

Change of Category of Air Traffic Service (ATS) at Benbecula Airport

Stakeholder Brief

21 April 2021



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Introduction

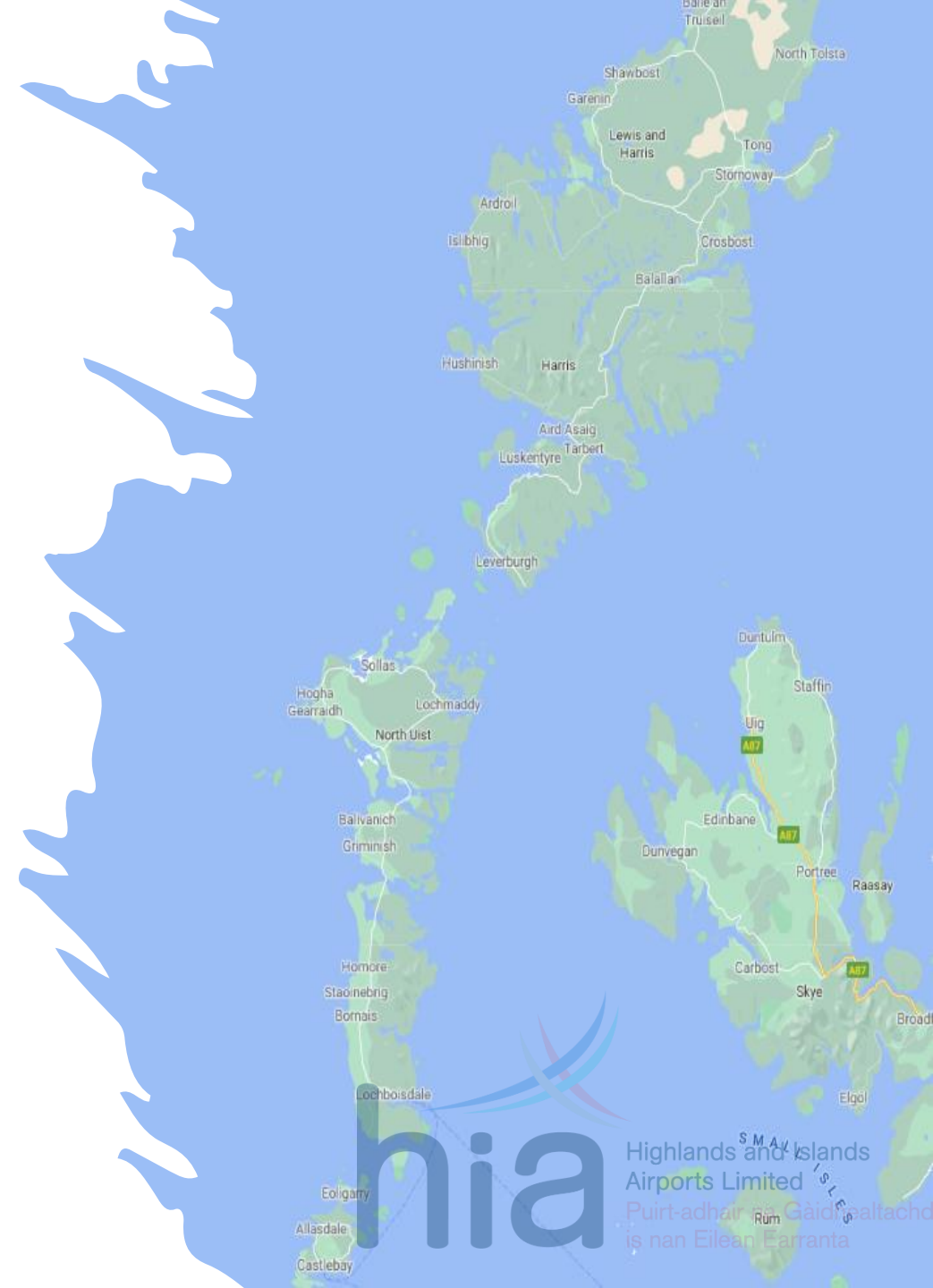
The purpose of this brief is to provide an overview of:

- the project being conducted by Highlands and Islands Limited (HIAL) to change the Category of Air Traffic Service (ATS) at Benbecula Airport from an Air Traffic Control (ATC) service to an Aerodrome Flight Information Service (AFIS);
- the safety assurance and airspace change activities that are being conducted to support the change in the Category of ATS.



