ATLANTIC58

SEI APPENDIX 7.1

Socioeconomic Analysis

SPACE PORT 1

Spaceport 1

Socio-Economic Impact Assessment

2023/24 – 2025/26

Final Report

November 2022

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Executive Summary

Introduction

MKA Economics was appointed by a consortium, led by Comhairle nan Eilean Siar (CnES) in January 2021, to formulate an independent socio-economic impact assessment of a proposed suborbital spaceport facility (Spaceport 1) in North Uist. An initial draft report was completed in March 2021 and was finalised in line with new project information in December 2021.

An independent review of the socio-economic impact assessment was commissioned by CnES, and completed by Lichfields, in April 2022. The review was responded to in August 2022, and it was agreed to update the socio-economic impact assessment to action some of these comments, as well as update aspects of the report.

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It was agreed that the approach was to provide a standalone report on the potential net economic benefits of the proposal to support the planning application and the Planning Authority in making its decision, giving due weight to the net economic benefit the scheme.

Socio-Economic Rationale and Policy Fit

The priority given by the UK Government to the development of a UK based Space launch industry is grounded in the forecast growth of this sector over the next two decades. The space sector is a vital part of the UK's economy, worth over £16.5 billion per year and employing over 47,000 people in diverse roles as scientists, engineers, entrepreneurs, and innovators. Space employment grew 6.7% from 2018/19, and comprised 0.14% of the UK workforce in 2019/20. The space industry contributed £6.9 billion of direct Gross Value Added (GVA), and £15.8 billion total GVA across the supply chain[1].

1 https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/1068861/20220412_BryceTech_UKSA_S_H_Summary_Report.pdf

The proposed development directly supports the UK and Scottish Space Strategies, which in turn are supported by the new National Economic Strategy for Economic Transportation (NSET)[2] and the soon to be publish National Planning Framework 4 (NPF4)[3].

There is strong public policy support to develop this market opportunity for the UK, and the Spaceport 1 site was one of only three sites which was identified as being suitable for an orbital vertical launch facility. With Spaceport Sutherland successful in attracting the funding award - and the resultant loss of opportunity for Spaceport 1 to go straight to developing an orbital launch facility - the Spaceport 1 Consortium shifted its focus to establishing a permanent business around suborbital launch. Spaceport 1, by virtue of its location and existing infrastructure, accessible through partnering with QinetiQ, is uniquely placed to offer launch capabilities to the suborbital market.

The Spaceport 1 proposal has been identified as a high priority project within Comhairle nan Eilean Siar's strategic plans[4]. It is also an important aspect of the local Community Development Plan[5] which supports the regional aim of creating more than 1,500 new jobs across the island to help mitigate against a declining population, especially the outward migration of younger people. The Business Case highlights how it will help protect the existing high paid professional jobs within QinetiQ, who operate the MoD Hebrides Range, and create new jobs in an innovative, high growth potential, high paying, space industry sector..

Spaceport 1 directly supports HIE's Strategy and Operating Plan[6] where there is a strong focus on harnessing the economic opportunity afforded by the space sector, not only in terms of new employment in areas of needs, but the wider spin-off opportunities across the region and Scotland as a whole.

Any perceived adverse effects on the tourism and recreational base of the islands can be addressed through 2019 survey work by OHT, where there is a positive sentiment amongst local tourism businesses. The launch pad itself and supporting structure, will be smaller and less prominent than a community wind turbine, of which there is an appreciation and knowledge of in North Uist. Visitor research around wind farms has widely found that tourists are no dissuaded from visiting or revisiting an area due to the existence of a wind farm(s) and there has been no stated detriment to the tourism economy of the islands due to the presence of MoD Hebrides Range in South Uist.

[2] https://www.gov.scot/publications/scotlands-national-strategy-economic-transformation/

[3] https://consult.gov.scot/local-government-and-communities/draft-national-planning-framework-4/

[4] https://www.cne-siar.gov.uk/business/economic-development-and-business-support/creating-communities-of-the-future/

[5] http://www.isleofnorthuist.com/

[6] https://www.hie.co.uk/about-us/policies-and-publications/strategy-and-operating-plan/

There is a role for the Consortium to support the delivery of economic and tourism benefits of Spaceport 1, notably in terms of presenting information when available on the launch profile and the potential supply chain opportunities afforded to local businesses of achieving successful launches.

Socio-Economic Baseline

This socio-economic baseline assessment is concerned with the local, sub-regional and regional areas. The assessment uses publicly available data sets to generate a number of key points and trends for discussion on the unique socio-economic opportunities and challenges within the local, and wider, population and economy of the study area.

The baseline assessment reveals a number of key issues in the study area:

- Extremely rural location with a lack of developed infrastructure, West North Uist to Baleshare is amongst the most geographically deprived area in Scotland.
- Long-term population decline due to an ageing population, low birth rates, and out-migration amongst primarily young demographics.
- A lack of a diversified economy mainly focused around primary industry, tourism and culture, and the public sector.
- Considerably lower levels of GVA per head than the national average, with figures around two-thirds of the national average
- Huge natural capital assets and a relatively untouched landscape.
- An important, and growing, tourism economy, with increasing volumes and values and longer dwell times.
- A significant adverse effect on the local economy, and tourism economy, as result of the Covid-19 pandemic, with unemployment doubling during the first national lockdown and visitor numbers significantly lower. However, unemployment levels in August 2022 have returned to pre-Covid19 levels, and it is anticipated that visitor levels have improved as Covid-19 restriction have eased.

Socio-Economic Impact

The net direct, indirect, and induced economic impacts, at the Outer Hebrides level, of the operational Spaceport 1 in 2025/26 are estimated to be:

- **Employment – 23.26 FTEs**
- **Turnover - £6.45 million**
- **GVA - £2.73 million**
- **Income - £1.18 million**

The above estimates can be aligned against those predicted at the two Scottish orbital launch sites (Space Hub Sutherland and Shetland Space Centre); these are shown in the table below. This is a high-level comparison, and a high degree of caution should be taken as each site is different in its capital expenditure, operations, market and launch cadence.

	Spaceport 1	Space Hub Sutherland	Shetland Space Centre
Gross impact			
Total Net Jobs (FTE)	22.42	55.80	139.50
FTEs per Launch	2.60	4.70	4.70

This shows that the local employment impacts, albeit around 50% lower than the other space centres, are of a magnitude consistent with other sites. This would be expected as the focus at Spaceport 1 is suborbital launches, rather than orbital launches in Sutherland and Shetland. Furthermore, the Space Industry Act 2018 sets out 'prescribed roles' which must be appointed by every UK spaceport, The legislation therefore establishes a mandatory minimum level of staffing, regardless of whether the spaceport is providing orbital or suborbital launch facilities.

In addition, Spaceport 1 requires construction of the proposed launch site which comprises a range of capital investments over a four month period. The total construction related costs have been valued at **£3.1 million**. This has the potential to generate further front-ended economic benefits for the Outer Hebrides, which have been estimated as being **£1.0 million** and **21.4 job-years.**

Findings and Conclusions

The impacts presented above are of a significant scale, both in employment terms but also in GVA and turnover terms. The scale of the impacts for the suborbital Spaceport can have a demonstrable and immediate impact on the economic well-being of the Outer Hebrides. They can help attract new investment to the islands and set a strong foundation for future investment and longer terms economic prosperity and economic sustainability.

The Spaceport 1 proposal fits with the future places and productive places growth priorities of the emerging National Planning Framework 4 (NPF4) and the new National Strategy for Economic Transformation (NSET). It also supports the key sector and community development objectives of both HIE and CnES strategies.

It explicitly supports the drive for new jobs locally set out in the North Uist Development Plan, and how this will help reduce the outward migration of younger people and attract new professionals and families to the islands. Importantly, it has the potential to help the economic recovery, and tourism recovery, by encouraging new business to the area, enticing the Outer Hebrides as a place to work, invest, visit and do business. This can aid the economic challenges faced by the Outer Hebrides, widening the economic base of the area, and benefiting from the long-term benefits afforded by the valuable and growing space sector.

In addition to the estimated socio-economic impacts arriving from the successful deployment of Spaceport 1 there a range of wider, longer term and harder to measure socio-economic benefits pertinent to this proposal including:

- Supporting **new economic growth and employment opportunities**, to an area which is economically fragile and dependent on a narrow base on economic activities;

- **Higher value jobs**, and wider **supply chain opportunities**, can both encourage people of working age to find work on the Island, as well as encourage new people and investment to the Island;

- Further the **tourism sector and aid its ongoing recovery from the Covid-19 pandemic**, notably business tourism in the local area, whilst not harming the leisure tourism appeal of the sector, as agreed and ratified by a recent survey of local tourism business across the Uists. Importantly, the launches that happen outside the main tourism season can help extend the tourism appeal of the island and support tourism businesses in the shoulder season and off-peak season;

- The business model is founded on the principles of **public participation and community benefit**. Both the landowner (the local authority) and the community - via the already established community interest company - will receive a share of profits each year.

- By creating a new economic sector, not only will the new direct jobs support the economy, but these are expected to grow over time, and help restructure the economy away from a narrow base of lower value, and seasonal, activities;

- **Enhancing the MOD Range / QinetiQ offering,** this partnership is uniquely placed to be able to work with the MOD to offer complementary services. This is in a nascent phase of discussion, but significant interest is being shown by customers and suppliers alike. This could enhance the appeal of the Range to a national and international audience and potentially secure bookings for future years.

- Help to protect the existing **high paid professional jobs with QinetiQ**, and creating new jobs in an innovative high paying space industry sector

Spaceport 1 can bring immediate economic impacts to the local area, an area in need of investment and jobs. These higher value jobs have the potential to bring further investment into the area as the sector grows and develops, and as the launches develop and continue. A hub of activity around a new economic sector can play a major role in helping the restructuring of the Island community into new activities. These will not replace traditional activities but can add-to the type of economic activity, encouraging local people to find local work, stay on the Islands, as well as attract new people to the Islands.

1 Introduction

Introduction

1.1 MKA Economics was appointed by a consortium, led by Comhairle nan Eilean Siar (CnES) in January 2021, to formulate an independent socio-economic impact assessment of a proposed suborbital spaceport facility (Spaceport 1) in North Uist. An initial draft report was completed in March 2021 and was finalised in line with new project information in December 2021.

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1.3 The standalone socio-economic report was prepared by MKA Economics to accompany the Environmental Impact Assessment (EIA) and support the planning application. It is acknowledged by both MKA Economics and the EIA Team (Aquatera and Atlantic58) that the potential economic impacts were not translated into potential EIA significance. At the time of assessment, the approach was considered proportionate to the scale of the development.

1.4 It was agreed that the approach was to provide a standalone report on the potential net economic benefits of the proposal to support the planning application and the Planning Authority in making its decision, giving due weight to the net economic benefit of the proposed scheme. It is known that 'Chapter 7. Community, Recreation and Tourism' of the EIA, undertaken by Aquatera, focuses on potential physical disruption, severance and enhancement impacts arising from the project and makes reference to the Socio-Economic Impact Assessment as a standalone report. It does not assess significance of potential net economic benefits in the context of EIA terminology. However, a more detailed and comprehensive assessment is provided to address comments received in response to the planning application and EIA Report in the Supplementary Environmental Information (SEI) Addendum, Section 7. Socioeconomics (which supersedes Chapter 7 of the EIA Report).

1.5 This socio-economic impact assessment has been led by MKA Economics, more details on MKA Economics experience is presented in the next section. Further background to Spaceport 1 is also introduced, and this is based on a review of the latest Spaceport 1 Business Plan (October 2022). The approach and method of the socio-economic assessment is also set out in this section.

MKA Economics

1.6 MKA Economics was established in 2009 and is directed by Mark Kummerer. Mark founded MKA Economics in 2009 following Associate Director roles at EDAW and EKOS.

Previously Mark was an economic and regeneration consultant at Halcrow and a graduate economist at Jura Consultants.

1.7 Mark has almost 25 years post qualifying experience and through his consultancy roles he brings high level experience in economic development and regeneration projects. He has project managed a variety of economic initiatives that include giving advice about appraisal, business planning, delivery and implementation, evaluation and impact assessment.

1.8 His particular strengths include economic development, market appraisal, public/private funding, economic and financial appraisal of projects, including, commercial developments, residential schemes, renewable energy, transport and infrastructure, SME support programmes and labour market initiatives.

1.9 Member of the Economic Development Association Scotland (EDAS). Mark was a Board Director with Forth Valley Social Enterprise (FVSE) from 2015 to 2018. Mark is a Planning Aid Scotland (PAS) Volunteer.

1.10 MKA Economics has been retained on HIE Economic Impact Framework since its inception in 2013, and has led on a wide range of space infrastructure economic impact assessments, including:

- Aug 2015: HIE - Vertical Launch Facility EIA (Incl Spaceport1)
- Jan 2017: HIE - Proposed Rocket Launch Facility EIA (Incl Spaceport1)
- Apr 2017: HIE - Vertical Launch Facility EIA (Incl Spaceport1)
- Apr 2017: HIE - Spaceport Machrihanish EIA
- Sep 2017: HIE - Vertical Launch Report
- Mar 2018: HIE - Rocket Launch Sites EIA (Incl Spaceport1)
- Aug 2019: HIE - Space Hub Sutherland Options Appraisal and EIA
- Nov 2019: HIE - Space Hub Sutherland Preferred Option EIA
- July 2021: HIE - Scottish Land Court Expert Witness for Space Hub Sutherland
- Various others: 3d Printer for Orbex and Orbex HQ in Forres

1.11 The economic impact deployed by MKA Economics has been developed and refined over the course of the above studies. Culminating in Space Hub Sutherland being externally scrutinised by BiGGAR Economics (who led the Unst Space EIA) at the Scottish Land Court in

July 2021. The analysis has stood up to external and rigorous interrogation and was seen as an important material consideration in the Scottish Land Court Hearing and Judicial Review (2021). Space Hub Sutherland was approved at the Scottish Land Court and Judicial Review.

