



# DAP1916 - Statement of Need

Tracking Code: **XK6N67S**

## BEFORE YOU BEGIN

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Please ensure the contents of CAP 1616 Appendix A are referred to prior to completing this form. \*

## TYPE OF CHANGE

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### 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

Have you previously submitted a Statement of Need?

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

CAELUS TRIAL E - GRAMPIAN SHETLAND

### 2. Title of proposal

Which of the following categories is the proposal being progressed under? \*

Permanent  Temporary  Trial

## SPONSOR

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### 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) \*

AGS Airports Ltd

Registered Company Number

09201991

Trading Address (primary site)

Glasgow Airport, Erskine Court, St Andrews Drive

Trading name (if applicable)

AGS Airports Ltd

E-mail

[REDACTED]

Postcode

LS15AB

Registered Office Address

1 Park Row, Leeds, West Yorkshire

Country of Company Registration

England

Country

Scotland

Postcode

PA32TJ

Mobile Number (for Airspace Portal) \*

[REDACTED]

Email \*

[REDACTED]

Confirm Email \*

[REDACTED]

Telephone \*

[REDACTED]

Requires Airspace Portal Access ?

Primary Point of Contact Name \*

[REDACTED]

Website address

www.agsairports.co.uk

### 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 \*

Confirm Email \*

 DELETE CONTACT

**Contact 2**

Contact Name \*

Requires Airspace Portal Access ?

Telephone \*

Mobile Number (for Airspace Portal) \*

Email \*

Confirm Email \*

 DELETE CONTACT

 Add Contact

**STATEMENT OF NEED**

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Independent Aviation/Airspace Consultancy

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

## Aviation Consultancy

Registered Company name (in full) \*

TRAX INTERNATIONAL LTD

Registered Company Number

09605513

Country of Company Registration

England

Registered Office Address

724 Capability Green, London

Postcode

LU13LU

Telephone

XXXXXXXXXX

Trading name (if applicable)

TRAX INTERNATIONAL LTD

Trading Address (primary site)

724 Capability Green, London

Country

England

Postcode

LU13LU

Website address

www.traxinternational.co.uk

Primary Point of Contact Name \*

XXXXXXXXXX

Primary Contact

Should the CAA use the Independent Consultancy as the primary point of contact for this airspace change proposal?

Requires Airspace Portal Access ?

Telephone \*

Mobile Number (for Airspace Portal) \*

E-mail \*

### Additional Contacts

You can add up to 4 additional contacts

**+** Add Contact

### Statement of Need

Please provide a brief 'Statement of Need' clearly explaining what the current/existing situation is **and** what issue or opportunity this proposal is seeking to address.

### Project Overview

The CAELUS (Care & Equity – Healthcare Logistics UAS Scotland) consortium is led by AGS Airports Ltd on behalf of NHS Scotland and the consortium partners and part funded by Innovate UK through the Industrial Strategy Challenge fund, Future Flight competition. The project which brings together AGS Airports, NHS Scotland, NATS, ATKINS, Cellnex, Connected Places Catapult and 10 other companies are working together to demonstrate the viability of a national drone network that can transport essential medicines, bloods and other medical supplies throughout Scotland.

The project will deliver a Concept of Operations (CONOPS) for the transition to fully integrated UAS operations at a national level. This specific workstream, led by NATS will develop and publish a phased approach outlining proposed airspace constructs and detailing regulatory and technology gaps required to enable the transition. Elements of this CONOPS will be validated through live flight operations, differentiating CAELUS from other projects by seeking to move the industry forward by proposing and validating a method of operations that are fully integrated and sustainable.