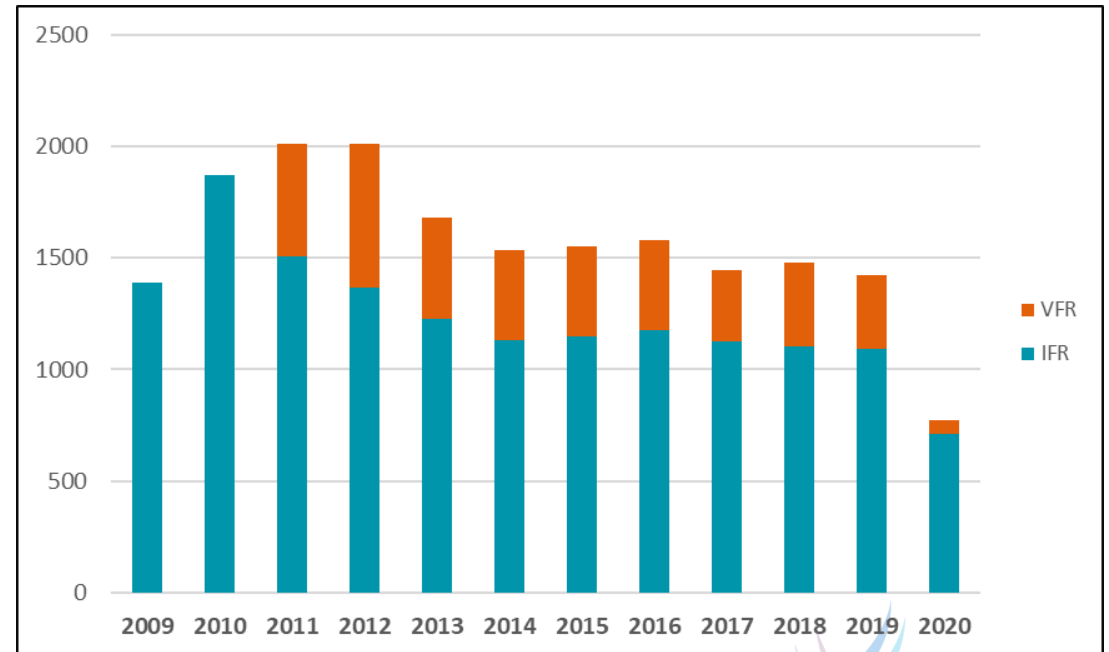
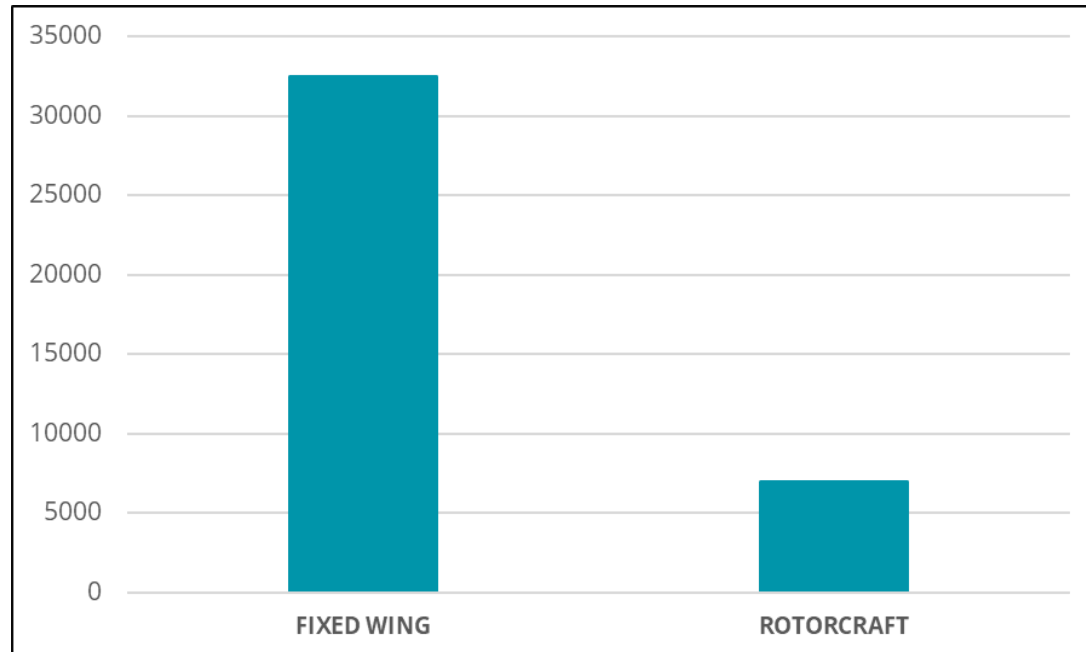
Background

- Benbecula Airport provides an ATS for scheduled flights to Stornoway, Inverness (via Stornoway) and Glasgow airports and for non-scheduled flights such as charter, general aviation, air ambulance and search and rescue flights.
- The airport handles approximately 4,000 aircraft movements per annum.
- During published opening hours, the airport provides a Procedural Service for flights operating under Instrument Flight Rules (IFR) and a Basic Service for flights operating under Visual Flight Rules (VFR).
- Outside of published opening hours, AFIS is provided on an on-call basis for emergency flights such as the air ambulance etc.
- Benbecula Airport has an Aerodrome Traffic Zone (ATZ) and is located within uncontrolled airspace (Class G).
- The Hebrides Danger Area D701 and D704 which is operated by QinetiQ on behalf of the Ministry of Defence lies to the west of the airport.

