



Highlands and Islands Enterprise
Iomairt na Gàidhealtachd 's nan Eilean

Space Hub Sutherland Design Principles Questionnaire

Aviation Stakeholders

Date: 18th September 2019

Author: [REDACTED]

Revision: Issue 1

Osprey Ref: 71270 06

This document is of UK origin and has been prepared by Osprey Consulting Services Limited (Osprey) and, subject to any existing rights of third parties, Osprey is the owner of the copyright therein. The document is furnished in confidence under existing laws, regulations and agreements covering the release of data. This document contains proprietary information of Osprey and the contents or any part thereof shall not be copied or disclosed to any third party without Osprey's prior written consent.

© Osprey Consulting Services Limited 2019

The Hub, Fowler Avenue, Farnborough Business Park, Farnborough, GU14 7JP

01420 520200 / enquiries@ospreycl.co.uk

Registered in England and Wales under No: 06034579

Document Details

Reference	Description
Document Title	Space Hub Sutherland Design Principles Questionnaire
	Aviation Stakeholders
Document Ref	71270 06
Issue	Issue 1
Date	18 th September 2019
Client Name	Highlands and Islands Enterprise
Classification	

Issue	Amendment	Date
Issue 1	Initial Issue	18 th September 2019

Approval Level	Authority	Name
Author	Osprey CSL	██████████
Reviewer	Osprey CSL	██████████
Client Review	Highlands and Islands Enterprise	██████████

Table of Contents

1	Introduction.....	1
1.1	Context.....	1
1.2	Background.....	1
1.3	Governmental Guidance and the CAP 1616 Process.....	1
1.4	Basis for Engagement.....	2
1.5	Points for your Consideration.....	2
1.6	Action Required.....	3
1.7	How to Respond.....	3
1.8	Focus Groups.....	4
1.9	Timescale for Responses.....	4
2	Questionnaire.....	5
2.1	Your Responses.....	5
2.2	Questions for Aviation Stakeholders.....	5

Table of Tables

Table 1 – Questions for Aviation Stakeholders.....	8
--	---

1 Introduction

1.1 Context

Highlands and Islands Enterprise (HIE) is managing a programme to build a Vertical Launch Space port in Northern Sutherland. This is an exciting opportunity for a new national capability which will also support local employment opportunities in this remote area. The proposed site is at A'Mhoine, near Melness, Sutherland. This document contains a questionnaire aimed at stakeholders which will help to define the Design Principles for the airspace solution required. This ensures that stakeholders, both aviation and non-aviation, have an opportunity to influence the criteria and principles that define a framework against which different design options will be evaluated.

1.2 Background

HIE is seeking to develop a Vertical Launch Space port. The project has received funding from the UK Space Agency (UKSA), who has also provided funding to two Launch Service Providers (LSPs) Lockheed Martin and Orbex, who are expected to be the main users of the site. The primary aim of the Space Hub Sutherland project is to deliver economic benefits, including jobs, training and supply chain opportunities.

This document concerns an application to the Civil Aviation Authority (CAA) for occasional segregated airspace to ensure that any launches are safe and so that other aircraft operators are deconflicted from the area.

The project is also subject to a full planning application that is being run separately to the application for airspace to support the operation. This questionnaire is not linked to the Planning Application.

1.3 Governmental Guidance and the CAP 1616 Process

Under Section 66 of the Transport Act 2000, the Secretary of State gave the CAA (the UK aviation independent regulator) a number of airspace-related functions, including: the duty to develop policy and strategy on the classification and use of airspace; to publish the UK airspace design and to approve changes to it. Under Section 70 of the Transport Act 2000, the CAA has a duty to take several factors into account when considering whether to agree to an airspace change proposal; this includes taking account of specific guidance on the environmental objectives contained within the current Air Navigation Guidance.

