as scaled down version of [CAP1616](#)).

We believe our designs allow us to safely execute on our operations whilst minimising negative impacts on other airspace users.

I attach the documentation related to our targeted aviation stakeholder engagement exercise for this change proposal, which includes the engagement document containing a response form; however, you may prefer to simply provide feedback by email.

I would appreciate your views and feedback on these designs please.

As I hope you will understand, we need to turn this airspace change around as quickly as possibly due to the COVID-19 healthcare imperative for the NHS in Scotland, so I would greatly appreciate it if you could please provide feedback by responding to this email by **midnight on Sunday 13 September 2020**. We understand that this timeframe is shorter the standard 12-week engagement and shorter than the scaled 6-week engagement; therefore, if you think this timeframe is too challenging, please let me know so that we can make allowances accordingly.

**IMPORTANT NOTE:** Skyports is engaging aviation stakeholders on another airspace change concurrently with this airspace change. The two proposals have been assigned separate CAA reference numbers. This one is [ACP-2020-055 \(Oban-Lochgilphead\)](#). The other is [ACP-2020-048 \(Bute Region\)](#). When providing your feedback, please make sure you are providing your views on the correct airspace change proposal.

Many thanks in advance and kind regards

[REDACTED]  
[REDACTED]  
[REDACTED]  
[skyports.net](https://skyports.net)



This email is from Skyports Limited. Skyports Limited is a limited company registered in England and Wales with registered

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## Appendix R: First reminder email to stakeholders (redacted)

[REDACTED]

---

**From:** [REDACTED]  
**Sent:** 01 September 2020 16:54  
**To:** [REDACTED]  
**Subject:** Reminder - Airspace Change ACP-2020-055 UAS BVLOS in Segregated Airspace (Oban-Lochgilphead) – Targeted Aviation Stakeholder Engagement  
**Attachments:** ACP-2020-055 Skyports - Oban-Loch - Targeted Aviation Stakeholder Engagement.pdf

Dear Aviation Stakeholder

Further to my original email below, this is a gentle reminder for stakeholders and interested parties to provide feedback and comment on the draft airspace design operations for [ACP-2020-055](#) (details attached) by **midnight on Sunday 13 September 2020**.

Any feedback would be greatly appreciated.

**IMPORTANT NOTE REMINDER:** Skyports is engaging aviation stakeholders on another airspace change concurrently with this airspace change. The two proposals have been assigned separate CAA reference numbers. This one is [ACP-2020-055 \(Oban-Lochgilphead\)](#). The **other** is [ACP-2020-048 \(Bute Region\)](#) with a later response deadline of **Sunday 4 October 2020**. When providing your feedback, please make sure you are providing your views on the correct airspace change proposal. If you were the recipient of an original invitation for feedback on ACP-2020-048, a first reminder for feedback on that ACP will be sent around mid-September.

Many thanks in advance and kind regards

[REDACTED]

[REDACTED]  
[REDACTED]  
[REDACTED]

[skyports.net](https://skyports.net)



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## Appendix S: Second reminder email to stakeholders (redacted)

**From:** [REDACTED]  
**Sent:** 07 September 2020 17:48  
**To:** [REDACTED]  
**Subject:** Second Reminder - Airspace Change ACP-2020-055 UAS BVLOS in Segregated Airspace (Oban-Lochgilphead) – Targeted Aviation Stakeholder Engagement  
**Attachments:** ACP-2020-055 Skyports - Oban-Loch - Targeted Aviation Stakeholder Engagement.pdf

Dear Aviation Stakeholder

Further to previous emails, I wanted to remind stakeholders and interested parties to please provide feedback and comment on Skyports' draft airspace designs for [ACP-2020-055](#) (details attached). The deadline for comments is **midnight this Sunday 13 September 2020**.

We would really appreciate any and all feedback please. If, for any reason, you think you may require more time to complete your feedback, please let me know and we can arrange extensions on a case-by-case basis.

In the meantime, Skyports is working to codify a robust TDA deconfliction process document with which we intend to share for review and feedback with relevant aviation stakeholders, particularly the emergency services, and other relevant parties that will need to enter the TDAs when active – even at last minute and without much warning – and will need assurances they can do this safely and without any interference with their operations.