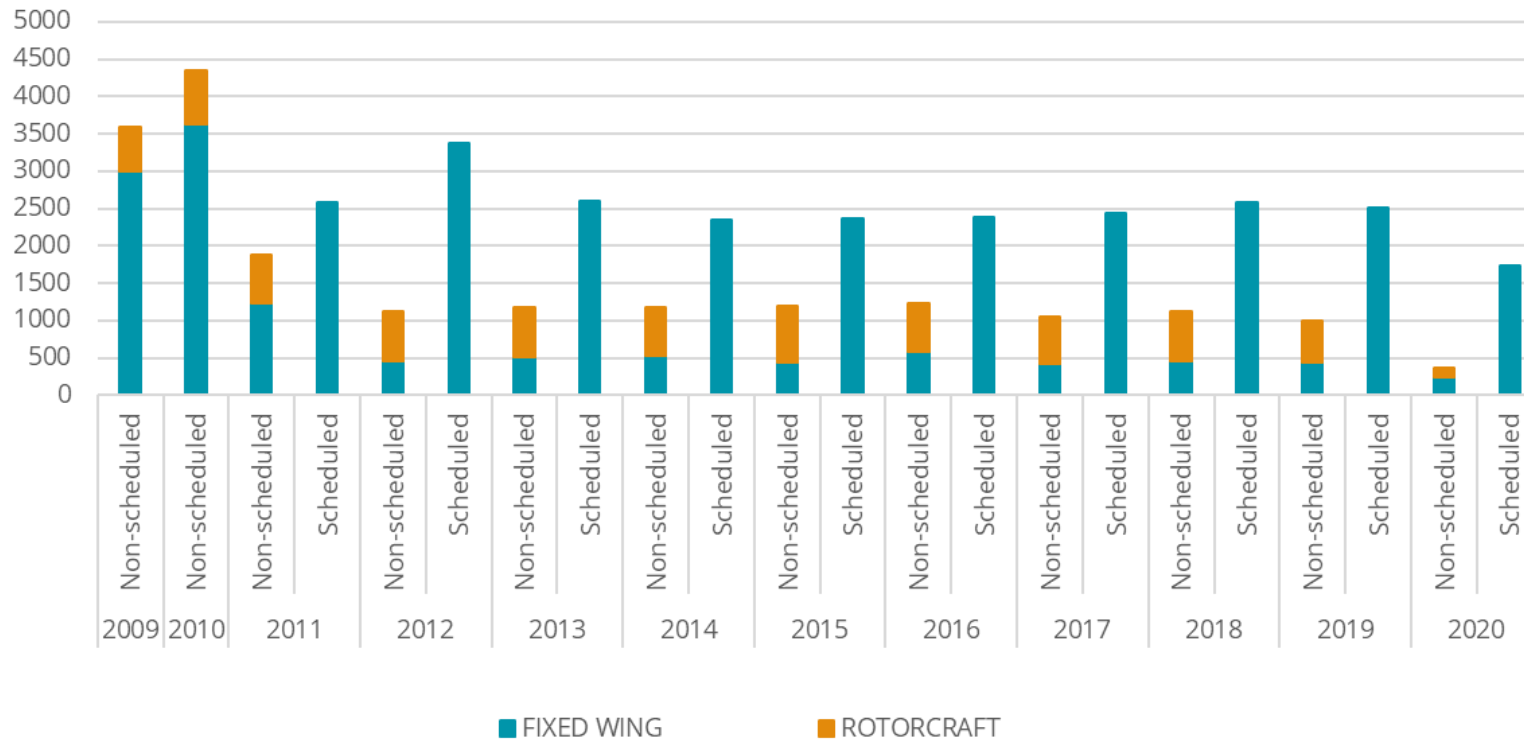


Movements at Benbecula Airport

- The two charts below depict the following for the period 2009 to 2020:
 - Aircraft types routinely flown at Benbecula Airport
 - The split between VFR and IFR flights during published opening hours
- During published opening hours 82% of traffic movements were fixed-wing and 18% were rotorcraft (helicopters) movements.



Movements at Benbecula Airport



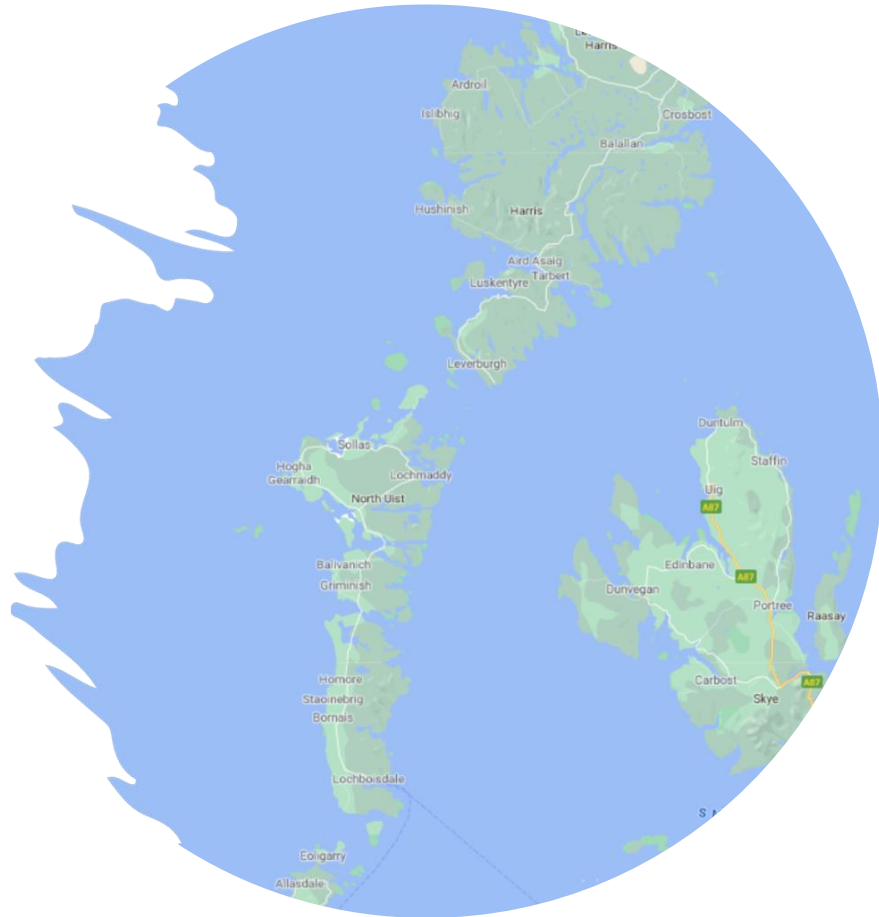
- On average, 70% of annual movements are scheduled and 30% are non-scheduled. This equates to approximately 2,500 scheduled and 1,100 non-scheduled movements.
- Scheduled movements are conducted by fixed-wing aircraft whilst non-scheduled movements can be either fixed-wing or rotorcraft (helicopters).

Project Scope



- The project to change the category of ATS from an ATC service to an AFIS service will ensure that Benbecula Airport provides an appropriate and proportionate ATS for the volume and complexity of air traffic within the airport and its vicinity.
- The operational transition to AFIS will ensure that the airport can continue to provide safe, efficient, sustainable and regulatory compliant services.