### Opportunities /Need

#### Healthcare opportunity

With approximately 26% of Scotland’s population living in remote or rural areas spread across 69% of the land mass, service delivery can encounter constraints which contributes to treatment inequity. NHS Scotland encompassing the Territorial Boards and Scottish Ambulance Service (SAS) views the adoption of Unmanned Aircraft Systems (UAS) or drones as an opportunity to transform the patient experience and reduce the impact of traffic congestion and CO2 emissions. Key to this is the driver of the NHS Scotland Recovery Plan (2021) which highlights the essential need for research, innovation and redesign as integral to the recovery of NHS Services. For both SAS and NHS Scotland equity in the delivery of healthcare is a key driver for involvement in this project as NHS Scotland considers how to remobilise and redesign services to address the needs of Scotland’s health and social care challenges. A current strategic directive for SHIP (Scottish Health Industry Partnership) is to grow the economy (community wealth building) and support remobilisation, accelerating the adoption of Innovation into NHS and Social Care (Life Sciences in Scotland, 2022). A drone-based network has the potential to reduce mileage and produce significant time saving opportunities improving patient experience, outcomes and equity in care delivery. As a formal partner of the consortium, NHS Scotland via lead board NHS Grampian, are providing a joined-up approach bringing input and expertise from health boards and SAS under the “Once-for Scotland” banner. The NHS will define and support at ground level the clinical use cases that will be flown or simulated in the live and digital demonstrations.

### Informing Regulation

Today, most beyond visual-line-of-sight (BVLOS) UAS operations can only be conducted within segregated airspace. The most common way to achieve this is to establish temporary danger areas (TDAs) for the UAS to operate within. Current regulation is designed to consider a per flight basis without means to provide a scalable solution. Recognised detect and avoid capabilities are basic. CAELUS intend to validate a developed concept of operations around airspace structure and use that is scalable and sustainable.

### Proposed Operations

We aim to utilise volumes of segregated airspace across Scotland in a total of 5 locations to enable us to prove elements of our proposed future concept of integrated airspace. For this proposal, we intend to fly a route connecting Grampian – Shetland region and representing use cases for the North NHS Innovation board and Scottish Ambulance Service. The use cases demonstration will require segregated airspace to be in place for a maximum of 4 weeks to allow for an appropriate weather window with expected flying during 1 day within that timeframe. Our proposal is that we activate the segregated airspace for limited duration. The airspace dimensions and duration of activation will be informed by stakeholder feedback. This segment of flying will be undertaken by Dronamics using their Black Swan UAV. A system of ADS-B Receivers will be deployed to demonstrate an additional layer of situational awareness to the UAV pilot along the flying routes and contribute to the Detect and Avoid solutions that will form part of the demonstrations.

### 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?

### Secretary of State for Transport's priorities

Is the proposal being progressed under any of the priorities set by the Secretary of State for Transport or any other CAA priority such as safety or national security?

**Airspace Modernisation Strategy \***

Is the proposal supporting the delivery of the Airspace Modernisation Strategy? If not, please use the text box below to explain how the proposal is not inconsistent with the Airspace Modernisation Strategy

**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, proposed operating date(s) and/or funding deadlines)

The activity proposed forms part of a programme of 5 ACP submissions (names CAELUS A through E) by AGS Airports Ltd on behalf of the CAELUS consortium (<https://www.agsairports.co.uk/drones>) as part of IUKs Future Flight initiative (Phase 3). Each flight will demonstrate and trial various aspects of a national eco system for UAS, the collective learning from which will be presented to CAA to help inform future regulation around integrated use of airspace and NHS decision making on the potential benefits and challenges around use of drones. The project is time constrained due to the window of funding which runs out end of Q2 2024.

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**SUBMISSION INSTRUCTIONS**

**Submission**

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

Date and Time:

22 Dec 2022 9:02:47 PM

Application Submission Number:

DAP1916V2-620

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** (<https://airspacechange.caa.co.uk/>). Please refer to CAP 2385 Airspace Change Portal Important Information Guide.

Given the high number of new airspace change proposals (ACP), together with those proposals which are already in the system, it is possible that the proposal may not be assigned to a Technical Regulator/Account Manager immediately following submission of the Statment of Need. New proposal are allocated on a first come first served basis, unless the proposal is directly related to safety or national security matters, or as directed by the Secretary of State for Transport's priorities.

Once your submission has been assigned to an Account Manager/Case Officer, 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 PPR. For Permanent changes, 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's airspace change portal** (<https://airspacechange.caa.co.uk/about-airspace-change/>).

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 Regulation (EU) No. 73/2010 as retained (and amended in UK domestic law) under the European Union (Withdrawal) Act 2018 and **CAP 1054: Aeronautical Information Management** (<https://publicapps.caa.co.uk/modalapplication.aspx?appid=11&mode=detail&id=6808>) guidance material for further information. These requirements will be discussed in greater details during the course of your intial 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.