At the beginning of 2018, the CAA introduced a new process that the regulator and sponsors of airspace change proposals must follow when proposing any airspace change. This new process was developed to ensure a greater level of transparency and two-way engagement with local communities. The process is described in the CAA publication (CAP) 1616, at the link below:

<https://publicapps.caa.co.uk/docs/33/CAP1616E2noninteractive.pdf>

The CAP 1616 Airspace Design process sets out the CAA's role to approve changes to airspace design, and to the law and policy which govern the CAA's role. The guidance in CAP 1616 sets out the framework for the stages of the process and the activities that must be undertaken from the conception of the need for a change. It details what must be undertaken during the airspace re-design; the consulting and engagement requirements with those potentially impacted; how to assess the impacts of different design options from a safety, operational and environmental perspective and ultimately how the regulatory decision will be made. If an airspace design change is approved by the CAA, the guidance also covers implementation and the subsequent Post-Implementation Review¹ that assesses how the airspace change has performed since introduction and whether the anticipated impacts and benefits defined in the original proposal and decision have been delivered.

1.4 Basis for Engagement

HIE understands that any change to the airspace environment to protect the launch operations at a new facility may introduce changes to local residents (non-aviation stakeholders) and aviation stakeholders alike. Clearly safety is paramount and therefore there will inevitably be some restrictions placed on the airspace in order to ensure that civil and military aircraft operations remain separated from the launch profiles. These restrictions will depend largely on the profiles and the frequency of use, but at this stage, a permanent airspace restriction is not anticipated. It is important that the views of stakeholders are considered at an early stage in the process, and therefore, your responses to the attached questions are important to understand what our key areas of consideration should be for a successful airspace change process.

1.5 Points for your Consideration

This section provides further information that may help when considering a response to the questions posed in Section 2.

1.5.1 Periodicity of Operations

Any restrictions on the airspace environment are not expected to be in place permanently. However, there will be restrictions placed in advance of proposed launches, and for a period after to ensure that the airspace has been vacated and that normal flying operations can continue safely. There may be a certain number of restrictions that can be tolerated with minimum impact. The project team would like to understand what frequency of operation would create a lower impact.

1.5.2 Time of Day

When responding to the questions, you may also wish to consider whether your comments are applicable by day or by night, or whether you feel that priorities should change over the 24-hr period, or day to day.

¹ Post Implementation Review (PIR), ideally conducted one year after implementation of the changes.

1.6 Action Required

HIE is committed to maintaining a sound relationship with the local community and remains committed to involving stakeholders who may be affected by the proposed change to the airspace environment from an early stage. It is very important to HIE to conduct effective engagement in a transparent way and in accordance with the guidance provided within Stage 1B DEFINE of the CAA CAP 1616 process. It is recognised that it is important to capture the views of aviation and non-aviation stakeholders who may wish to express their thoughts concerning any future changes.

It is important to understand that, at this stage of the process, our initial engagement is limited to a selection of representative bodies and individuals who can offer views on behalf of their local communities. These views will help us to formulate some Design Principles, which you will have an opportunity to review. The Design Principles will themselves provide the framework against which Design Options can be evaluated. After the Design Options are drawn up, HIE will share these with the same representative bodies involved in developing the Design Principles. **The more detailed Design Options will then be the subject of a full public consultation exercise later in the process.**

We have developed the questions below in Section 2 and would encourage you to insert your responses in the enclosed table and return this to us as described in paragraph 1.7 below.

Please do not feel constrained in your response to any question. If you wish to highlight any other relevant local constraints or issues, then HIE would welcome any feedback you choose to contribute that will support the development of the Design Principles. Your responses may be operational or environmental in nature but are those you feel are most important to you, or to your represented community.

1.7 How to Respond

There are several ways you can respond to the survey. The easiest and quickest way to respond is to access the questions via the link contained with the email which takes you to the online survey.

Alternatively, you can choose to fill your answers directly to each question in the relevant field in Section 2 below. Then save the file that includes your responses and attach to an email to the following address:

spacehubsutherland@hient.co.uk

In addition to the MS Word file, we will accept scanned, hand-written responses or email responses provided they are legible and clearly identify the question to which your response relates.

We will also accept legible postal responses to the following address within the timescales specified in paragraph 1.9 below:

Airspace Change
Space Hub Sutherland
Osprey Consulting Services Limited
Suite 10,
The Hub,
Fowler Avenue
Farnborough
GU14 7JP

It is important that individual email responses clearly show your name and contact details; this will allow us to cross refer to the emails we send out.

1.8 Focus Groups

During October 2019, HIE will be hosting two Focus Groups with key stakeholders. Therefore, we have asked for the questionnaire responses to be returned to us in October, ahead of these events. During the Focus Groups discussions, additional views will be recorded and collated. The responses from the Focus Groups and the questionnaires will be analysed and will form the basis of the draft Design Principles document, for review and subsequent submission to the CAA.