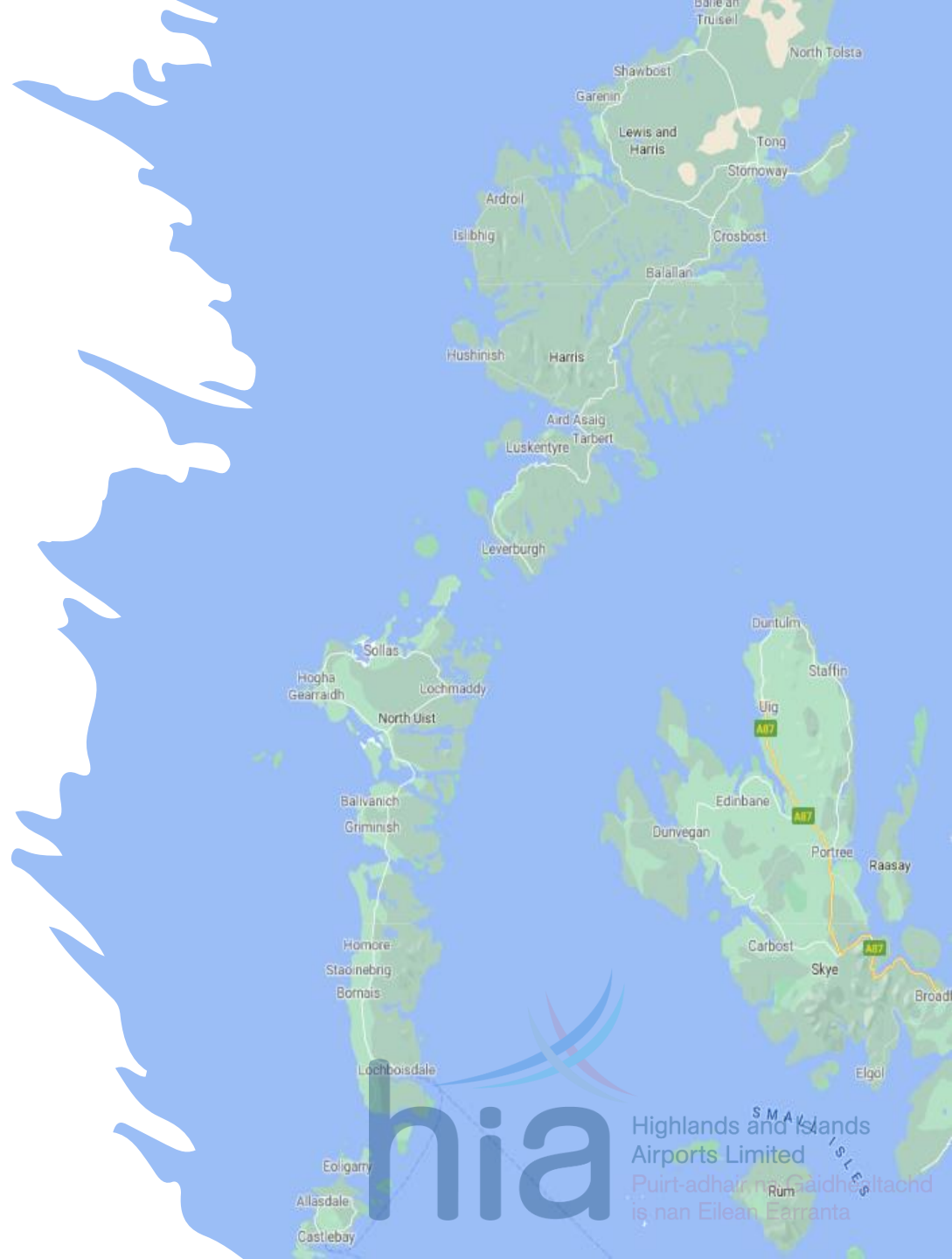
Rationale for change



- We anticipate that regulatory momentum will require Air Navigation Service Providers (ANSPs) to introduce controlled airspace at aerodromes providing an ATC Service. The CAA is unlikely to approve an application to introduce controlled airspace because it would not be deemed proportionate to the low density and low complexity of air traffic at Benbecula.
- Given the historically low density, low complexity operations, AFIS is deemed to be the most appropriate and proportionate category of ATS for Benbecula Airport.
- AFIS will provide a safe, sustainable, efficient, and regulatory compliant ATS to all airspace users.
- There are numerous examples of much larger airports across the UK providing safe and efficient AFIS with significantly higher traffic volumes in more complex airspace.

Notification of the proposed changes to the Civil Aviation Authority (CAA)

- HIAL has formally notified the Civil Aviation Authority (CAA) Safety Regulation Group (SARG) of its intention to proceed with this change through submission of an Airspace Change Application (ACP) on 8 January 2021.
- HIAL's ACP submission is in compliance with the CAA requirements outlined in CAA Civil Aviation Publication (CAP) 1616.
- The current status of the ACP is available for review on the CAA ACP portal at <https://airspacechange.caa.co.uk/PublicProposalArea?plD=340>.
- Evidence to demonstrate the continued provision of a safe, efficient, sustainable and regulatory compliant ATS will be provided in the form of a Safety Case developed in accordance with CAA Civil Aviation Publication (CAP) 760 and the HIAL Safety Management System (SMS).



What will change as a result of the change in the level of ATS?