Background

1.12 The Spaceport 1 development emerged following the competitive exercise in 2018 for funding from the UK Space Agency and Highlands and Islands Enterprise to establish a vertical launch facility in Scotland. With Spaceport Sutherland successful in attracting the funding award - and the resultant loss of opportunity for the Consortium to go straight to developing an orbital launch facility - the Spaceport 1 Consortium shifted its focus to establishing a permanent business around suborbital launch.

1.13 The Consortium believe that through the provision of modest infrastructure and by utilising the capabilities of the partnership approach, Spaceport 1 can develop a unique, sustainable and profitable suborbital launch capability for the domestic and international sounding / test rocket markets.

1.14 The vision for Spaceport 1 is to be the UK's primary location for suborbital rocket launch activities.

1.15 By harnessing a region of the North Uist coastline and the nearby MOD Hebrides Range, with access to 115,000 km2 of segregable airspace without altitude restrictions, and existing tracking, telemetry and launch abort infrastructure, Spaceport 1 will provide a unique, safe, and unparalleled operating environment from which research, launch system development, rocketry, STEM, outreach, and defence related activities can be licensed and undertaken.

1.16 The main driver for the project is to retain and sustain capabilities, expertise, and employment within one of Scotland's noted areas of high deprivation. Spaceport 1's activities will bring revenue into the Outer Hebrides and provide a platform for attracting future investment and business diversification.

Approach

1.17 This report presents our findings from our socio-economic impact assessment of the proposed Spaceport 1 development, which focuses on the development of a suborbital launch site in North Uist.

1.18 The objectives of the research are to:

- provide a brief overview of the project;
- outline the strategic fit and alignment with socio-economic policies and priorities;

- present a robust understanding of the local economy, and tourism economy, through the completion of a socio-economic audit;
- estimate direct, indirect and induced impacts for employment, income (wages/salaries) and GVA; and
- provide an indicative outline of the likely extent of the externalities associated with this project, i.e., the impact of construction expenditure and the impact of spending by additional business visitors attracted to the area as a result of the launch facility;

1.19 This report is based on:

- a review of Business Cases for Spaceport 1 (July 2020, November 2021, February 2022 and October 2022);
- telephone discussions with Joe McPhee (Head of Economic Development and Planning, CnES) and Alison MacCorquodale (Economic Development Officer - CnES);
- telephone discussions and email correspondence with Mark Roberts (Spaceport 1 Programme Delivery Director, Rhea) who led the creation of the Business Case on behalf of Spaceport 1 Consortium;
- telephone discussions and e-mail correspondence with Sarah Murray (Lead on the Environment Impact Assessment, Aquatera);
- a review of internal presentations related to the project, including new Business Case, financial projections and other updated technical papers in November 2021;
- a review of The Size and Health of the UK Space Industry[7] (United Kingdom Space Agency, 2021);
- a presentation of the Draft Report to CnES and Rhea, to inform the final report;
- a review commissioned by CnES Planning by Litchfields of the socio-economic assessment in April 2022

1.20 While this report is based on recent consultations and a review of the latest Business Case (October 2022), it should be stressed that some assumptions underlying the impact calculations are still indicative. Where incomplete information is available, our analysis has erred on the side of caution, and adopted a prudent set of assumptions.

[7] https://www.gov.uk/government/publications/the-size-and-health-of-the-uk-space-industry-2021

2 Socio-Economic Rationale and Policy Fit

Introduction

2.1 This section presents the economic and market rationale for developing a suborbital launch facility in this location and setting the policy agenda in which it supports and contributes towards.

Rationale for developing Spaceport 1

2.2 The Spaceport 1 project is directly aligned with the UK Government's 2021 National Space Strategy[8] which recognises that space is a vital part of the UK's economy. With a renowned science and technology sector, a strong talent pipeline and leading satellite manufacturing and operations capabilities, the UK Government acknowledges that action is required to support the development of UK launch capability to unlock further potential and provide a holistic offer to the space economy.

2.3 The space sector is a vital part of the UK's economy, worth over £16.5 billion per year and employing over 47,000 people in diverse and exciting roles as scientists, engineers, entrepreneurs, and innovators. Space employment grew 6.7% from 2018/19, and comprised 0.14% of the UK workforce in 2019/20. The space industry contributed £6.9 billion of direct gross value added (GVA) (0.31% of UK GDP), and £15.8 billion total GVA across the supply chain[9].

2.4 The UK Government has invested £40million to help give take-off to space flight from the UK, including £31.5million for spaceports in Scotland. Space firms headquartered in Scotland bring in £254million and about 20 per cent of those working on British projects do so in Scotland for 133 organisations.

2.5 Spaceport 1 Business Case sets out the opportunity to move now and seize a niche segment of this market, by offering industry access to the infrastructure necessary to support the needs of suborbital launches, and future orbital launches (from other sites). Spaceport 1 will assist in achieving the Scottish Government's ambition for the Scottish space sector as laid out in its 2021 Strategy for Space in Scotland[10].

8 https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/1034313/national-space-strategy.pdf

9 https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/1068861/20220412_BryceTech_UKSA_S_H_Summary_Report.pdf

10 https://scottishspace.org/wp-content/uploads/2021/10/a_strategy_for_space_in_scotland.pdf

2.6 Spaceport 1, by virtue of its location and existing infrastructure, accessible through partnering with QinetiQ, is uniquely placed to offer immediate launch capabilities to the suborbital market. Such activity, in one of Scotland's noted areas of high deprivation, will support inward migration and assist with harnessing the region's potential, resulting in much needed investment and employment at a time of economic fragility.

2.7 At a local level, Spaceport 1 is aligned with CnES Corporate Strategy 2020 – 2022[11], specifically its economic priorities. The desired outcomes of the Strategy are that the businesses of the Outer Hebrides are 'innovating, diversifying and more resilient' and that 'people have access to higher value and more diverse economic opportunities.'

2.8 By focusing on suborbital activity, Spaceport 1 differentiates itself from other UK models, a tactic that will support long-term viability and the development of expertise unique to its activities, creating a successful, productive and resilient business in its own right.

2.9 Market research carried out by one of the UK's longest serving commercial launch brokers has confirmed the potential market and highlighted the paucity of cost-effective launch options globally. While the actual launch of a suborbital vehicle is executed in a very short period of time, the project activity around a safe and licensable launch is considerable. For this reason, Spaceport 1 will provide a full 'end to end' launch enabling support package, offering clients access to the broadest range of services.

2.10 The Spaceport 1 proposal has been identified as a high priority project within the Comhairle nan Eilean Siar economic development plans and is a key component of the Outer Hebrides section of the Islands Deal currently being developed with the UK and Scottish Governments. Furthermore, it will help protect the existing high paid professional jobs within QinetiQ, who operate the MoD Range Hebrides, and create new jobs in an innovative, high growth potential, high paying, Space industry sector within the Outer Hebrides.

[11] https://www.cne-siar.gov.uk/media/15789/corporate-strategy-2020-2022.pdf

Policy Fit

Scottish Planning Policy, 2015

2.11 There is no statutory requirement placed on developers or decision makers to consider socio-economic impacts in developments. There is however a very implicit imperative to generate socio-economic baseline assessments for developments generated by the Scottish Planning Policy (SPP)[12]. The SPP states that one of the core values of the planning system in Scotland is to *'Play a key role in facilitating sustainable economic growth, particularly the creation of new jobs and the strengthening of economic capacity and resilience within communities'.*

2.12 Additionally, the SPP creates a presumption in favour of development which contributes to sustainable development: *'The planning system should support economically, environmentally, and socially sustainable places by enabling development that balances the costs and benefits of a proposal over the long term. The aim is to achieve the right development in the right place'.*

2.13 Therefore, the creation of a socio-economic rationale and impact assessment for the proposed development is in fact necessary in order to demonstrate the value brought by the development to the local population and economy.

2.14 Following publication of the revised SPP, Scottish Ministers committed to developing further advice to assist in assessing and giving due weight to the net economic benefit of proposed development.

2.15 The 'net economic benefit' advice note builds[13] on Paragraphs 29 and 93 of SPP. Paragraph 29 makes a presumption in favour of development that contributes to sustainable development. It means that policies and decisions should be guided by, inter alia, *'giving due weight to economic benefits'.* Paragraph 93 references the need for Planning Authorities to *'giving due weight to Net Economic Benefit of the proposed development'* when assessing planning applications.

2.16 The advice note states the importance of demonstrating the net economic benefit of a proposed scheme, highlighting the importance of taking economic benefits into account when determining a planning decision.

[12] https://www.gov.scot/publications/scottish-planning-policy/

[13] Draft Advice on Net Economic Benefits and Planning, Scottish Government, 2016

2.17 This economic assessment has been commissioned in line with the advice note, as it is expected that the net economic benefit of Spaceport 1 is likely to be a material consideration. Therefore, the onus is on the Spaceport 1 Consortium to provide the relevant information in support of the planning application.

National Planning Framework 4, 2022

2.18 The draft National Planning Framework sets out a vision for how places will change in the future[14].

2.19 It seeks to balance the environment and the economy and seeks *'to develop future places that will attract new investment, build business confidence, stimulate entrepreneurship and facilitate future ways of working – improving economic, social and environmental wellbeing'.*

2.20 It seeks to support the new National Strategy for Economic Transformation (NSET) to set out how to recover from Covid-19 pandemic and build a sustainable economy in the longer term. By helping to deliver this, planning will contribute to our short-term recovery, as well as our long term just transition to a net zero, nature-positive economy.

2.21 Proposed space ports are set out in the draft NPF4, these seek to make use of the area's relatively remote location and free airspace and support national ambitions to grow this sector. NPF4 confirms the plans for a Shetland Space Innovation Campus and Spaceport 1 in Scolpaig, North Uist as part of the Islands Growth Deal, and space ports at Machrihanish and Benbecula.

National Strategy for Economic Transformation, 2022

2.22 This project fits with the following priorities of the Scotland's new National Strategy for Economic Transformation[15] (NSET). NSET has a 10 year vision that by *'2032 Scotland's economy will significantly outperform the last decade, both in terms of economic performance and tackling structural economic inequalities'.*

2.23 It has an international dimension and seeks to recognise Scotland as a nation of entrepreneurs and innovators, who will have embraced the opportunities of new technologies, including space technologies such as *'leading Europe in end-to-end capability for small satellite design, manufacture and launch, including earth observation data solutions that are critical in tackling climate change'.*

[14] https://consult.gov.scot/local-government-and-communities/draft-national-planning-framework-4/

[15] https://www.gov.scot/publications/scotlands-national-strategy-economic-transformation/

2.24 NSET notes the role of the New Highlands and Islands Regional Economic Partnership (REP), and the role it can play in helping to further develop the space sector across the Highland and Islands.

2.25 The project supports the UK Industrial Strategy which puts space as a key sector, as also recognised by the supporting 'Prosperity from Space' and 'National Space Strategy', which sets out the value of the space sector to the UK economy and how this can grow as space presents significant opportunities. The global space economy is projected to grow from an estimated £270 billion in 2019 to £490 billion by 2030.

2.26 The Government's ambition is for the Scottish space sector to be the first in Europe able to provide *'an end-to-end solution for small satellite manufacture, launch and innovation in satellite data analysis'*. As part of this ambition, the aim is to develop both horizontal and vertical space ports serving small satellite producers.

2.27 Working with the Space Scotland (formerly Scottish Space Leadership Council) and other partners, the Scottish Government has an ambition that the space sector in Scotland will have an annual contribution to the Scottish economy in excess of £4bn and seeks a five fold increase in the space sector workforce.

Prosperity from Space, 2018

2.28 In 2018, the Space Growth Partnership, an industry group that brings together companies, academics, institutions and entrepreneurs involved in the space sector, published Prosperity from Space[16].

2.29 At the core of the strategy are four pillars:

- creating a National Space Programme to unlock increased private investment;
- creating the right environment for success by securing and building on existing strengths and market position;
- investing in people and places; and
- continuing to drive growth from investment in ESA, Eumetsat and EU programmes.

2.30 The proposed development contributes towards addressing the need to maximise the value generated by UK space ports and launch activities, one of four market priorities identified in the strategy, and to spread the benefits from the space sector across the UK.

[16] https://www.spacepartnership.org.uk/

National Space Strategy, 2021

2.31 In September 2021 the UK Government launched the first ever National Space Strategy for the UK[17]. This set out the following vison:

'We will build one of the most innovative and attractive space economies in the world, and the UK will grow as a space nation. We will protect and defend UK interests in space, shape the space environment and use space to help solve challenges at home and overseas. Through cutting-edge research, we will inspire the next generation and sustain the UK's competitive edge in space science and technology'

2.32 The strategy sets out how the space sector is growing faster than the rest of the UK economy, and the average worker in the space sector is 2.6 times more productive than in other sectors. It is worth over £16.5 billion per year and now employs over 47,000 people.

2.33 The strategy sets out how the Government is investing resources to develop spaceports across locations in England, Scotland, and Wales, laying the groundwork for end-to-end UK services building, launching, and operating small satellites, and working closely with industry to implement modern regulations and create favourable conditions for launch.

2.34 Spaceport 1 is recognised in the National Space Strategy as one of the locations which will be capable of enabling the *'first country to launch a small satellite from Europe in 2022 from the spaceports being developed across the UK.'* With a focus on suborbital launches Spaceport 1 is extremely well placed to help deliver the National Space Strategy.

