



DAP1916 - Statement of Need

Tracking Code: **8SS7F2**

CHANGE

1. Category of Airspace Change

Does your proposal concern Changes to Notified Airspace Design or Planned and Permanent Redistribution of Air Traffic? *

- ☒ Changes to Notified Airspace Design ☐ Planned and Permanent Redistribution of Air Traffic

2. Title of proposal

Please enter a title for this intended change, (max 80 characters): *

Group of TDAs connecting Orkney and Shetland Islands for SATE UAS operations

☐ Have you previously submitted a Statement of Need ?

SPONSOR

3. Change Sponsor Details

Please select the appropriate category and complete. *

- ☒ A Company
☐ An Unincorporated Association or other body
☐ Individual (including sole traders and partnerships)

3a. A Company

Registered Company name (in full) *

Windracers Limited

Registered Company Number

11216986

Country of Company Registration

United Kingdom

Registered Office Address

1st Floor Healthaid House

Postcode

HA1 1UD

E-mail

[REDACTED]

Trading name (if applicable)

Trading Address (primary site)

Country

Postcode

Website address

Primary Point of Contact Name *

[REDACTED]

☐ Requires Airspace Portal Access ?

Telephone *

Email *

Additional Contacts

You can add up to 4 additional contacts

Contact 1

Contact Name *

☒ Requires Airspace Portal Access ?

Telephone *

Mobile Number (for Airspace Portal) *

Email *

Contact 2

Contact Name *

☒ Requires Airspace Portal Access ?

Telephone *

Mobile Number (for Airspace Portal) *

Email *

STATEMENT OF NEED

4. Independent Aviation/Airspace Consultancy

☐ Is an Independent Aviation/Airspace Consultancy involved in this proposal?

5. Statement of Need

Please provide a brief ‘Statement of Need’ clearly explaining what issue or opportunity this proposal is seeking to address.

Further information can be found in CAP1616 *

The SATE (Sustainable Aviation Test Environment) will create the UK's first operationally based low-carbon, aviation test centre at Kirkwall Airport in the Orkney Islands.

Part funded by UK Research and Innovation (UKRI) through the Industrial Strategy Challenge Fund. The Future Flight Challenge is investing up to £125 million to develop greener ways to fly, such as all-electric aircraft and deliveries by drone, by advancing electric and autonomous flight technologies. The investment is matched by £175 million from industry.

The challenge aims to bring together technologies in electrification, aviation systems and autonomy to create new modes of air travel and capability.

The SATE will be a UK first and it is hoped will test and showcase new technology that can be adopted for island and wider use, with the aim to create social benefit and economic prosperity.

The SATE project will feature:

- Flight trials demonstrated in a real-life context
- Trials including low-carbon aircraft using electric, hydrogen and Sustainable Aviation Fuels (SAF) as well as Unmanned Autonomous Vehicles (UAV)
- Airport infrastructure improvements
- Improved regional air connections
- Local supply chain and employment impacts
- Contribute to Net-Zero aviation goal

The SATE Consortium is formed of the following 13 members, led by Highlands and Islands Airports (HIAL). Loganair, Ampaire, ZeroAvia, Windracers, Flarebright, University of the Highlands and Islands (UHI), European Marine Energy Centre (EMEC) , Denchi Group, Cloudnet, Highlands and Islands Transport Partnership (HiTrans), Highlands and Islands Enterprise (HIE), and the Orkney Island Council (OIC).

As part of the SATE consortium, Windracers will demonstrate the application of ULTRA Unmanned Aircraft System (UAS) for delivering on-demand supplies to remote communities that currently suffer from mistimed or limited logistics. Preliminary engagement with key local stakeholders has confirmed the priority for medical supplies to remote health care service providers and other relevant use cases that would generate significant benefit.

Under the current regulatory and technological conditions, it is necessary to establish structures of segregated airspace that enable the intended Beyond Visual Line-of-Sight (BVLOS) operations. Therefore, this airspace change proposal aims to set up a complex of five different Temporary Danger Areas, connecting the following locations:

- Wick Airport
- Kirkwall Airport
- Eday Airport
- North Ronaldsay Airport
- Fair Isle Airport
- Tingwall Airport
- Unst Airport

These airspace structures will be activated during short periods of time, separately or in combination to allow the intended itinerary, whilst minimising the impact over other aviation activities. It is anticipated that the implementation of this ACP will last no longer than 8 weeks.

Participation of Air Traffic Services will be sought to provide the TDA complex with DAAIS during operation.

ULTRA UAS is a 10 m wingspan, 350 kg MTOW fixed wing remotely piloted aircraft that features multiple redundancy of critical subsystems, on-board electronic conspicuity (ADS-B + Mode S) and standard visual conspicuity aids (navigation and position lights).

6. Administrative Changes

☐ Does your proposal represent an administrative change to the Aeronautical Information Publication (Proposed Level 0 change)?

7. Instrument Flight Procedures

☐ Does your proposal have the potential to include a change to and/or new IFPs?

8. Five-Letter Name Codes (5LNC)

☐ Does this request solely concern the reservation of new Five-Letter Name Codes (5LNC) in advance of a future proposal?

9. Additional Information

Please use the box below to add any further information which the CAA should be aware of when considering this submission (for example dependencies on other airspace change proposals and/or funding deadlines):

Dependency on Exemption Application to be submitted to CAA - UAS Sector

SUBMISSION INSTRUCTIONS

Submission

Date and Time:

18 Mar 2021 2:29:07 PM

Your form has been successfully submitted. Please keep a copy of this acknowledgement for your records.

Application Submission Number:

DAP1916V2-213

Please note that the Airspace Regulation team will contact you to acknowledge receipt of your Statement of Need and to confirm the unique ACP reference number (ACP-YYYY-NNN) allocated to this submission. Following receipt of your unique ACP reference number, you will be required to create an associated airspace change proposal on the [CAA's Airspace Change Portal](#). Please refer to CAP 1706: CAA Airspace Change Portal Sponsor Training Manual provides for further information/guidance on how to use the Airspace Change Portal.

Once your submission has been assigned, arrangements will be made for you to attend an Assessment Meeting. One of the key outputs from this meeting will be an indicative timeline for the proposed airspace change. To enable the CAA to consider your proposed timescales, you will be expected to present dates for the following milestones at the Assessment Meeting:

- DEFINE Gateway
- DEVELOP & ASSESS Gateway
- CONSULT Gateway
- Formal Airspace Change Proposal Submission
- Target AIRAC

The CAA holds Gateway Assessment Meetings on a monthly basis and the annual schedule is published on the [CAA website](#).

Finally, you should also note that from September 2018 any amendments submitted by a Data Originator or ANSP for onward promulgation in the UK IAIP will be subject to the Aeronautical Data Quality Requirements. See [Commission Regulation \(EU\) No 73/2010](#) (updated by 1029/2014) and [CAP 1054: Aeronautical Information Management](#) guidance material for further information. These requirements will be discussed in greater detail during the course of your initial meeting with the CAA.

When you have completed this form, click this button to submit the form for processing. Do not click this button more than once. You will then be provided with further instructions.