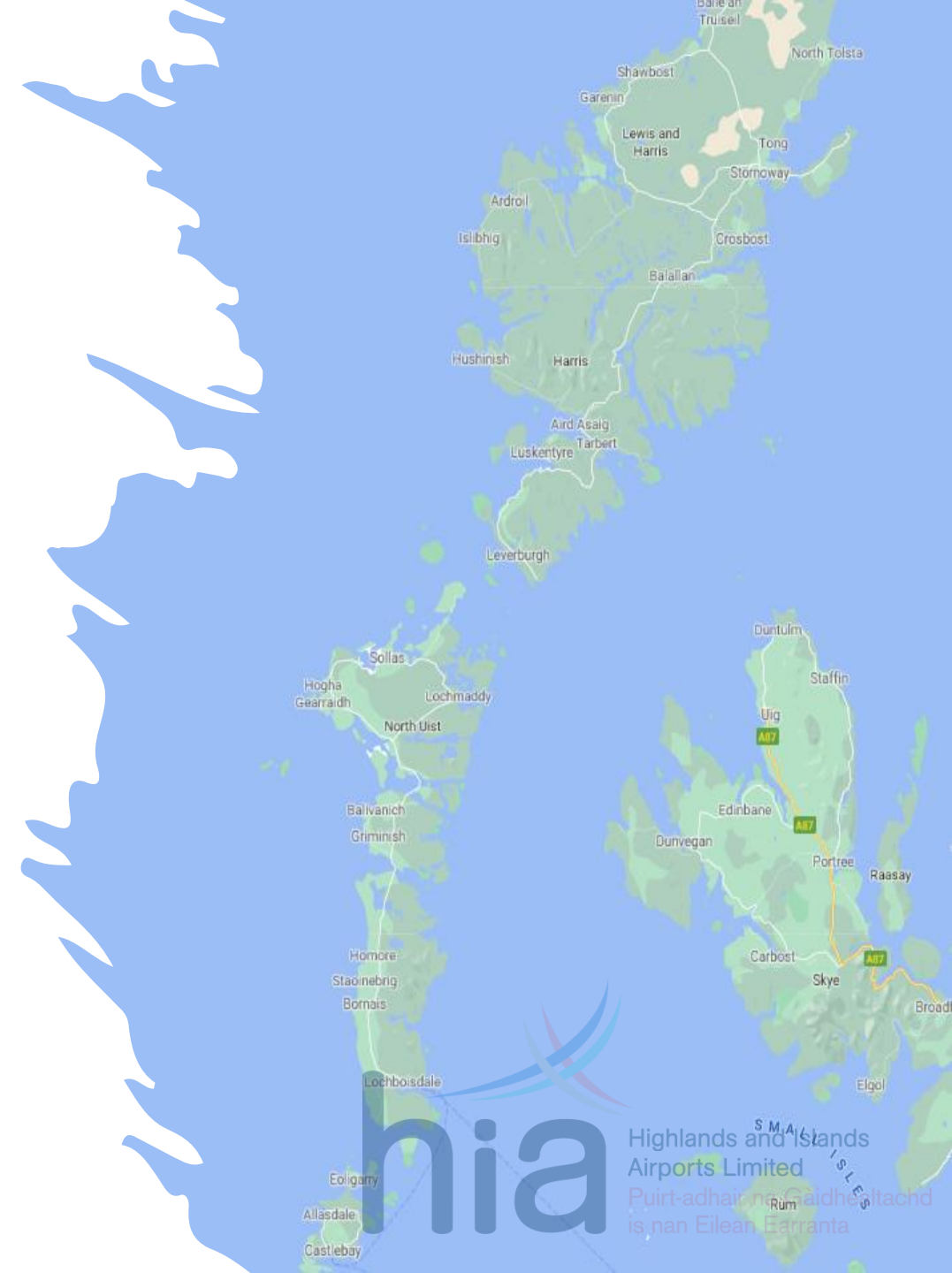
General

- HIAL will provide an AFIS at Benbecula Airport during its published opening hours in place of an ATC Service.
- AFIS will be available to all arriving, departing and transiting traffic flying within Benbecula Airport's area of operation that wish to receive an air traffic service.
- The airport will continue to provide the current out of hours on-call AFIS for emergency flights such as the air ambulance etc.

Service to airspace users

Airspace users will notice the following changes:

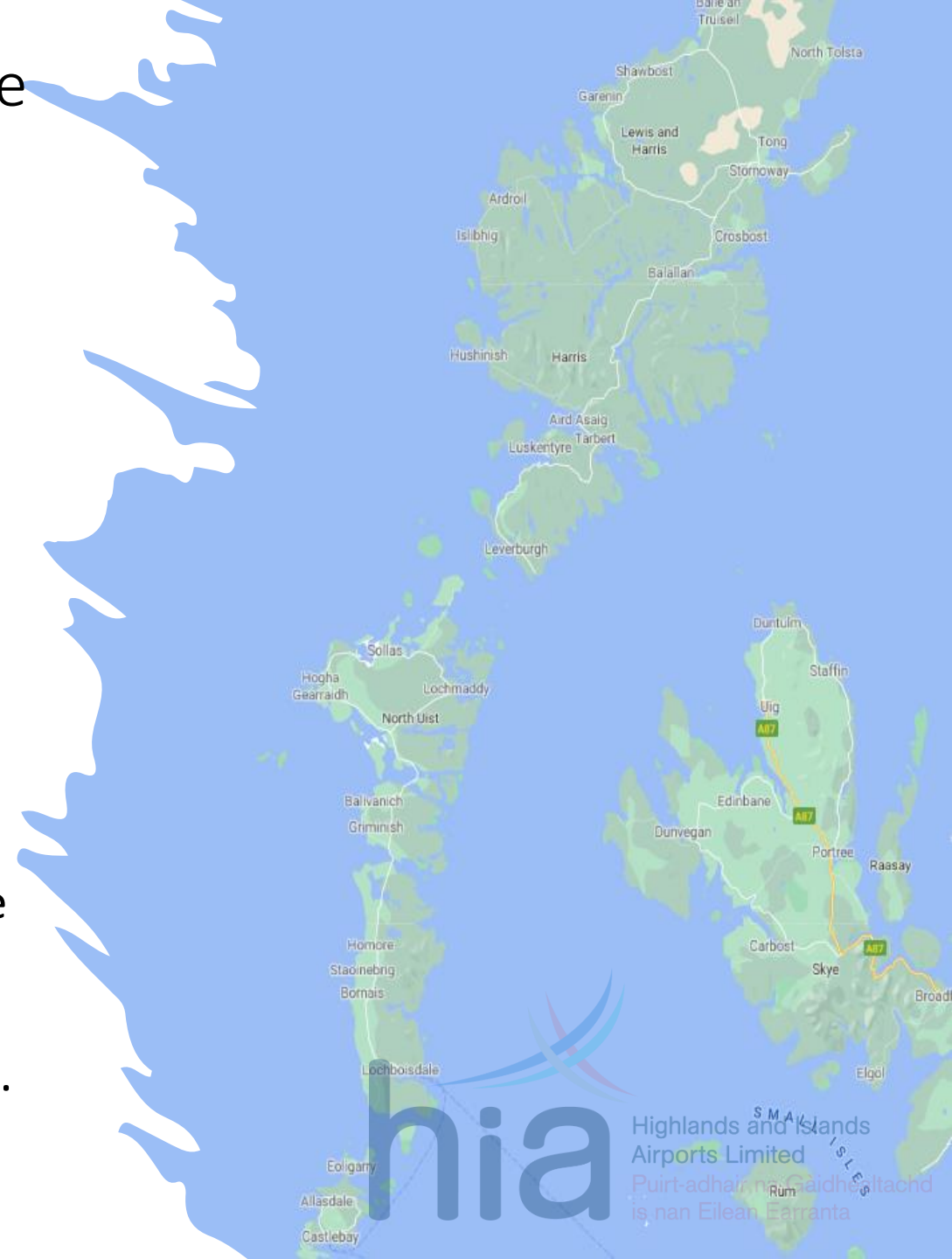
- Aircraft operating under IFR will receive a Basic Service as opposed to a Procedural Service
- Aerodrome Flight Information Officers (AFISOs) will provide essential aerodrome and traffic information to airborne aircraft as opposed to clearances and/or instructions. However, AFISOs may relay clearances and/or instructions from adjacent ATC sectors and a suggested course of action to pilots when required.
- Clearances and/or instructions will continue to be provided to aircraft operating on the aerodromes maneuvering area.



What will change as a result of the change in the level of ATS?