A Strategy for Space in Scotland, 2021

2.35 Launched in October 2021, A Strategy for Space in Scotland, has a simple and ambitious vision of *'Scotland, the best place on Earth to build a Space Business'.* The strategy sets out to deliver the following objectives:

- An annual contribution to the Scottish economy in excess of £4bn.
- A five times increase in the workforce.
- A globally recognised strategic location and European leader for commercial space developments.

17 https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/1034313/national-space-strategy.pdf

- A range of managed launch and orbital services, supporting the highest launch cadence in Europe.

- An increased and diverse workforce with improved participation that is fully reflective of Scottish society and ensures space is open for all.

2.36 The Strategy for Space in Scotland will be consistent with and supportive of the broader UK National Space Strategy within which this will play a significant part.

2.37 A key objective of the strategy is to facilitate, support and develop the Scottish launch sector, providing an environment for businesses to grow and deliver both vertical and horizontal launch services. Initially focussed on the needs of the small satellite sector, the Scottish Launch Sector will be supported to explore new market opportunities and to grow to address these global market needs.

2.38 It is in this area where Spaceport 1 can play an important role in developing a suborbital launch facility.

HIE's Strategy and Operating Plan, 2019 – 2022

2.39 It also supports the following priorities of the latest HIE Strategy and Operating Plan[18]:

Grow our working age population by implementing policies to attract and retain young people to the region and through positive net in-migration:

- It is anticipated that by year 3 of the project, Spaceport 1 will employ 25 staff.

- Extensive training packages are integral to the business and are a condition of licencing, and these will be agile to changes in the Space and launch sectors.

- Recruiting young people is key to Spaceport 1's business

- Engaging with Strathclyde and Edinburgh Universities to encourage school leavers to further their education in the space sector.

Pursue opportunities making sustainable use of the region's natural assets, harnessing ambition and culture, and investing in skills:

- The air and sea space availability to the west of the Hebrides make the location uniquely ideal for sub-orbital launch at Spaceport 1

[18] https://www.hie.co.uk/about-us/policies-and-publications/strategy-and-operating-plan/

- Spaceport 1 will be located on Scolpaig Farm. For most of the year, there will be no access restrictions to the site and the local community and visitors will be free to utilise the site for sport, leisure and recreational activities. The site already proves popular with walkers, bird watchers, sea-swimmers, and photographers.

- Spaceport 1 is already working in partnership with RSPB to develop visitor management plans that will work alongside the agricultural and habitat management work of a local crofter who has been awarded a lease for such activities.

Build an inclusive economy through a place- based approach, reaching all parts of our region, increasing income levels and tacking inequalities:

- The North Uist & Benbecula Locality Plan was developed by the Outer Hebrides Community Planning Partnership following a place-based approach. Feedback from the public sector and the local community that SP1 should be pursed in order to increase income levels and tackle inequality.

Stimulate start-ups and grow businesses which are resilient, flexible and adaptable to the ever-changing economic environment:

- Spaceport 1 will stimulate a thriving spaceport related ecosystem – logistics, transport, engineering support, accommodation

- Spaceport 1 will work with HIE and Business Gateway to encourage new business start-ups and existing businesses to diversify

- The partnership with QinetiQ has the potential to protect and increase employment at MoD Range Hebrides.

Develop a productive business base which is innovative, entrepreneurial, and globally ambitious to build prosperity and productivity and therefore increase the value of goods and services per worker:

- Spaceport 1 will see the development of a new – fast growing – sector in the Outer Hebrides.

- A range of jobs will be available at Spaceport 1 and salaries have been set at a level consistent with sectoral jobs elsewhere.

Invest in enabling infrastructure to support business and community growth

- Investing in this project will see the development of a fully operational suborbital spaceport.

Outer Hebrides Community Planning Partnership

2.40 The Outer Hebrides Community Planning Partnership[19] is of the opinion that there is a window of opportunity for action and investment in key areas of the Outer Hebrides. There is a unique opportunity to revitalise the islands and to transform the Outer Hebrides into a net contributor to the national economy, while simultaneously rebuilding confidence in our communities and our distinctive Gaelic culture and heritage.

2.41 *'Creating Communities of the Future'* is a strategy for action. It provides a shared vision for the regeneration of the Outer Hebrides, based on six inter-related economic drivers. The strategy provides a long-term regeneration vision for the Outer Hebrides, which is supported by a detailed Action Plan. With appropriate support the strategy believes that the Outer Hebrides will be characterised by:

- a diverse and growing population with a balanced demographic structure allowing young people to move freely as lifestyles change and allowing effective public services;
- a dynamic renewable energy sector of international renown providing the base for new forms of economic activity;
- a high quality environment, which maintains bio-diversity;
- a private sector that is a high-level economic contributor;
- a tourism industry, which has developed the Outer Hebrides as a world-class destination;
- communities which are globally connected through a high quality transport infrastructure and leading-edge communications systems;
- Stornoway has grown significantly and has been developed as a world-class entry-point to the Outer Hebrides; and
- UHI Millennium Institute provides a university campus, a network of learning centres and numerous students who are part of the community a diverse range of quality, modern, social and leisure facilities, with a high value placed on Gaelic culture and heritage.

2.42 As part of the community planning process, a **North Uist and Benbecula Locality Plan** was developed in 2018. This adds a more local appreciation to the wider regional community plan. The structure of the local plan reflects that of the regional plan, where at the

[19] https://www.cne-siar.gov.uk/business/economic-development-and-business-support/creating-communities-of-the-future/

local level there is a greater emphasis on public transport, play and recreation and care & maintenance.

2.43 This project fits with the priorities of the Outer Hebrides Community Planning Partnership, notably seeking to attract innovation and investment and create sustainable employment.

2.44 The Community Planning Partnership predicts a need for a minimum of 1,500 jobs for sustainable population to prevent the ongoing decline, with the reversal of population decline and retention of young people being the primary aim of local development plans.

2.45 **There is a focus on the economy locally as well, in terms of creating the correct conditions for innovation and investment which secures a sustainable and vibrant job market with well-paid opportunities. The Spaceport 1 proposals can aid this economic ambition.**

North Uist Community Local Development Plan

2.46 North Uist Development Company (NUDC) has an existing local development plan; which identifies specific aims and objectives for NUDC. These are related to the wider regional ambitions set out in the Community Plan for the Outer Hebrides[20]. These are:

- **Aim 1 - Foster a Dynamic, Sustainable and Viable Community**
- **Aim 2 - Promote and Protect the Community's Unique Natural and Cultural Heritage**
- **Aim 3 - Strive for a Demographically Balanced Community**
- **Aim 4 - Make North Uist an Accessible Community**

2.47 The demographic imbalance illustrated by the reducing number of young people and increasing number of people in the upper age bands, along with the reliance on public sector and primary industries, and tourism among local businesses, presents a challenge for all the agencies with responsibility for the future sustainability of North Uist.

2.48 The Spaceport 1 proposals can support each of these aims, and importantly encourage economic activity, creating new fulltime jobs as well as supporting other businesses creating supply chain benefits.

[20] http://www.isleofnorthuist.com/

Scotland's Outlook 2030

2.49 Following on from the Tourism Scotland 2020 strategy (Scottish Tourism Alliance, 2012), a collaborative network of industry experts created Scotland's Outlook 2030[21], which focuses on creating a world-leading tourism sector in Scotland that is sustainable in the long-term.

2.50 The strategy focuses on four key priorities: people, places, businesses and experiences. The strategy recognises the effects of climate change, technological advancements, Brexit and changing consumer behaviour on tourism and highlights the need for collaboration between government, communities and the public and private sectors.

2.51 There are six conditions that the strategy has highlighted as being crucial for success:

- using technological advancements and information to understand changes and trends in tourist behaviours;
- ensuring policies are in place that support the vision;
- enabling investment opportunities into Scotland's tourism market;
- improving transport and digital infrastructure;
- greater collaboration between businesses in the industry; and,
- positioning Scotland as a great place to live and visit locally and globally.

Outer Hebrides Tourism

2.52 The Outer Hebrides is a well know tourism destination, and its future growth is guided by Outer Hebrides Tourism's (OHT) Tourism Strategy 2030[22]. To do this the strategy seeks to maximise the economic benefits afforded by tourism through a range of strategic objectives.

2.53 Due to the nature of the Spaceport 1 proposals, in 2019 Outer Hebrides Tourism members were consulted as part of the socio-economic impact assessment[23]. It should be noted this was based on the proposed orbital development, and not the current sub-orbital proposal.

[21] https://scottishtourismalliance.co.uk/scotland-outlook-2030-overview/

[22] https://www.visitouterhebrides.co.uk/dbimgs/Outlook2030%20Final%20April%2021.pdf

[23] The consultation was carried out with Ian Fordham (Chairman, OHT) on 1st February 2021

2.54 It covered three broad areas:

1. **Business tourism effects**, in terms of temporary surge in manpower at each launch;

2. **Leisure tourism effects**, in the form of launch spectators; and

3. Views on the **wider effects** on the tourism sector.

2.55 The consultation exercise uncovered the following key points across each broad area. These areas have been consulted upon with the OHT Board, and this content has been reviewed and ratified with OHT in February 2021.

2.56 **Business tourism effects:** It was felt these could be positive, notably outside the May to August peak tourism season. In fact, launches in this period may displace traditional tourism demand and have a possible adverse effect on 'rack rates' and 'availability'. Outside this period the effects of supply chain businesses and professionals coming onto North Uist would be encouraged and support the tourism sector in the 'off-season' and shoulder months.

2.57 **Leisure tourism effects:** It was felt that estimating the likely level of leisure tourism was notoriously difficult, and there were known constraints such as, the location of the launch site, the ability to get to the site and also competing launches in other mainland locations acting as a restraint on spectator behaviour.

2.58 However, it was recognised that it may become a factor in visitor plans in terms of when to visit and what to do when on the Island but is unlikely to be the main consideration when deciding to visit Uists and the wider Outer Hebrides.

2.59 **Perceived effects on the tourism sector:** OHT carried out a survey of Uist tourism businesses in October 2019 to gain their views on the plans for the Spaceport, this was at a time of heightened negative feelings and anti-Spaceport mood, therefore caution should be taken when reviewing the results, however, these were largely in favour of the proposals, with the following key findings:

- **Effects on the Uist Entire Economy:** 65% positive / 15% neutral / 20% negative
- **Effects on the Uist Tourism Economy:** 53% positive / 19% neutral / 28% negative
- **Effects on Own Tourism Business:** 50% positive / 20% neutral / 30% negative
- **Effects on the Life in Uist:** 62% positive / 15% neutral / 23% negative

2.60 It was noted that the level of positivity was lower the closer the responding businesses were to the launch site, however it remained largely positive on a ratio of 2:1 to 3:1 in favour of the positive effects of Spaceport 1. It was noted that the Spaceport 1 infrastructure is smaller and less visible than the range of community windfarms on the islands, and therefore it was not felt or seen to be a factor in dissuading visitors from visiting the island or returning to visit again.

2.61 Although it is a while since the survey was conducted, and prior to Covid-19 pandemic, and when there was a strong anti-space mood, there has been a major drop in tourism and in fact the business tourism and spectator effects could play a part in helping the tourism sector recover – although it is expected to return strongly as there will be a drive on staycations. There may have been an anti-space mood due to perceived risks of a major incident and impact on the local environment. However, this concern will be mitigated by the Consortium to reassure locals, and potential tourists.

2.62 It was noted that businesses could benefit by knowing more about the plans, the launch profile, and how they can benefit from the new trade associated with launch activity. It was also noted that the Spaceport 1 Consortium could help showcase the island as part of their own promotional activities – essentially making the launch part of the suite of exciting things to see and do when considering a tourist trip to Uist and the Outer Hebrides.

Summary

2.63 The space sector is a vital part of the UK's economy, worth over £16.5 billion per year and employing over 47,000 people in diverse and exciting roles as scientists, engineers, entrepreneurs, and innovators.

2.64 The priority given by the UK Government to the development of a UK based Space launch industry is grounded in the forecast growth of this sector over the next two decades. The proposed development directly supports the UK and Scottish Space Strategies, which in turn are supported by the new National Economic Strategy for Economic Transportation and the soon to be publish National Planning Framework 4.

2.65 There is strong public policy support to develop this market opportunity for the UK, and the Spaceport 1 site was one of only three sites which was been identified as being suitable for a vertical launch facility. With Spaceport Sutherland successful in attracting the funding award - and the resultant loss of opportunity for Spaceport 1 to go straight to developing an orbital launch facility - the Spaceport 1 Consortium shifted its focus to establishing a permanent business around suborbital launch. Spaceport 1, by virtue of its location and existing infrastructure, accessible through partnering with QinetiQ, is uniquely placed to offer immediate launch capabilities to the suborbital market.

2.66 The Spaceport 1 proposal has been identified as a high priority project within Comhairle nan Eilean Siar's Corporate Strategy and Economic Development plans. It is also an important aspect of the local Community Development Plan which supports the regional aim of creating more than 1,500 new jobs across the island to help mitigate against a declining population, especially the outward migration of younger people.

2.67 The Business Case highlights how it will help protect the existing high paid professional jobs within QinetiQ, who operate the MoD Hebrides Range, and create new jobs in an innovative, high growth potential, high paying, Space industry sector within the Outer Hebrides.

2.68 Spaceport 1 directly supports HIE Strategy and Operating Plan where there is a strong focus on harnessing the economic opportunity afforded by the space sector, not only in terms of new employment in areas of needs, but the wider spin-off opportunities across the region and Scotland as a whole.

2.69 Any perceived adverse effects on the tourism and recreational base of the islands can be addressed through recent survey work by OHT, where there is a positive sentiment amongst local tourism businesses. The launch pad itself and supporting structure, will be smaller and less prominent than a community wind turbine, of which there is an appreciation and knowledge of in North Uist. Visitor research around wind farms has widely found that tourists are no dissuaded from visiting or revisiting an area due to the existence of a wind farm(s).