Please note again that these Focus Groups are for views on the Airspace Change Process and are not linked to separate consultation meetings on the Planning Application.

1.9 Timescale for Responses

Please ensure your response is returned to us no later than **Monday 21st October 2019**.

2 Questionnaire

2.1 Your Responses

The questions below are designed to help us understand the constraints that should be considered during the CAA CAP 1616 Design Principles step of the Define Stage (1). Please insert your responses below each of the following questions; the size of the response box will expand as you type your response. Use as much space as you need, or alternatively attach additional sheets or documents making it clear which questions you are responding to. Save this document together with any other relevant documents and return them as described at para 1.7 above. If any of the questions are not applicable or relevant, please say so against the appropriate question.

Please note that this questionnaire relates only to the CAP 1616 Airspace Change Process which is an entirely separate process to the Highland Council Statutory Planning Application submission. Both processes include elements of stakeholder engagement and formal consultation so inevitably there will be some overlap.

2.2 Questions for Aviation Stakeholders

Representative Organisation:

for example: ANSP, Regional Airport, General Aviation Operator, Glider Pilot, etc.

Q1 - Please list any constraints that might limit the lateral and/or vertical extent of any airspace solution that you feel HIE should consider when designing an airspace solution to protect the launches. Please list your reasons.

Your Response:

Q2 - Please advise us of any coordination requirements between HIE and other Air Navigation Service Providers (ANSPs) that should be considered during the development of new airspace restrictions established by HIE.

Your Response:

Q3 - Are you aware of anything in the CAA Airspace Modernisation Strategy that presents a risk or opportunity to HIE in development of the airspace solution to protect the Space Hub launches? Please provide details.

Your Response:

Q4 - Do you envisage that a Letter of Agreement (LoA) or Memorandum of Understanding (MoU) or other agreement with HIE will be required? If so, please provide details of what you would expect to be required as part of this agreement.

Your Response:

Q5 - Please let us know if there are any day-time or night-time specific constraints that you consider HIE could take into account when considering the airspace solution required to protect the vertical space launches. Please provide details and reasons.

Your Response:

Q6 - Please tell us if there are there any other operational constraints that HIE will need to consider when planning its new airspace solution.

Your Response:

Q7 - Please inform us of who you consider to be the other key local aviation stakeholders that you believe HIE should engage with during the process of designing an airspace solution to protect the vertical space launches. Please provide contact details and reasons.

Your Response:



Q8 Please provide details of any constraints imposed by restricted airspace operations in the area encompassed by HIE's Space Hub Sutherland's potential operating area (e.g. military operations, danger areas, restricted areas, route crossings, transit corridors, training areas etc.)

Your Response:

Q9 - Please provide details of any issues or constraints due to local helicopter operations that you believe may have an impact within the proposed area of the Space Hub Sutherland operating area.

Your Response:

Q10 - Please advise us of any other issues or constraints you feel HIE could consider when designing its new airspace solution to protect the vertical space launches. Please provide details.

Your Response:

Q11 - What impact or constraints will Space Hub Sutherland airspace solution to protect vertical space launches have on local GA/VFR operations. Please provide details.

Your Response:

<p>Q12 - Please provide details of any constraints that may be occasioned by local gliding activities on, or adjacent to the Space Hub Sutherland launch site.</p>
<p>Your Response:</p>
<p>Q13 - A thorough Environmental Impact Assessment is being conducted by HIE as part of the Planning Application process. Are there any specific environmental factors associated with the airspace change application that you believe should be considered by HIE?</p>
<p>Your response:</p>
<p>Q14 - Please state any principles you believe that HIE could adopt to mitigate (in full or in part) the direct or indirect impact of rocket launches on aviation emissions or pollution. For example, due to the dispersal of other air traffic during launch periods.</p>
<p>Your response:</p>
<p>Q15 – HIE is currently engaging with local and national organisations and a full public consultation is planned in due course. However, please let us know of any local or national organisations that you believe HIE should include in its formal consultation.</p>
<p>Your response:</p>

Table 1 – Questions for Aviation Stakeholders

PAGE INTENTIONALLY BLANK