**IMPORTANT NOTE REMINDER:** Skyports is engaging aviation stakeholders on another airspace change concurrently with this airspace change. The two proposals have been assigned separate CAA reference numbers. This one is [ACP-2020-055 \(Oban-Lochgilphead\)](#). The **other** is [ACP-2020-048 \(Bute Region\)](#) with a later response deadline of **Sunday 4 October 2020**. When providing your feedback, please make sure you are providing your views on the correct airspace change proposal. If you were the recipient of an original invitation for feedback on ACP-2020-048, a first reminder for feedback on that ACP will be sent around mid-September.

Many thanks in advance and kind regards

[REDACTED]  
[REDACTED]  
[REDACTED]  
[skyports.net](https://skyports.net)



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## Appendix T: Individualised final reminder email to stakeholders

[REDACTED]

---

**From:** [REDACTED]  
**Sent:** 11 September 2020 15:57  
**To:** [REDACTED]  
**Subject:** RE: Second Reminder - Airspace Change ACP-2020-055 UAS BVLOS in Segregated Airspace (Oban-Lochgilphead) – Targeted Aviation Stakeholder Engagement

Dear [REDACTED]

Further to previous emails, we would be very keen to get your feedback on our proposed ACP.

If you require a little extra time to provide comments, that would be fine. Just let me know.

Thanks and kind regards

[REDACTED]

## Appendix U: Additional engagement points

The CAA has shared some points (verbatim) related to some of our current and past airspace changes that it had received which may or may not be related to ACP-2020-055. Where Skyports has identified them to be relevant or partially relevant to ACP-2020-055, we have provided responses to them here:

### Additional engagement point 1

- **Summary:** Weather all around the west-coast is very changeable, and localised weather can quickly cause low stratus, orographic cloud etc to form. To operate safely VFR, maximum freedom of movement is required (and this can legally involve flight below 500' over the sea) - this avoids the high ground which surrounds all these operating areas.
- **Skyports response:**
  - This point does appear relevant to ACP-2020-055; therefore, the point has been addressed in the Targeted Engagement Summary report.
  - Skyports recognises the highly changeable nature of the weather around the west coast of Scotland.
  - The SUA that Skyports is deploying to the proposed areas of operations facilitated by the TDA complex proposed within ACP-2020-055 is subject to strict weather imitations. Should weather conditions exceed SUA limitations, Skyports will not operate the vehicle and either i) not activate a TDA(s) or ii) deactivate as soon as possible a TDA(s) that has already been activated.
  - Skyports acknowledges that aircraft being operated VFR will need to preserve maximum free movement, which will involve being able to enter an active TDA in an emergency and at short notice, as well as being able to fly below 500ft AMSL over the sea to avoid the surround high terrain.
  - Skyports will provide means of communications via NOTAM for pilots to be able to contact us and make entry requests by i) telephone directly; or ii) by radio via a DAAIS, who will relay that information or request via telephone to Skyports. Contact details will be specified on the NOTAM.
  - Skyports will not operate if the cloud base is below 1500ft AMSL. Skyports will use Met Office Aviation Briefing Services and other applications for tactical decisions to determine the cloud base before commencing and throughout operations.
  - In the event of an accidental breach of a TDA, caused by poor weather for example, and the Skyports SUA is already airborne, the SUA is fitted with an automatic collision avoidance system. If the other aircraft is carrying ADS-B and is broadcasting out, based on the assumption that that the other aircraft maintains their speed and heading, the SUA will automatically respond sufficiently early to avoid that other aircraft. Unfortunately, this technical capability is not yet an approved means of Detect and Avoid (DAA) with the CAA UAS Team that is at least equivalent to the 'see and avoid' principle' used in manned aviation to avoid collision with other aircraft and obstacles; hence, the requirement to operate within temporary segregated airspace.
  - The SUA is also fitted with ADS-B IN and OUT, which can process uncertified ADS-B signals (SIL/SID=0); therefore, Skyports will be able to use this Electronic Conspicuity (EC) to monitor the movement and locations of aircraft that are broadcasting in the vicinity of the

proposed area of operations. Pilots will be able to do the same with regards the movement and location of the Skyports SUA if they are carrying ADS-B.