2.70 There is a role for the Consortium to support the delivery of economic and tourism benefits of Spaceport 1, notably in terms of presenting information when available on the launch profile and the potential supply chain opportunities afforded to local businesses of achieving successful launches.

3 Socio-Economic Baseline

Introduction

3.1 A socio-economic baseline assessment has been completed to set the context of the local economy, assessing local, sub-regional and regional socio-economic conditions.

3.2 The assessment uses publicly available data sets to generate a number of key points and trends for discussion on the unique socio-economic opportunities and challenges within the local, and wider, population and economy of the study area.

3.3 The baseline sets the scene in socio-economic terms of the local and regional areas and where possible compares this to the national economy. The baseline is not presented to measure the impact of the proposed development, although it can assist policy makers and local stakeholders better understand the socio-economic conditions and how the proposed development can offer sustainable economic benefits to the local and regional areas.

Methodology

3.4 In order to generate a reliable and comprehensive socio-economic baseline of the areas of impact to be felt by the development, this report draws on a number of publicly available data sets and sources in order to:

- Define areas and populations of consideration;
- Relevant socio-economic indicators; and
- Discuss notable socio-economic issues resulting from analysis.

3.5 Looking first at the process of definition, it is vital to accurately choose areas and populations of interest. To do so, the Scottish Index of Multiple Deprivation (SIMD) 2020[24] is used. The SIMD provides an invaluable insight into demographic and socio-economic data in Scotland through the presentation of such data in small data zones. These individual data zones can show concentrations of deprivation across a wide range of indicators and allow focus on specific areas and communities.

[24] https://www.gov.scot/collections/scottish-index-of-multiple-deprivation-2020/

3.6 Through this, we will see the unique socio-economic challenges and opportunities within the area of direct focus. The local area is represented via the individual data zone of S01009021 (West North Uist to Baleshare), as this is the smallest available area of data available. This area lies within the HS6 postcode, and this individual data zone is solely comprised of HS6 postcodes and is therefore the most accurate representation of the local area. For North Uist, the intermediate data zone of 'Benbecula and North Uist' is chosen to represent the wider island of North Uist. Na h-Eileanan Siar is represented at the local authority level within the SIMD data set. These areas are defined as local (HS6 postcode), sub-regional (North Uist and Benbecula) and regional (Na h-Eileanan) areas, due to the availability of data presented in the SIMD.

3.7 National Records of Scotland[25] (NRS) data is also used to gain an in-depth picture on the local demography and the surrounding Na h-Eileanan Siar region. This data can only be represented at the local authority level, but it is nonetheless invaluable at representing a broad range of socio-economic issues. For an accurate assessment of the economy of the local area and the surrounding Na h-Eileanan Siar local authority area, the most authoritative data set available is NOMIS Labour Market Statistics[26] compiled by the Office for National Statistics (ONS). Unfortunately, we are not able to acquire data from this source specific to Scolpaig and North Uist, but we are able to use data for the whole of Na h-Eileanan Siar. This is a productive approach, as it is necessary to consider the make-up of the economy in the wider region to gain an accurate socio-economic baseline.

Study Areas

3.8 The proposed development is located in West North Uist to Baleshare datazone (S01009021), a datazone on the north-west coat of the island of North Uist in the Outer Hebrides within the Na h-Eileanan Siar local authority area.

3.9 The area is surrounded by a number of small settlements including Griminish, Tigh a' Gearraidh, Middlequarter, and Ceann a' Bhàigh. Figure 3.1 overleaf shows the location of Spaceport 1.

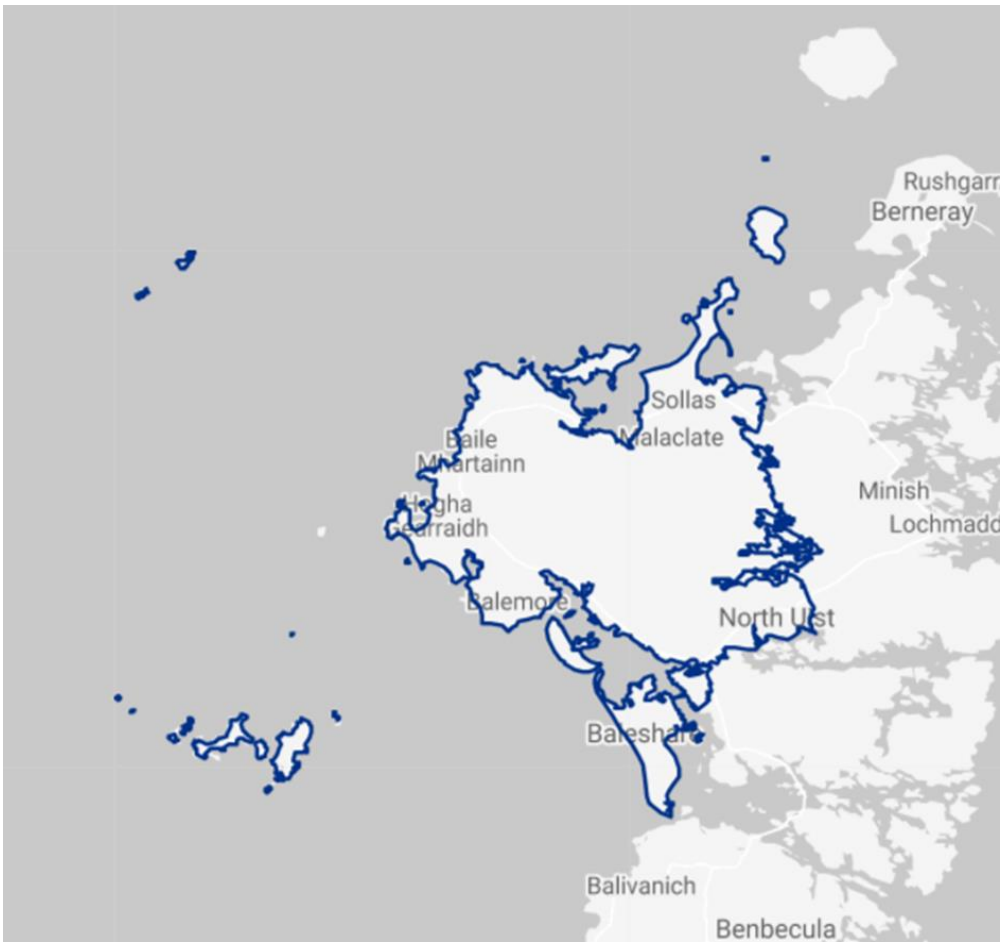
[25] https://www.nrscotland.gov.uk/files//statistics/council-area-data-sheets/na-h-eileanan-siar-council-profile.html

[26] https://www.nomisweb.co.uk/reports/lmp/la/1946157417/report.aspx

Figure 3.1: Map of North Uist

3.10 Figure 3.2 below shows the boundary area of the S01009021 SIMD data zone most applicable to the local (West North Uist to Baleshare) area.

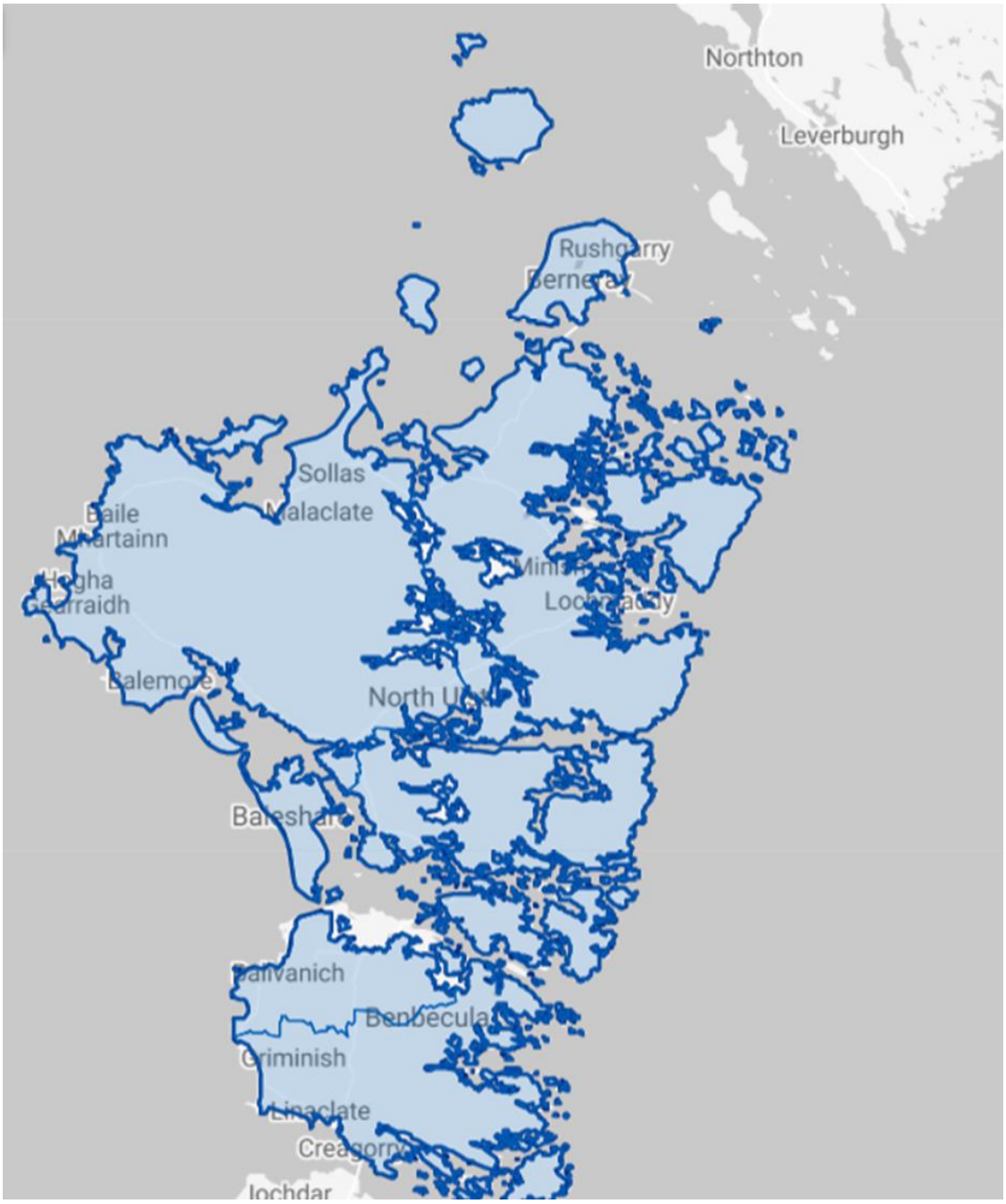
Figure 3.2: Local (West North Uist to Baleshare) S01009021 SIMD data zone boundary



North Uist

3.11 North Uist lies in the centre of the group of islands known as the Outer Hebrides, or Western Isles, or Na h-Eileanan Siar in Gaelic. Neighbouring North Uist are other islands in the chain such as Lewis, Harris, Scalpay, South Uist, and Benbecula. The islands are connected via a causeway to Benbecula, Berneray, and Baleshare. Lochmaddy is the main town and fishing port on the island and has a population of approximately 300 people. Ferry links connect North Uist to neighbouring islands, Skye and Harris. Figure 3.3 below shows the boundaries of the North Uist and Benbecula SIMD intermediate data zone.

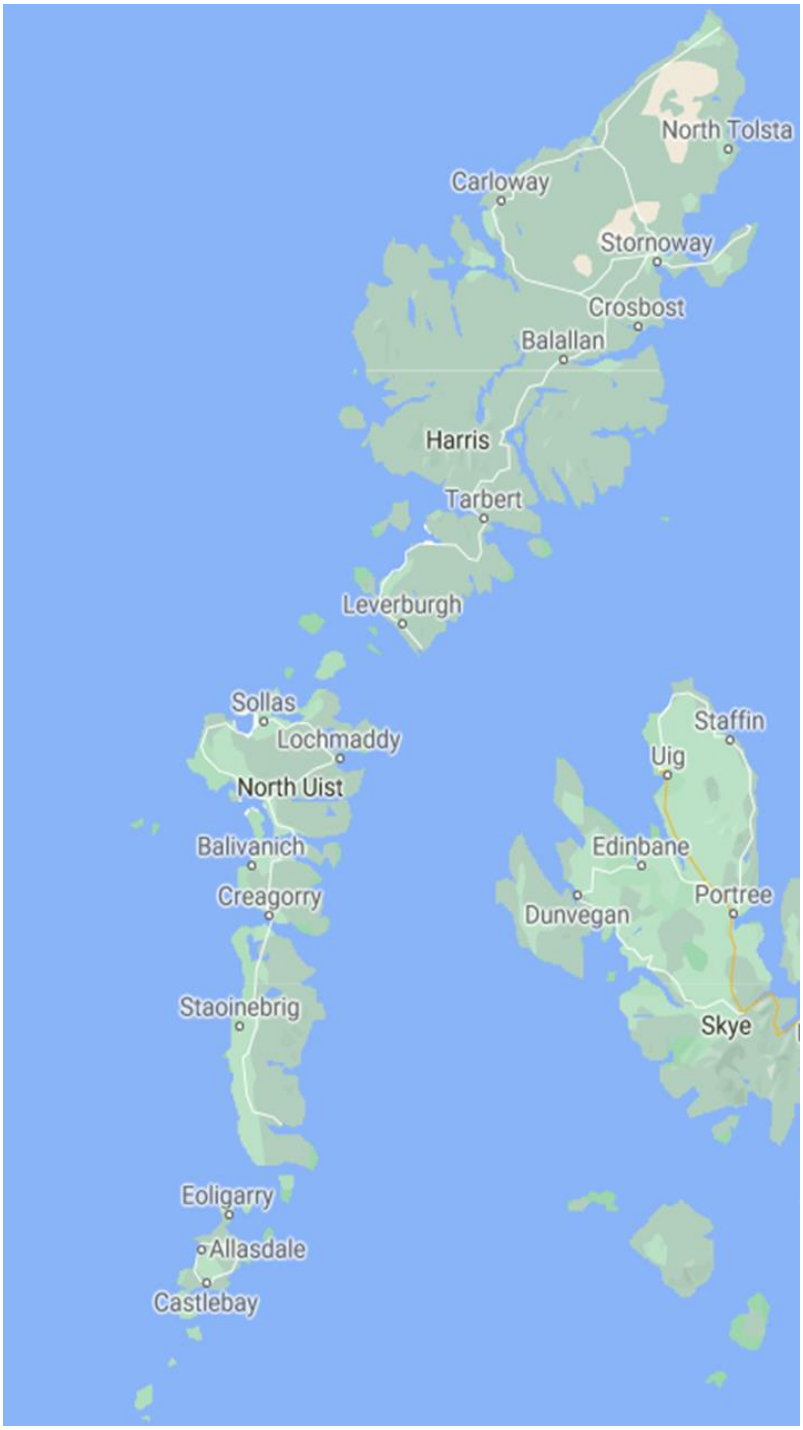
Figure 3.3: Sub-Regional (Benbecula and North Uist) SIMD data zone boundary



Na h-Eileanan Siar

3.12 Na h-Eileanan Siar, or the Outer Hebrides, is a major island chain in Scotland. The main islands consist of Lewis, Harris, Uist, and Barra. The total of the 15 inhabited islands have a population of 26,950. The largest settlement is Stornoway, with a population of around 5,000. This makes Stornoway the second largest island town after Kirkwall in Orkney. Figure 3.4 below shows the overall location of Na h-Eileanan Siar.