Adjacent units

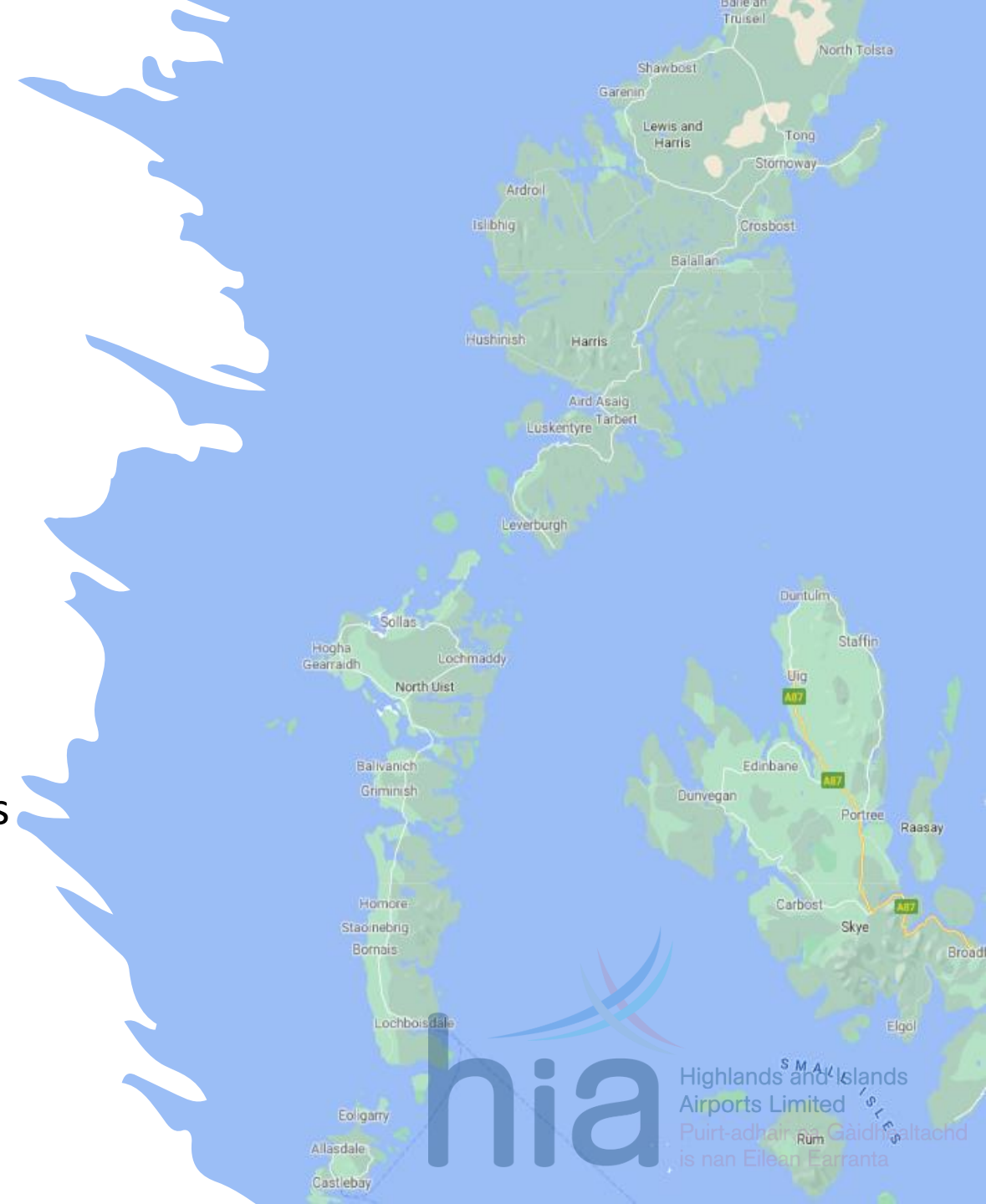
- A number of other ATS Units including Prestwick Centre West Coast and Stornoway Airport currently provide air traffic services to aircraft in transit to and from Benbecula Airport. The coordination and interface procedures for the management of these aircraft are contained within formal Letters of Agreement (LoAs).
- LoAs will be reviewed as part of the wider safety assurance activity to ensure that any changes in coordination and/or interface procedures are fully captured in revised LoAs.
- Similarly, the LoA with QinetiQ who operate the Hebrides Danger Area D701 and D704 complex will be reviewed to reflect the change of level of ATS at Benbecula. The introduction of alternative arrangements to replace the Danger Area Crossing Service for D704 currently provided by Benbecula ATC.



What will not change as a result of the change in the level of ATS?

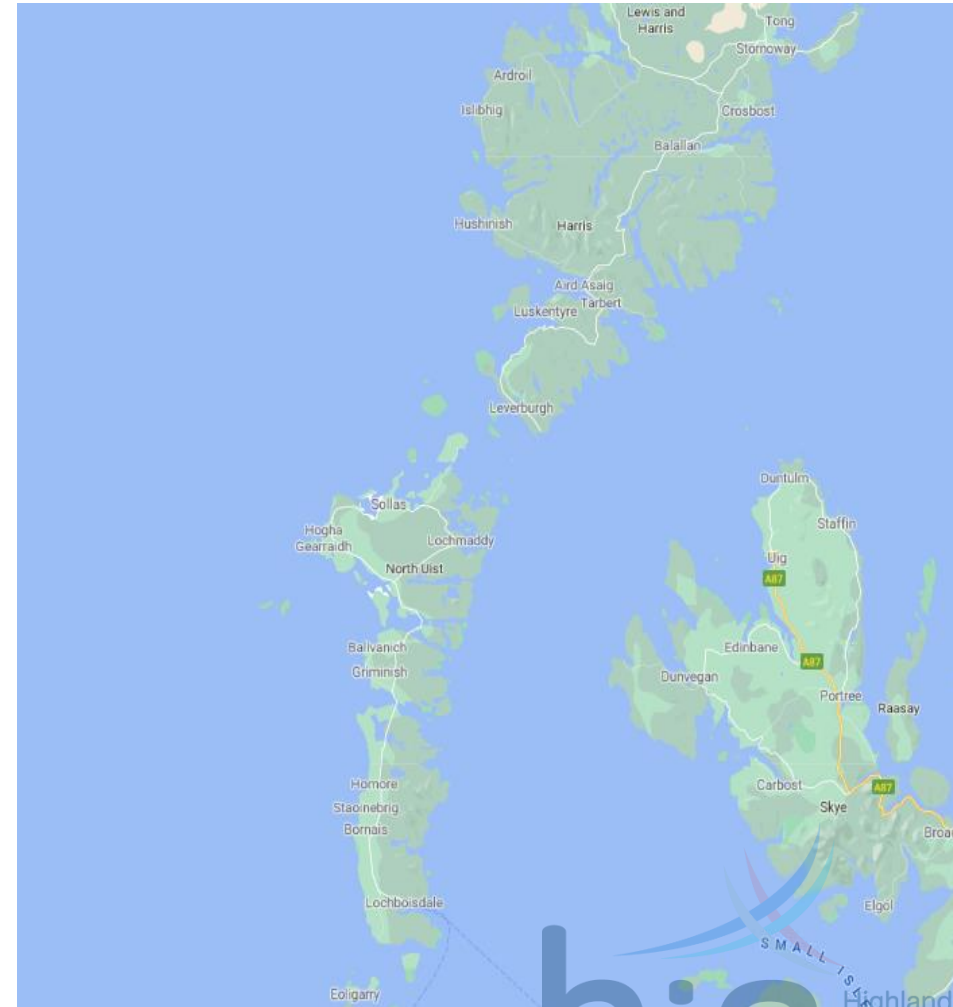
The change is limited to a change in the category of ATS provision. The only change is that the ATC service will be replaced by an AFIS. The following areas will not be affected by this change.