Additional engagement point 2:

- **Summary:** Every one of these proposed TDAs cut across routes around Mull, Glenforsa Airstrip and Oban Airport, and potentially extend a further 30nm south, down the west coast to Lochgilphead and the Crinan Canal. These are frequent low-level 'escape routes' avoiding high ground, for pretty much everything routing from the west coast to the Central Belt (Glasgow and Prestwick).
- **Skyports response:**
  - This point does appear partially relevant to ACP-2020-055; therefore, the point has been addressed in the Targeted Engagement Summary report for ACP-2020-055.
  - ACP-020-055 does not contain proposals to cut across Glenforsa Airfield or around Mull, although one route does extend from Oban out to Craignure on north coast of Mull.
  - Skyports acknowledges that aircraft being operated VFR will need to preserve maximum free movement, which will involve being able to enter an active TDA in an emergency and at short notice, as well as being able to fly below 500ft AMSL over the sea to avoid the surround high terrain.
  - Skyports will provide means of communications via NOTAM for pilots to be able to contact us and make entry requests directly by i) telephone directly; or i) by radio via a DAAIS, who will relay the information or request via telephone to Skyports. Contact details will be specified on the NOTAM.
  - Skyports will not operate if the cloud base is below 1500ft AMSL. Skyports will use Met Office Aviation Briefing Services and other applications for tactical decisions to determine the cloud base before commencing and throughout operations.
  - In the event of an accidental breach of a TDA, caused by poor weather for example, and the Skyports SUA is already airborne, the SUA is fitted with an automatic collision avoidance system. If the other aircraft is carrying ADS-B and is broadcasting out, based on the assumption that that the other aircraft maintains their speed and heading, the SUA will automatically respond sufficiently early to avoid that other aircraft. Unfortunately, this technical capability is not yet an approved means of Detect and Avoid (DAA) with the CAA UAS Team that is at least equivalent to the 'see and avoid' principle' used in manned aviation to avoid collision with other aircraft and obstacles; hence, the requirement to operate within temporary segregated airspace.
  - The SUA is also fitted with ADS-B IN and OUT, which can process uncertified ADS-B signals (SIL/SID=0); therefore, Skyports will be able to use this Electronic Conspicuity (EC) to monitor the movement and locations of aircraft that are broadcasting in the vicinity of the proposed area of operations. Pilots will be able to do the same with regards the movement and location of a Skyports SUA if they are carrying ADS-B.

Additional engagement point 3

- **Summary:** There is no mechanism for GA pilots to gain tactical entry
- **Skyports response:**
  - This point does appear relevant to ACP-2020-055; therefore, the point has been addressed in the Targeted Engagement Summary report.

- Skyports will provide means of communications via NOTAM for pilots to be able to contact us and make entry requests by i) telephone directly; or i) by radio via a DAAIS, who will relay the information or request via telephone to Skyports.

#### Additional engagement point 4

- **Summary:** The requirement to activate the TDA (or portions) for full daylight hours is disproportionate to the potential number of drone movements.
- Skyports response:
  - This point does appear relevant to ACP-2020-055; therefore, the point has been addressed in the Targeted Engagement Summary report.
  - All TDAs within the TDA complex may not be activated at the same time. Only TDAs that are required to facilitate routes to be flown on a given day will be activated. Other TDAs in the complex that are not required will not be activated.
  - TDAs will not be activated for full daylight hours unless required to meet the requirements of the NHS and to facilitate flights. Skyports intends to use TDAs only when required and will deactivate TDAs outside of notified hours. In the event of not being able to operate for any reason once a TDA(s) has already been activated, for example because of poor weather or a technical issue, Skyports will deactivate the TDA(s) as soon as possible.