Figure 3.4: Na h-Eileanan Siar



Geography

3.13 Geographically, West North Uist to Baleshare lies within an area of Scotland classified as very remote rural. The Scottish Government Urban Rural Classification[27] guide ranks settlements in Scotland using an 8-fold classification system between 'Large Urban Areas' and 'Remote Rural'. West North Uist to Baleshare, Benbecula and North Uist, and indeed almost the entirety of the Na h-Eileanan Siar local authority area falls squarely within the remote rural classification. Using the 2016 data, Na h-Eileanan Siar is comprised of 27.6% 'very remote small towns' and 72.4% 'very remote rural'. In contrast, only 3.5% and 5.9% of Scotland have these respective classifications. For clarification, 'very remote rural' areas are those with populations of less than 3,000. As will be seen with further analysis this extreme rurality poses a unique set of socio-economic challenges for local area and the surrounding areas.

3.14 Figure 3.5 below visually demonstrates the level of rurality within West North Uist to Baleshare, and the surrounding area. The areas in yellow are classified as 'very remote rural', the green is 'remote rural', and the purple is 'very remote small towns'. West North Uist to Baleshare, Benbecula and North Uist, Na h-Eileanan Siar, and indeed the vast majority of the surrounding islands and mainland are classified as 'very remote rural'.

Figure 3.5: Scottish Government Urban Rural Classification Guide Map

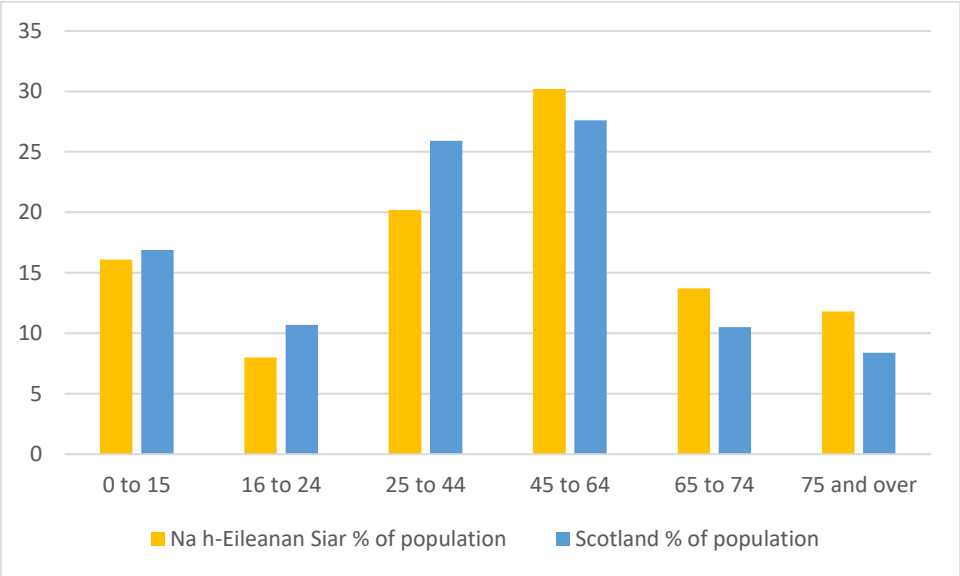
[27] https://www.gov.scot/publications/scottish-government-urban-rural-classification-2016/

Population Characteristics

3.15 As expected, the population of the West North Uist to Baleshare district, Benbecula and North Uist, and the surrounding Na h-Eileanan Siar area is very low in proportion to the whole of Scotland. In terms of the local datazone (data zone S01009021) there is a population of 700, compared to 2,908 in Benbecula and North Uist, and 26,950 in the whole of Na h-Eileanan Siar. It should be noted that as this is a small area there is more margin for error in the national statistics, and therefore the results should be treated with a degree of caution, therefore these figures may be over or under estimated. Of this total population, 56% are of working age in the local area, compared to a broadly similar 59% in both Benbecula and North Uist and Na h-Eileanan Siar. This level for the whole area is however lower than the Scotland-wide average of 64%. This is perhaps indicative of issues concerning an ageing population and out-migration of working age people from Scotland's islands and remote rural regions.

3.16 The age distribution of the population in Na h-Eileanan Siar is distinct from the Scotland-wide average. In figure 3.6 below we can clearly see that there is a lower proportion of those ages between 0-44, and a higher proportion of those ages 45-75+. This further cements the fact about a lower proportion of working-age people in the study area than the national average.

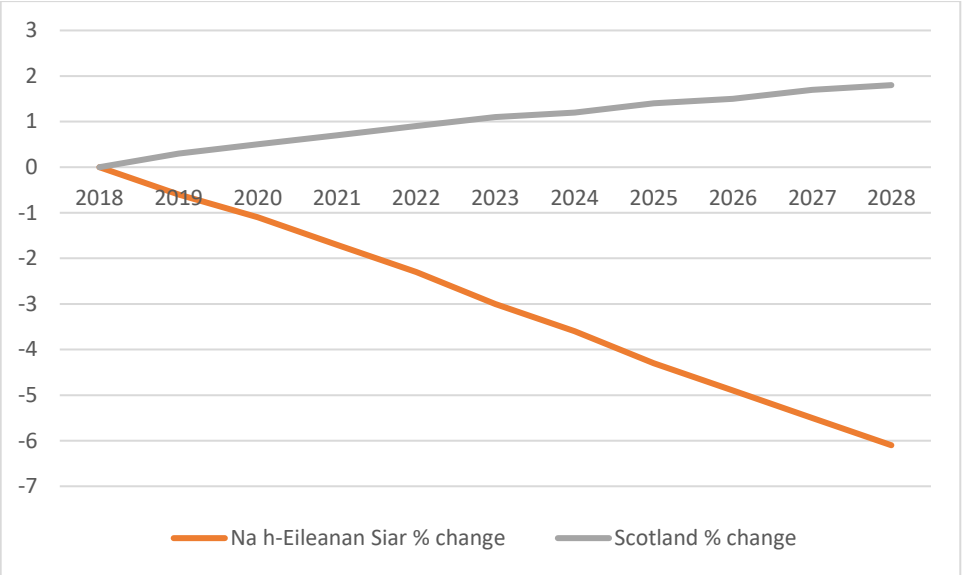
Figure 3.6: Age Distribution – Na h-Eileanan Siar vs. Scotland



Source: NRS, 2019

3.17 Building on this age distribution, when we compare population projections for Na h-Eileanan Siar compared to Scotland as a whole, we can see the detrimental impact of the ageing population. Figure 3.7 clearly predicts that the population of Na h-Eileanan Siar will decline into the future, whereas the rest of Scotland, on average, will see an increase; on 2018 levels.

Figure 3.7: Population Projections – Na h-Eileanan Siar vs. Scotland



Source: NRS, 2019

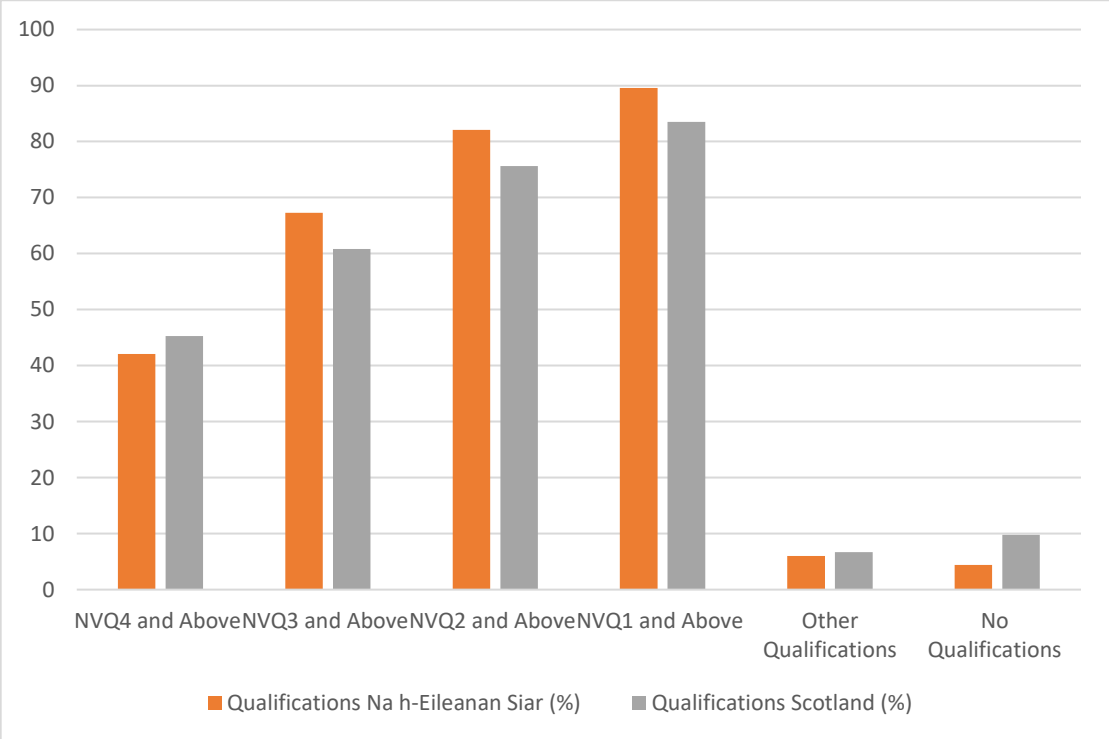
3.18 Looking next at economic data, the levels of those income deprived and unemployed in West North Uist to Baleshare and Benbecula and North Uist are slightly lower than both the Na h-Eileanan Siar and Scotland. 8% of the population of West North Uist to Baleshare and Benbecula and North Uist are income deprived, compared to 10% and 12% for Na h-Eileanan Siar and Scotland, respectively. Similarly, unemployment stands at 6% in West North Uist to Baleshare and 7% in Benbecula and North Uist, compared to 10% and 12% for Na h-Eileanan Siar and Scotland, respectively.

3.19 Lastly, the North Uist Community Development Plan voices a number of concerns of its own which echo these data trends. In the plan they state in a community profile that North Uist is experiencing long-term population decline, and ageing demographic, and low birth rates.

3.20 Educationally, West North Uist to Baleshare, Benbecula and North Uist, and Na h-Eileanan Siar are in a better position than the Scotland-wide average across a number of indicators. School attendance and pupil attainment is higher; there is a lower proportion of working age people with no qualifications; less 16–19-year-olds are not in education, employment, or training; and a higher proportion of 17–21-year-olds go to university. Coupled with the data on income depravity and unemployment it would be reasonable to assume that people living locally are, on average, socio-economically better off than the Scotland-wide average in terms of education and employment. The higher proportion of 17–21-year-olds going to university may again be indicative of an out-migration problem of those of working-age population out of remote rural and island communities in Scotland; as the vast majority of higher education institutions lie out with Na h-Eileanan Siar.

3.21 Additionally, in education, the NOMIS statistics allow us to see the proportions of those with NVQ1-4 qualifications for the area of Na h-Eileanan Siar. This data shows us that Na h-Eileanan Siar has, proportionally, less people with NVQ4 or above qualifications than the Scotland average, but they do have a higher proportion of those with NVQ1-3 qualifications. This tells us that the people of Na h-Eileanan Siar may be overall more highly educated than the Scotland average, but may be lacking in access to higher and further education. Figure 3.8 below shows the distribution of qualifications visually.