- The airports published opening hours
- The radio frequency in use and designated operational coverage.
- Instrument Approach Procedures (IAPs)
- Infrastructure within the aerodrome boundary
- Airspace dimensions or classification
- ATS systems architecture, such as communications and metrological systems
- Aircraft flight profiles, ground tracks, noise generation
- Environmental impact
- A Basic Service will still be available to all airspace users



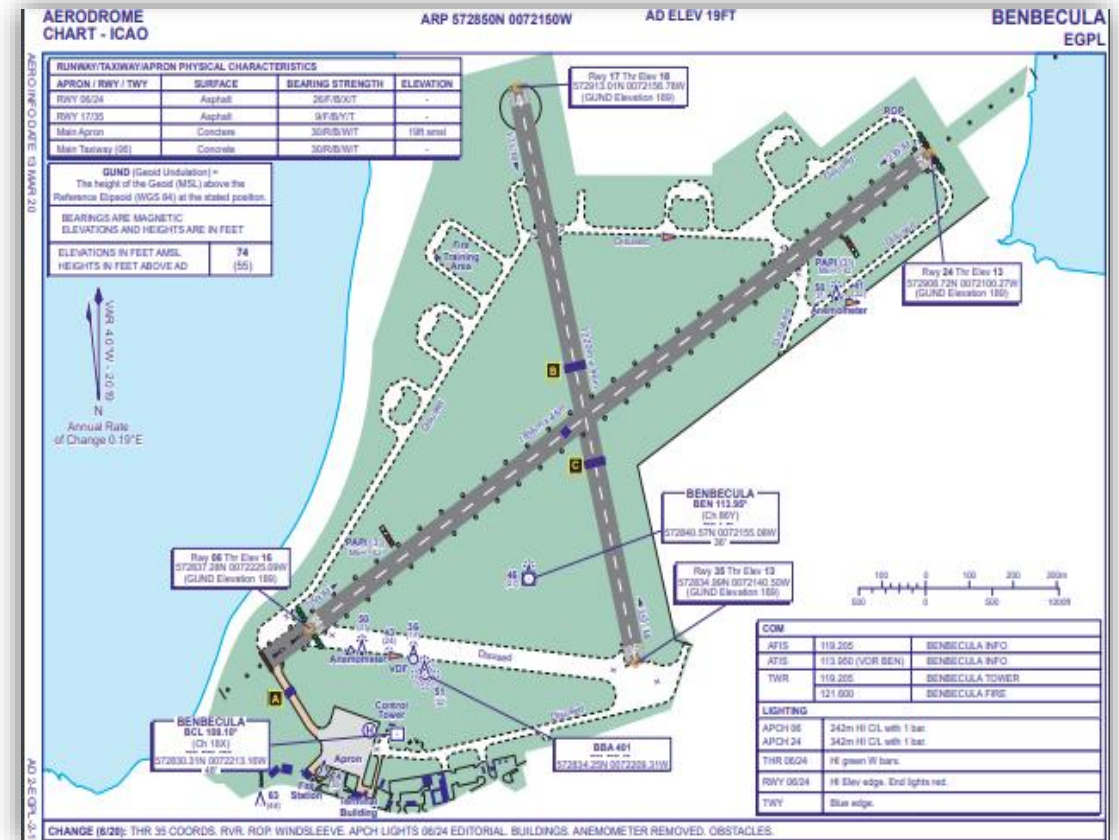
Aviation safety assurance update

- The operational implementation of the proposed change of ATS is subject to a full safety assessment in accordance with the CAA Civil Aviation Publication (CAP) 760 and the HIAL Safety Management System (SMS).
- As part of this process a Safety Plan detailing the Safety Assurance activities has been submitted to the UK CAA SARG.
- Safety assessment and hazard identification workshops have also taken place with all key stakeholders including adjacent sectors and airlines.
- The Safety Argument (4 Part Safety Case) is in development. Safety Case Part-1 has already been submitted to the CAA for consideration.