#### Additional engagement point 5

- **Summary:** This is actually a Proof-of-Concept business trial, initiated (quite legitimately) by the drone company, for longer term usage - I feel it has however, been cynically disguised as an urgently required need for covid response. This 'urgency' was being argued 8 months ago in May 2020.
- Skyports response:
  - This point does appear partially relevant to ACP-2020-055; therefore, the point has been addressed in the Targeted Engagement Summary report.
  - The process for ACP-2020-055 did not commence until August 2020.
  - The purpose of the airspace change was included in the Statement of Need and discussed at the CAA Assessment Meeting, including the reason for the urgency.
  - While COVID-19 projects will be prioritised to be able to commence the airspace change process, the airspace change must still be subject to the airspace change process.
  - The COVID-19 pandemic has been ongoing for almost a year. Scotland entered its first 'lockdown' on 24 March 2020, with changes allowing only a gradual easing of lockdown measures commencing on 19 June 2020. Coronavirus remained present in Scotland, albeit more greatly suppressed with the application of Protection Levels, until autumn/winter 2020/21 when the number of cases and fatalities rose exponentially across the UK, partially because of the discovery of a more transmissible variant of Coronavirus. Mainland Scotland entered a second lockdown on 5 January 2021, which has been extended at least into the first half of February. In a speech to the Scottish Parliament on 4 January 2021 announcing the lockdown, the First Minister detailed the number of new case numbers, illustrating "the severity and the urgency of the situation" and the "significantly increased pressure on the NHS". The NHS in Scotland provided a letter of support to the Skyports project, although the NHS is not paying Skyports to provide this service: the project is

funded by Skyports ourselves and through a joint funding initiative between the UK Space Agency (UKSA) and the European Space Agency (ESA), following a drive to find space-enabled technology and services to support the NHS in response to Coronavirus.

Additional engagement point 6

- **Summary:** Drone use carrying packages from A to B is already a proven concept - the trial should be withdrawn until Detect and Avoid (DAA) technology allows drones to successfully and safely integrate with existing airspace users, without the need for segregated airspace that disadvantages and reduces safety margins for the existing airspace users.
- Skyports response:
  - The project is not to prove that a small unmanned aircraft can carry packages. The project is to assist the NHS with the response to COVID-19.
  - BVLOS UAS operations in non-segregated airspace will not normally be permitted by the CAA without an acceptable Detect and Avoid (DAA) capability.
  - In CAP1827, the CAA states, “gaining regulatory approval for BVLOS operations of UAS in unsegregated airspace remains a challenges” and “several ‘regulatory questions’ must be addressed in order to improve knowledge in the ecosystem and to enable the development of appropriate regulatory frameworks with associated approval mechanisms”.
  - Skyports is working with the CAA within the Regulatory Sandbox “to explore the viability of solutions for BVLOS operations of...UAS in unsegregated airspace”. The CAA “is keen to accelerate our learnings and gain additional knowledge that we can share with all innovators.” (CAP1827)
  - Nevertheless, according to the CAA in CAP1827, the viability of solutions to operate UAS BVLOS in unsegregated airspace “may still require airspace segregation in the first instance as part of an iterative trial plan.”; therefore, the allowance of unmanned aircraft systems to successfully and safely exist in airspace users without the need for segregated airspace may still require some segregation in the first instance to support trials of solutions, and to help develop the appropriate regulatory frameworks and CAA approval mechanisms.
  - Skyports is keen to make clear, however, that ACP-2020-055 is not being used to facilitate trials of any solutions for BVLOS operations of UAS in unsegregated airspace, as prioritised airspace change applications for COVID-19 are not permitted by the CAA for other purposes.

## Appendix V: Justification for departure from AIC schedule

The CAA has asked for a justification for departure from the AIC schedule:

It is important for the NHS Board in Scotland that the project commences at the beginning of February as planned. The drone delivery service will support the NHS at a critical time in the ongoing COVID-19 pandemic and as the NHS deals concurrently with the usual pressures of winter. Mainland Scotland entered a second lockdown on 5 January 2021, which has been extended to at least into the middle of February. In a speech to the Scottish Parliament on 4 January 2021 announcing the lockdown, the First Minister detailed the number of new case numbers, illustrating “the severity and the urgency of the situation” and the “significantly increased pressure on the NHS”. Commencement later than the beginning of February would undermine the efficacy of the project’s contribution to the NHS response. One weeks’ notification would be satisfactory to meet this schedule.