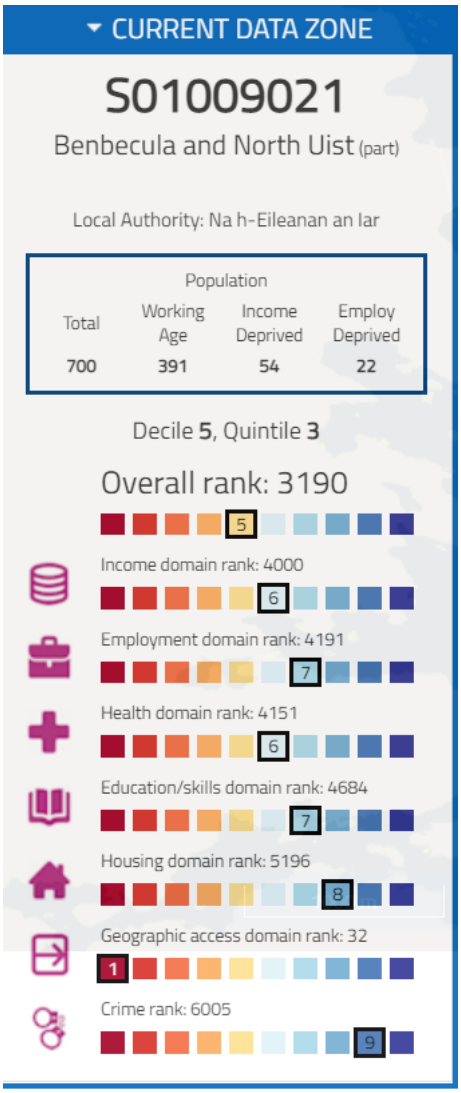
Figure 3.8: Qualifications – Na h-Eileanan Siar vs. Scotland



Source: Nomis, 2021

3.22 When looking at SIMD indicators on access to services, this is where the impacts of living in such a remote rural area are most acute. A significantly higher proportion of those living in West North Uist to Baleshare, Benbecula and North Uist, and Na h-Eileanan Siar do not have access to superfast broadband compared to the whole of Scotland. West North Uist to Baleshare stands at 29%, Benbecula and North Uist at 24% and Na h-Eileanan Siar at 21%, compared to 7% in Scotland as a whole. It is interesting to note the declining proportions the further the distance from the local area, perhaps indicating that the local area itself is particularly negatively affected by this lack of access. The following figure highlights this point, illustrating that the area is one of the most deprived areas in Scotland in terms of 'Geographic Access'.

Figure 3.9: West North Uist to Baleshare SIMD Overview



3.23 Drive times to local amenities also serve as a useful indicator within a socio-economic baseline. Using drive times in minutes to secondary schools and retail centres, those living in West North Uist to Baleshare, Benbecula and North Uist, and Na h-Eileanan Siar may face significantly higher drive times than those in the rest of Scotland, on average.

3.24 This is to be expected to a large degree given the remote rurality of the area, but it does lend further evidence to the unique socio-economic challenges faced by remote rural and island communities such as West North Uist to Baleshare. This data must be caveated however by the fact that there are wide discrepancies in drive time in Na h-Eileanan Siar and Scotland as a whole.

Economy

Gross Value Added

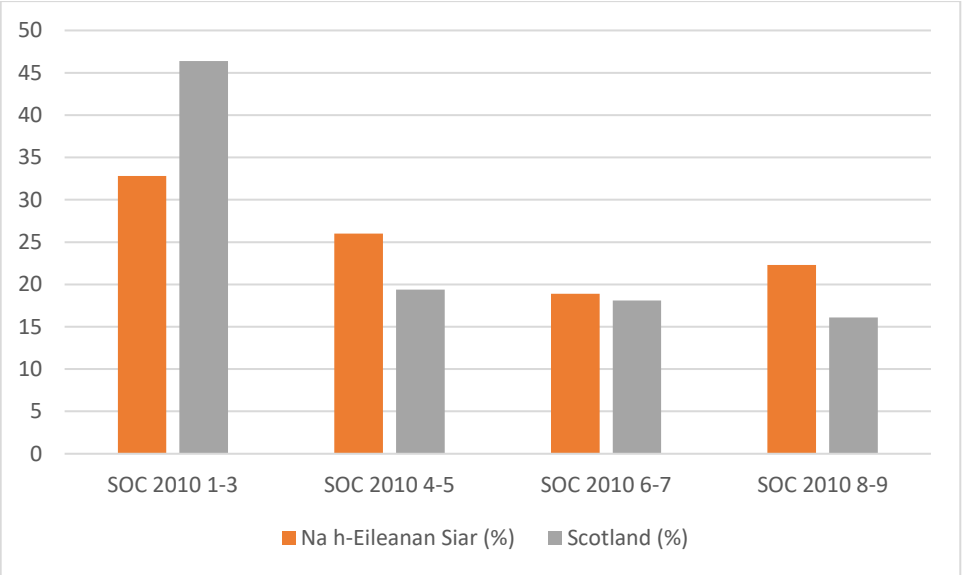
3.25 According to the Scottish Annual Business Statistics (2020) CnES had a total GVA output of around £211m in 2020, compared to £174m in 2010, representing a 21% increase over the decade, this compares with zero growth reported in GVA over the same period at the national level. Although GVA out levels have improved over the last decade the GVA per head in Na h-Eileanan Siar is significantly below the national level, locally it is around £30k compared to £45k nationally. This has been a consistent variation across the last decade.

Labour Market

3.26 A higher proportion of people living in Na h-Eileanan Siar are economically active compared to Scotland as a whole, and as it necessarily follows a lower proportion are economically inactive. There are a higher percentage of retired people in Na h-Eileanan Siar (18.9%) compared to Scotland as a whole (14.2%). This, again, may be indicative of the particular socio-economic challenges of remote rural and island communities, that being an ageing population.

3.27 When looking at the structure of employment, it becomes apparent that Na h-Eileanan Siar is notably different from Scotland as a whole. There is a lower proportion of people in senior managerial, professional, and associate professional/technical occupations (SOC 1-3) than Scotland as a whole. Conversely, there is a higher proportion of people in administrative and skilled trade occupations (SOC 4-5) and in process plant, machine operative, and elementary occupations (SOC 8-9). This points to a different industrial makeup within the local area and wider economy compared to the rest of Scotland. The proportion of those in caring, leisure, and sales and customer service occupations (SOC 6-7) is mostly similar to Scotland as a whole.

Figure 3.10: Occupation Types – Na h-Eileanan Siar vs. Scotland



Source: Nomis, 2021

3.28 The earnings of those in full-time employment in Na h-Eileanan Siar are slightly lower than Scotland as a whole. Gross weekly pay is, on average, £562 in Na h-Eileanan Siar compared to £595 in Scotland as a whole. Hourly pay follows this trend, with £14.60 in Na h-Eileanan Siar compared to £15.36 in Scotland as a whole.

3.29 There are, overall, a lower proportion of people in receipt of out-of-work benefits in Na h-Eileanan Siar (10.6%) compared to Scotland as a whole (13.0%). This lower proportion is similar for age groups 16-24 and 25-49, with the exception of a very minor higher proportion in those aged 50+ compared to Scotland as a whole.

3.30 In summation, looking at NOMIS data we can see a few key points. Those living in Na h-Eileanan Siar, on average, are more economically active; are more predominantly in positions of middle and lower skills; are lower paid; and are in receipt of less out-of-work benefits than compared to Scotland as a whole.

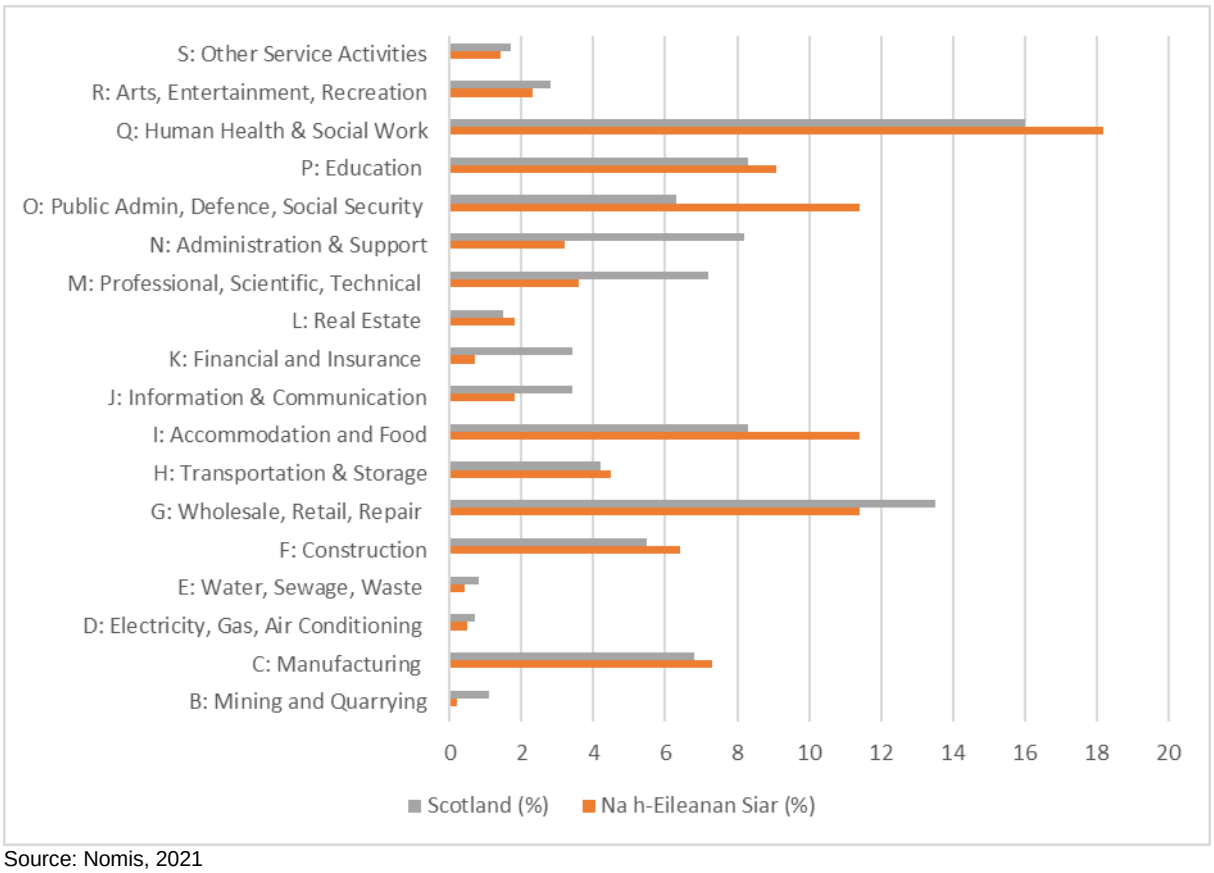
Industry

3.31 Looking at the composition of industries and business types within the local economy is also an important step in generating the socio-economic baseline. NOMIS data again provides a comprehensive breakdown of industry types by industrial classifications, as well as the different sizes of businesses to be found. Looking at jobs by industry first, we can see that primary industries (those concerned with the natural resources) are of a lower proportion compared to the rest of Scotland.

3.32 For secondary industry (the processing of raw materials and manufacturing) there is, inversely, a higher proportion in industries such as manufacturing, construction, and transportation and storage. The tertiary sector (services) is more mixed up. Industries associated with professional, financial, information, and technology are lower by substantial margins compared to Scotland on average. Industries however associated with tourism such as accommodation, food, and drink enjoy higher proportions compared to Scotland on average.

3.33 The reason for this stark difference is most likely, again, to be caused by the rural nature of the local economy. Less access to infrastructure and services such as superfast broadband would make it difficult to base technology-dependent industries in a remote rural area. Additionally, the enhanced resources in terms of nature and natural beauty are conducive to tourist industries. Figure 3.11 below visually demonstrates these trends.

Figure 3.11: Industry Composition – Na h-Eileanan Siar vs. Scotland



Source: Nomis, 2021

3.34 The industry composition is labelled as a problem within the North Uist Community Development Plan[28]. They state that the Hebrides, including North Uist, has a weak economic base which is concentrated on a narrow range of sectors, and is especially reliant on primary industries and the public sector. They also are concerned that these sectors are insufficiently diverse to sustain a young, educated population. Coupled with a lack of well-paid jobs, this means that those in the age ranges of 15-29 are disproportionally among those who leave the island. This problem also transpires through to local businesses who are around 54% comprised of the tourism and culture sector.

3.35 One final point to raise is that industries within the public sector such as education, public administration, defence, social security, human health, and social work are of a higher proportion in Na h-Eileanan Siar than compared to the rest of Scotland, which suggests a disproportionate dependence on the public sector than the private, perhaps reflective of the geographical and demographic challenges face by the remote rural geography.