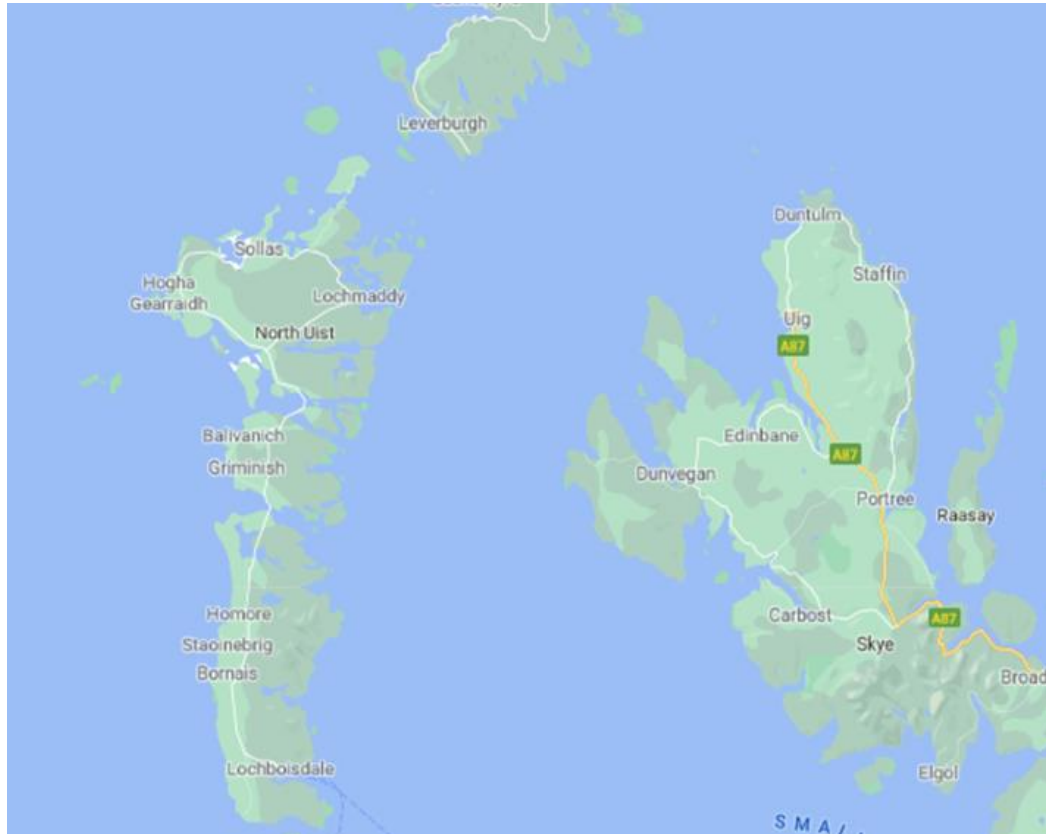


Airspace Change Proposal (ACP) Update

- An Airspace Change Proposal ‘Statement of Need’ has been submitted to the CAA and can be viewed at <https://airspacechange.caa.co.uk/PublicProposalArea?pID=340>
- The ACP Assessment Meeting with the CAA was held on 1 April 2021 at which the CAA provided a provisional assessment that the change proposed met the CAA CAP 1616 threshold for a Level 0 change.
- The target date for the operational transition of ATS to AFIS at Benbecula Airport is April 2022.
- A final decision on the CAA’s provisional assessment of the ACP being a Level 0 change will be made when HIAL submit the complete body of supporting safety evidence to the CAA for consideration.



Associated Project – Aerodrome Flight Information Service Centre of Excellence



- HIAL intends to create a new AFIS Centre of Excellence (CoE) at Benbecula Airport.
- The AFIS CoE, which is scheduled to open mid 2022, will act as the hub for management and coordination of the AFIS function across the six airports where HIAL provides an AFIS only service.
- The new CoE will cater for all of HIAL's AFISO training and development requirements, thereby negating the necessity for trainees to have to travel to Gloucestershire to attend training courses.
- The CoE will deliver a range of high standard AFIS related courses that will be developed in line with UK and International best practice.

Associated Project – Flight Information Display (FID)



- HIAL will install a Flight Information Display (FID) system in Benbecula Tower to provide enhanced situational awareness of the real-time air picture within the AFISOs area of operation.
- The timeframe for this project is dependent on the CAA publishing the technical specification and regulatory framework to support the use of FIDs – as well as industry appetite to develop new systems in line with regulatory requirements.
- The CAA has indicated that it hopes to publish the technical specification and supporting regulatory framework by June 2021.
- Given the lead in time for publication of the technical specification etc. the likelihood is that the system will be installed and available for operational use by the end of 2022.

Contact Information

Further information on the proposed Airspace Change (ACP) can be obtained through the CAA's Airspace Change Portal.

HIAL Point of Contact:

info@hial.co.uk

Information and progress of the Airspace Change Proposal:

[https://airspacechange.caa.co.uk/
PublicProposalArea?pID=340](https://airspacechange.caa.co.uk/PublicProposalArea?pID=340)

Glossary of Terms

TERM	DEFINITION
Basic Service	an ATS in which advice and information useful for the safe and efficient conduct of flights is given to a pilot. The avoidance of adjacent aircraft is the pilot's responsibility. Information given to the pilot may include weather information, conditions at the aerodrome, changes in aerodrome facilities, general airspace activity information, and any other information likely to affect safety.
Procedural Service	an ATS extending the provisions of a Basic Service, to provide restrictions, instructions, and approach clearances to a pilot. If these are complied with, the aircraft will be deconflicted from other aircraft in receipt of a Procedural Service.
Movement	A single take-off or landing. For traffic purposes one take-off and one landing is counted as two movements.
Visual Flight Rules (VFR)	A set of rules governing the conduct of flight under visual meteorological conditions in which a pilot avoids other traffic on the basis of "See and Avoid"
Instrument Flight Rules (IFR)	A set of rules governing the conduct of flight under instrument meteorological conditions.
Controlled Airspace	Airspace in which ATC services are provided to aircraft operating under either IFR or VFR depending on the controlled airspace classification. Participating aircraft are required to follow the instructions of a controller.
Uncontrolled Airspace	Airspace in which there is no requirement to provide ATC services and in which all IFR and VFR flights take full responsibility for their own safety but may be in receipt of an ATS that aids avoidance of other aircraft.

Glossary of Terms

TERM	DEFINITION
Safety Case	The argument and documents presenting a coherent argument that the level of safety attained will satisfy specified safety requirements and achieve the level of safety required at any point of a system's life cycle.
Danger Area Crossing Service	An ATS provided to aircraft wishing to access Danger Area Airspace whilst this airspace is active that must be provided in accordance with civil or military regulations.
Instrument Approach Procedure (IAP)	A design comprising a series of predetermined manoeuvres by reference to flight instruments with specified protection from obstacles from beginning to a point from which a landing can be completed or, if a landing is not completed, to a position at which holding or en-route obstacle clearance criteria apply.