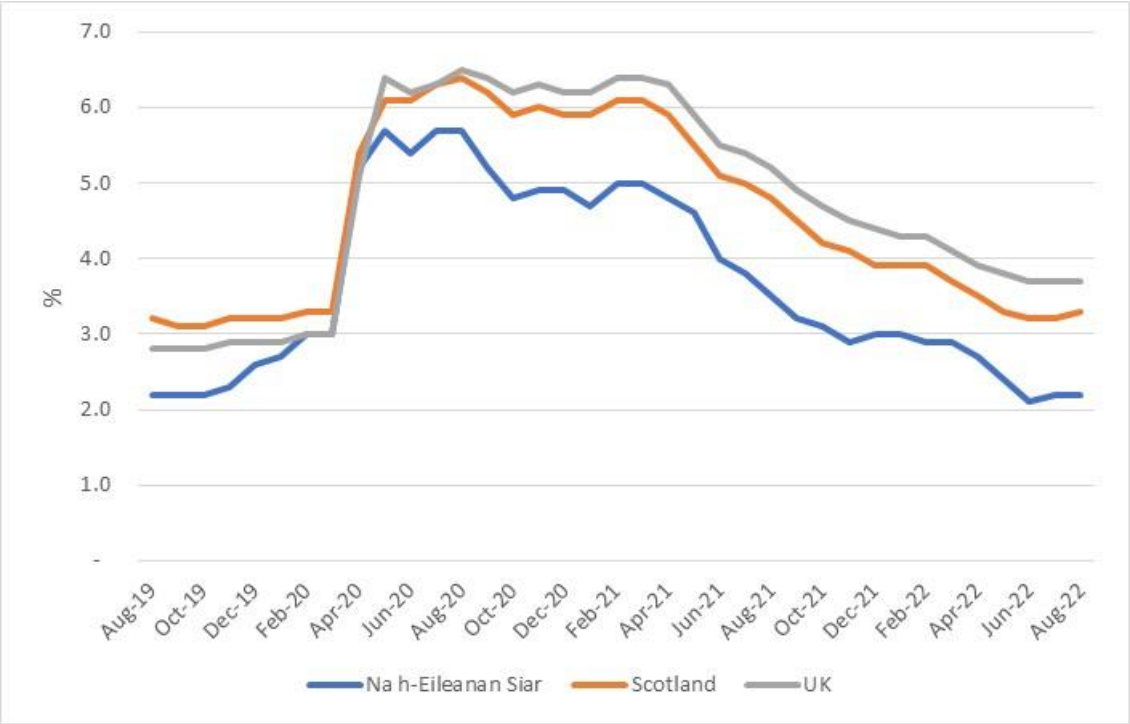
3.36 Looking at the composition of sizes of businesses in Na h-Eileanan Siar we can see, again, a clear difference to Scotland as a whole. There are, proportionally, more enterprises and local units of the micro (0-9 employees) size compared to Scotland as a whole. When looking at small (10-49), medium (50-249) and large (250+), there are a lower proportion in Na h-Eileanan Siar than compared to Scotland as a whole. This again, maybe indicative of the unique challenges faced by the local economy of Na h-Eileanan Siar.

Ongoing Economic Challenges

3.37 When discussing a socio-economic baseline in a current context, it is impossible to ignore the effects of the Covid-19 pandemic, the war in Ukraine and the inflationary pressures this has had on the UK economy and the cost of living crisis. It is irrefutable that these issues continue to have a detrimental impact on the local, regional and national economie. One key metric in assessing this impact is out-of-work benefits, as a sustained period of economic downturn will lead to less people in work and therefore more people seeking income support. Figure 3.12 below shows the percentage of people claiming out-of-work benefits as a percentage of the workforce over the past three years. It is clear to see that around the time the Covid-19 pandemic forced a national lockdown in April 2020, there was an almost immediate sharp uptake in the number of people seeking out of work benefits across the whole of the UK.

[28] North Uist Community Development Plan, North Uist Development Company, 2018

Figure 3.12: Out of Work Benefits – Na h-Eileanan Siar vs. Scotland and UK



Source: Nomis, 2022

3.38 Although the unemployment rate has steadily improved since April 2021 and the rate in August 2022 (2.2%) has returned to pre-Covid-19 level, it still outlines more than 300 people out of work locally.

Tourism and Recreation Baseline

3.39 As mentioned previously, tourism and recreational activities make up a large share of the Outer Hebrides' local environment and economy. As such, a review of potential tourism receptors is vital in order to make a comprehensive socio-economic baseline assessment. The sector is largely an industry of micro-businesses, with tourism supplementing income from other sources, such as crofting or office-work.

3.40 In 2017, the islands welcomed 219,000 visitors, adding £65m to the economy of the Outer Hebrides each year[29]. The industry is growing at around 5% p.a., given the profile of the is growing, and we are well aligned with the growth drivers in the tourism industry. Given visitors, move between islands, an exact split between islands is not possible, but the approximate split is Lewis (45%), Uist (25%), Harris (20%) and Barra (10%).

[29] https://www.visitouterhebrides.co.uk/industry/tourism-in-the-outer-hebrides

3.41 Tourism accounts for 10-15% of economic activity on the islands. The proportion is higher outside the Stornoway area, with the popular destinations of Barra and Harris the most dependent on tourism.

3.42 Tourism directly supports the equivalent of 1,000 full-time jobs on the islands. It also plays a significant role in supporting other sectors. Retailers and restaurants in Stornoway obtain up to 40% of their sales from visitors. It also creates significant demand for the trades and construction industry.

3.43 Leisure visitors stay for an average of 6 days. Due to the remote island location, and the nature of transport links, the Outer Hebrides have no day visitors. Two-thirds of visitors to the islands are regular visitors to the islands.

3.44 Over 80% of visitors to the Outer Hebrides are from the UK, with the majority coming from other parts of Scotland. The industry remains seasonal, though the season has extended significantly in recent years, from three to four months a generation ago to seven to eight months now.

3.45 The Explore North Uist website[30] (Explore Scotland, 2020) lists a key number of tourist attractions:

- Sollas Golf Course – A 9-hole course on the north west of North Uist.
- Baleshare – A flat, tidal and low-lying islands connected to the rest of North Uist via a causeway.
- RSPB Nature Reserve at Balranald – Famous for corncrake protection.
- Trinity Temple, Carnish – A historic ruin, listed as of European significance and possibly Scotland's oldest university.
- Barpa Langass – A 5,000-year-old burial chamber thought to be the burial place of a Neolithic chieftan.
- Fishing – Anglers from all around the globe come to fish on North Uist.
- Uist Sculpture Trail – A pathway for exploration via a series of 7 commissioned works by artists found in various locations around the Uists and Benbecula.
- Otter spotting – A popular island attraction as the east side of the island is a landscape of inland and sea lochs, inlet bays and channels.

[30] https://www.isle-of-north-uist.co.uk/

- Hebridean Way Cycle – A classic 185-mile cycle route which crosses 10 islands including North Uist.

Summary

3.46 The assessment uses publicly available data sets to generate a number of key points and trends for discussion on the unique socio-economic opportunities and challenges within the local, and wider, population and economy of the study area.

3.47 The baseline assessment reveals a number of key issues in the study area:

- Extremely rural location with a lack of developed infrastructure, West North Uist to Baleshare is amongst the most geographically deprived area in Scotland.
- Long-term population decline due to an ageing population, low birth rates, and out-migration amongst primarily young demographics.
- A lack of a diversified economy mainly focused on primary industry, tourism and culture, and the public sector.
- Considerably lower levels of GVA per head than the national average, with figures around two-thirds of the national average
- Huge natural capital assets and a relatively untouched landscape.
- An important, and growing, tourism economy, with increasing volumes and values and longer dwell times.
- A significant adverse effect on the local economy, and tourism economy, as result of the Covid-19 pandemic and the ongoing cost of living crisis, with unemployment doubling during the first national lockdown and visitor numbers significantly lower. However, unemployment levels in August 2022 have returned to pre-Covid19 levels, and it is anticipated that visitor levels have improved in both 2021 and 2022 since lockdown measures were removed.

4 Socio-Economic Impact Assessment

Introduction

4.1 The proposed project could potentially benefit the Outer Hebrides, Highlands and Islands and Scotland economies in a number of different ways. This section will consider the following gross direct impacts in turn:

- construction activities of Spaceport 1;
- permanent activities of Spaceport 1;
- launch activities, and fees;
- business tourism effects

4.2 This section will consider each of those impacts in turn. It will conclude by aggregating together the impacts from each of these strands, to provide our estimate of the facility's potential total gross direct impact. It should be noted that the construction activities are not aggregated or presented as gross or net direct impacts as these are front-loaded and temporary impacts. The construction impacts are one-off up-front impacts and are assessed separately in this section.

4.3 All of these forecasts are based on the assumptions (taken from the Spaceport 1 Consortium's Business Case, Projected Launch Programme and supporting financial statements, November 2021) that six launches will take place in 2023/24, eight launches in 2024/25 and ten launches per annum thereafter. Aspects have been reviewed and refined as part of a further iteration of the Business Case in October 2022.

4.4 It should be noted, this socio-economic impact model is consistent with the models deployed on other space sector impact assessment commissioned by HIE. It draws on project specific figures where available and on industry standard proxies for comparison and consistency. The economic impact assessment focuses on the main areas on economic activity, and economic effects. It does not assess any perceived or unintentional economic disbenefits which may occur. The model is based on the effects of known, and estimated effects, of the proposed activities.

4.5 This appraisal is based on an initial three year period, from 2023/24 to 2025/26. It assumes six launches in year one, eight in year two and ten in year three. The rate will remain at ten launches from year three, and therefore the impacts presented are based on the 'steady state' level achieved in year three.

4.6 In keeping with best practice, and in line with other developments of this nature, the impacts are presented at three spatial levels, these being Outer Hebrides, Highlands and Islands and Scotland. Due to the remote rural location of the proposed development the impacts are not presented at the local level. The most local area is defined as the Outer Hebrides.

Construction Activities of Spaceport 1

4.7 By supporting the turnover and employment of the businesses that will be awarded contracts, construction of Spaceport 1 is expected to generate economic benefits for local and regional economies. These spread further through supply chain expenditure and construction workers spending their salaries and wages.

4.8 Spaceport 1 requires construction of the proposed Launch Site, these works include:

- Construction of a concrete launch pad surrounded by a prepared crushed aggregate surface to support vehicle movement around the pad. The pad will have a sophisticated sprinkler, drainage and collection system to allow management of a wide variety of launch system propellants.
- Construction of a new track to connect a parking area, to be situated in the area of the current Scolpaig farm buildings, to the pad.
- An upgrade to the track between the A865 and the parking area, including improved drainage and provision of passing places on the track.
- Upgrade to one of the current outbuildings to provide a communications room, workshop, and secure storage on site, in line with safety requirements.
- Upgrade of site utilities to provide the required supplies.

4.9 Total upfront capital investment costs are anticipated to be around £3.1 million. This is based on a review of the Spaceport 1 Business Case (October 2022). Spending on construction related activities will provide opportunities for the construction and civil engineers sector in the Outer Hebrides, the Highlands and Islands and Scotland. The total project costs are nearer £3.6 million, however, these include non-construction related activities. The construction period is expected to be around four months.

4.10 Assumptions have been made with respect to the share of expenditure that could take place within each study area. These are based on the capacity of the relevant sectors in each study area to carry out the construction works, as set out in the economic baseline. It is considered that the study areas could secure the following shares of contracts: 75% in the Western Isles and 100 % across Scotland.

4.11 Applying these shares to the construction costs, it is estimated that the Outer Hebrides will benefit from around £2.3 million and Scotland from £3.1 million.

4.12 To estimate the economic impact from the construction phase, the turnover generated by construction spending has been divided by the turnover per employee ratio for the construction sector in the Outer Hebrides (£107,285) from the Scottish Annual Business Statistics[31]. Similarly, the GVA generated has been derived from the GVA per head for construction related activities in the Outer Hebrides (£46,531), also from Scottish Annual Business Statistics, 2020.

4.13 In this way, it is estimated that Spaceport 1 will directly generate £1.0 million GVA and 21.4 job-years in the Outer Hebrides and £1.34 million GVA and 28.9 job-years in Scotland.

Permanent Activities of Spaceport 1

4.14 Based on our correspondence with the Spaceport 1 Consortium, we understand that there will be 21 people on the payroll in 2023/24, rising to 23 in 2024/25 and 25 in 2025/26. However, not all these posts are full time, as some of these will be part-time, supporting launch activity.

4.15 For the purposes of the economic impact assessment the posts have been converted to Full Time Equivalents (FTEs) based on the level of work required. This results in nine direct FTE staff employed at Spaceport 1 in 2023/24, increasing to 11 in 2024/25 and 12 in 2025/26. This position is reconfirmed in the Spaceport Business Plan, October 2022.

4.16 From 2025/26 there will therefore be a cohort of 12 FTE staff employed by Spaceport 1. These jobs include a Launch Director, a Business Development Officer, Site Manager, Commercial Officer, an Environmental Officer, an HSE Officer, Administrative Support and an Operations Officers.

4.17 We have estimated the levels of turnover, GVA and income likely to be associated with this predicted employment based on figures from the Size and Health of the UK Space Industry, as reported by UKSA 2021[32], which estimates that the turnover per head to be £351,697, GVA being 41% of turnover and average gross earnings have been drawn from Spaceport 1 financial projections. Industry standard proxies are utilised at ex-ante appraisal stage, this is consistent with other space sector impact assessments, allows comparisons and avoid optimism-bias associated with financial projections.

[31] https://www.gov.scot/publications/scottish-annual-business-statistics-2020/

[32] https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/1068861/20220412_BryceTech_UKSA_S_H_Summary_Report.pdf

Table 4.1: Gross impacts associated with permanent activities of Spaceport 1

	FTE Employment	Turnover (£m)	GVA (£m)	Income (£m)
2023/24	9.00	3.17	1.30	0.56
2024/25	11.00	3.87	1.59	0.67
2025/26	12.00	4.22	1.73	0.75

Launch Activities, and Fees

4.18 Each launch will generate further costs for the Spaceport 1 Consortium. Based on discussions with the Spaceport 1 Consortium and review of the financial forecasts (October 2022) it is estimated that the that the contribution to the launch site operator will be £595k in 2023/24, increasing to £799k in 2024/25 and £1.03 million in 2025/26.

4.19 These figures are noted as being conservative estimates and may be significantly greater depending on market conditions.

4.20 This contribution will support wider employment and GVA impacts of Spaceport 1 Consortium activities beyond those permanent activities noted above, including the safeguarding and creation of high paid rocket science and related jobs at QinetiQ in this location. The level of employment and resultant GVA may be greater in future periods depending on market conditions and the performance of Spaceport 1.

4.21 Assuming the same turnover per head, turnover/GVA ratio and gross earnings (presented as income in the following figures) from UKSA[33], we estimate that this element of the project will generate the following gross economic impacts.

Table 4.2: Gross launch activity impacts of Spaceport 1

	FTE Employment	Turnover (£m)	GVA (£m)	Income (£m)
2023/24	1.69	0.60	0.24	0.08
2024/25	2.27	0.80	0.33	0.11
2025/26	2.93	1.03	0.42	0.15

33

https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/1068861/20220412_BryceTech_UKSA_S_H_Summary_Report.pdf

Business Tourism Effects

4.22 The facility will bring additional business visitors to the area during launch periods.

4.23 For the purposes of this assessment, and in consultation with Spaceport 1, we have assumed that for each launch around 10 business visitors will travel to and remain on the island for around eight nights, resulting in 80 new business tourism nights per launch. In 2023/24 the first six launches from the site would generate 480 business tourism nights. It should be noted that this is a conservative estimate and the number of business visitors and the duration of their stays may be longer than set out above.

4.24 As launch cadence increases, to ten launches per annum from year 3 (2025/26), this should be seen to be a 'steady-state' level. These 800 business nights is a level that could be accommodated on the Island, in relation to available accommodation and transport availability.

4.25 Assuming that each business visitor will spend £212 on accommodation, food, travel and gifts per 24-hour period[34], and applying a GVA ratio and income per FTE job figures (£20,904) for the 'Sustainable Tourism' industry from the Scottish Government Priority Sector Statistics publication[35]. The number of jobs per total visitor expenditure is based on the findings from the VisitBritain report on the economic value of tourism[36], which outlines that one tourism job is safeguarded for every £54,000 of tourism expenditure. These assumptions produce the following gross impacts:

Table 4.3: Gross impacts associated with Tourism

	FTE Employment	Turnover (£m)	GVA (£m)	Income (£m)
2023/24	1.88	0.10	0.09	0.04
2024/25	2.51	0.14	0.12	0.05
2025/26	3.14	0.17	0.15	0.07

[34] https://www.visitscotland.org/binaries/content/assets/dot-org/pdf/research-papers/outer-hebrides-report---may-18.pdf

[35] https://www.gov.scot/publications/growth-sector-statistics/

[36] https://www.visitbritain.org/economic-impact-and-employment

Total Gross Direct Impacts

FTE Employment

4.26 By summing together all of the above gross impacts, we estimate that the proposed facility will support 12.58 gross full time equivalent jobs in 2023/24, rising to 18.07 in 2025/26 onwards.

Table 4.4: Gross FTE employment impacts of the proposed facility

	Permanent Activity	Launch activities	Business Tourist spend	Total
2023/24	9.00	1.69	1.88	12.58
2024/25	11.00	2.27	2.51	15.78
2025/26	12.00	2.93	3.14	18.07

Turnover

4.27 By summing together all of the above gross impacts, we estimate that the proposed facility will support £3.86 million of gross turnover in 2023/24, rising to £5.42 million in 2025/26 onwards.

Table 4.5: Gross turnover employment impacts of the proposed facility (£ million)

	Permanent Activity	Launch activities	Business Tourist spend	Total
2023/24	3.17	0.60	0.10	3.86
2024/25	3.87	0.80	0.14	4.80
2025/26	4.22	1.03	0.17	5.42

GVA

4.28 By summing together all of the above gross impacts, we estimate that the proposed facility will support £1.63 million of gross GVA in 2023/24, rising to £2.30 million in 2025/26 onwards.

Table 4.6: Gross GVA employment impacts of the proposed facility (£ million)

	Permanent Activity	Launch activities	Business Tourist spend	Total
2023/24	1.30	0.24	0.09	1.63
2024/25	1.59	0.33	0.12	2.03
2025/26	1.73	0.42	0.15	2.30

Income

4.29 By summing together all of the above gross impacts, we estimate that the proposed facility will support £0.68 million of gross income in 2023/24, rising to £0.96 million in 2025/26 onwards.

Table 4.7: Gross income employment impacts of the proposed facility (£ million)

	Permanent Activity	Launch activities	Business Tourist spend	Total
2023/24	0.56	0.08	0.04	0.68
2024/25	0.67	0.11	0.05	0.84
2025/26	0.75	0.15	0.07	0.96

5 Net Direct Impacts

Introduction

5.1 In this section, we estimate the net direct impacts associated with the project by applying adjustments for deadweight, displacement and leakage to the gross figures, where applicable.

Adjustment Assumptions

5.2 We have not applied any adjustment factors to the site management figures, as the proposed suborbital facility is likely to be the only such facility in Scotland when it becomes operational. We do not believe that any of this activity is likely to take place in the absence of this project, and all impacts will benefit the local area as staff will be permanently employed by Spaceport 1. We have not assumed any leakage, as all of the described jobs and economic activity will take place on either North Uist or Benbecula.

5.3 Similarly, we have not applied any deadweight or displacement factors to the business tourism figures. We do not believe that any of this activity is likely to take place in the absence of this project, and it is all therefore additional.

5.4 However, in relation to launch activities, we assumed that the Spaceport 1 Consortium will generate revenues for each launch and that this will cover both its profit margin, and the cost of all the activities required to make the launch happen (including the costs of rocket design and construction, and on the ground assembly and preparation costs). We have assumed that 50% of these revenues will be attributable to economic activity which takes place in the Highlands and region, with 80% of the activity taking place in Scotland region. There will be sub regional benefits to businesses in locations near the Spaceport 1, we assume 15% local attribution.

Net Direct Impacts

Employment

5.5 After applying the above adjustment factors to the gross employment impact figures, we estimate that the net direct FTE employment impacts of the project will be as follows:

Table 5.2: Estimated net direct FTE employment impacts of the project

	Outer Hebrides	Highlands and Islands	Scotland
2023/24	11.14	11.73	12.24
2024/25	13.85	14.65	15.33
2025/26	15.58	16.61	17.48

Turnover

5.6 We estimate that the net direct turnover impacts will be as follows:

Table 5.3: Estimated net direct turnover employment impacts of the project (£ million)

	Outer Hebrides	Highlands and Islands	Scotland
2023/24	3.36	3.56	3.74
2024/25	4.12	4.40	4.64
2025/26	4.54	4.90	5.21

GVA

5.7 We estimate that the net direct GVA impacts will be as follows:

Table 5.4: Estimated net direct GVA employment impacts of the project (£ million)

	Outer Hebrides	Highlands and Islands	Scotland
2023/24	1.42	1.51	1.58
2024/25	1.75	1.87	1.97
2025/26	1.94	2.09	2.22

Income

5.8 We estimate that the net direct income impacts will be as follows:

Table 5.5: Estimated net direct income employment impacts of the project (£ million)

	Outer Hebrides	Highlands and Islands	Scotland
2023/24	0.61	0.64	0.67
2024/25	0.74	0.78	0.81
2025/26	0.84	0.89	0.93

6 Direct, Indirect and Induced Impacts

Multipliers

6.1 According to figures from the UKSA report, the UK space sector has a UK-wide GVA multiplier of 2.3, which effectively means that every £1.00 of direct activity will support a further £1.30 of indirect and induced activity elsewhere in the supply chain. The report also concludes that the sector has an employment multiplier of 2.8, meaning that every FTE job in the sector supports a further 1.8 indirect or induced jobs elsewhere in the UK economy[37]. The assessment has adopted figures from the 2018 report, to align with the comparable and available figures from the Scottish Government, as set out below.

6.2 For the purpose of our analysis, we have assumed that the Scotland wide multiplier will be the same as the UK figures as the development will help in establishing the space sector as a key economic sector in Scotland. The HIE multipliers have been assumed to be equivalent to half of the national figures, the Outer Hebrides multipliers will be equivalent to one-third of these figures and at the local level they will be a quarter of the national level multipliers. The same adjustments have been used for the tourism and accommodation multipliers, which are based on FTE and GVA multipliers from the 2018 Scottish Government Input:Output Tables[38]. Assumptions are summarised in Table 6.1. These adjustments are consistent with HIE Economic Impact Guidance, as completed on arrange of other socio-economic impact assessment completed for HIE.

Table 6.1: Assumed Type II (indirect and induced) multipliers

	Employment	Turnover	GVA	Income
Outer Hebrides				
Space	1.6	1.43	1.43	1.43
Tourism	1.07	1.15	1.15	1.15
HIE				
Space	1.9	1.65	1.65	1.65
Tourism	1.11	1.22	1.22	1.22
Scotland				
Space	2.8	2.3	2.3	2.3
Tourism	1.22	1.44	1.44	1.44

[37] https://www.gov.uk/government/publications/uk-space-industry-size-and-health-report-2018

[38] https://www.gov.scot/publications/input-output-latest/

Net Impacts

Employment

6.3 After applying the Type II multipliers to the gross employment impact figures, we estimate that the net direct, indirect and induced FTE employment impacts of the project will be:

Table 6.2: Estimated net direct, indirect and induced FTE employment impacts of the project

	Outer Hebrides	Highlands and Islands	Scotland
2023/24	16.82	20.80	31.29
2024/25	20.83	25.85	38.95
2025/26	23.26	29.07	43.99

Turnover

6.4 We estimate that the net direct, indirect and induced turnover impacts will be as follows:

Table 6.3: Estimated net direct, indirect and induced turnover impacts of the project (£ million)

	Outer Hebrides	Highlands and Islands	Scotland
2023/24	4.77	5.84	8.52
2024/25	5.86	7.21	10.56
2025/26	6.45	8.02	11.85

GVA

6.5 We estimate that the net direct, indirect and induced GVA impacts will be as follows:

Table 6.4: Estimated net direct, indirect and induced GVA impacts of the project (£ million)

	Outer Hebrides	Highlands and Islands	Scotland
2023/24	2.01	2.45	3.56
2024/25	2.47	3.03	4.42
2025/26	2.73	3.38	4.97

Income

6.6 We estimate that the net direct, indirect and induced income impacts will be as follows:

Table 6.5: Estimated net direct, indirect and induced income impacts of the project (£ million)

	Outer Hebrides	Highlands and Islands	Scotland
2023/24	0.86	1.04	1.50
2024/25	1.04	1.26	1.83
2025/26	1.18	1.44	2.09

7 Conclusions

7.1 This report presents an independent socio-economic impact assessment of the proposed Spaceport 1. The research was undertaken by MKA Economics on behalf of CnES and the Spaceport 1 Consortium.

7.2 The planned Spaceport 1 proposal fits sustainable economic growth priorities of the new NSET. It also supports the key sector and community development objectives of both HIE and CnES strategies. It explicitly supports the drive for new jobs locally set out in the North Uist Development Plan, and how this will help reduce the outward migration of younger people and attract new professionals and families to the islands.

7.3 Importantly, it has the potential to help the economic recovery, and tourism recovery, by encouraging new business to the area, enticing the Outer Hebrides as a place to work, invest, visit and do business. This can aid the economic challenges faced by North Uist and the Outer Hebrides, widening the economic base of the area, and benefiting from the long term benefits afforded by the valuable and growing space sector.

7.4 We summarise our indicative estimates for the 2025/26 impacts of the project in the table below. It should be stressed that some assumptions underlying this calculation are indicative and based on what limited information is known about the project at this early stage. Where incomplete information is available, our analysis has erred on the side of caution, and adopted a prudent set of assumptions. The figures are presented for each spatial area, taking account of launch activity attribution and differing multiplier effects and differing levels.

Table 7.1: Indicative estimate of economic impacts, 2025/26

	Outer Hebrides	Highlands and Islands	Scotland
Gross impact			
FTE employment impact	18.07	18.07	18.07
Turnover impact (£m)	5.42	5.42	5.42
GVA impact (£m)	2.30	2.30	2.30
Income impacts (£m)	0.96	0.96	0.96
Net Direct impact			
FTE employment impact	15.58	16.61	17.48
Turnover impact (£m)	4.54	4.90	5.21
GVA impact (£m)	1.94	2.09	2.22
Income impacts (£m)	0.84	0.89	0.93
Net direct, indirect and induced impacts			
FTE employment impact	23.26	29.07	43.99
Turnover impact (£m)	6.45	8.02	11.85
GVA impact (£m)	2.73	3.38	4.97
Income impacts (£m)	1.18	1.44	2.09

7.5 The net direct economic impacts, at the Outer Hebrides level, of the Spaceport 1 in 2025/26 are:

- **Employment – 15.58 FTEs**
- **Turnover - £4.54 million**
- **GVA - £1.94 million**
- **Income - £0.84 million**

7.6 When taking account of multiplier effects, the net direct, indirect and induced impacts of the project in 2025/26, at the Outer Hebrides level, are:

- **Employment – 23.26 FTEs**
- **Turnover - £6.45 million**
- **GVA - £2.73 million**
- **Income - £1.18 million**

7.7 The above estimates can be aligned against those predicted at the two Scottish orbital launch sites (Space Hub Sutherland and Shetland Space Centre); these are shown in the table below. This is a high level comparison, and a high level of caution should be taken as each site is different in its capital expenditure, operations, market and launch cadence.

Table 7.2: Comparison of Operational Impacts Shetland Space Centre and Space Hub Sutherland (FTE Jobs per launch, Net Economic Impact)

	Spaceport 1	Space Hub Sutherland	Shetland Space Centre
Gross impact			
Total Net Jobs (FTE)	22.42	55.80	139.50
FTEs per Launch	2.60	4.70	4.70

7.8 This shows that the local employment impacts, albeit around 50% less than the other space centres, these are of a magnitude consistent with other sites. This would be expected as the focus at Spaceport 1 is suborbital launches, rather than orbital launches in Sutherland and Shetland. Furthermore, the Space Industry Act 2018 sets out ‘prescribed roles’ which must be appointed by every UK spaceport, The legislation therefore establishes a mandatory minimum level of staffing, regardless of whether the spaceport is providing orbital or suborbital launch facilities.

7.9 In addition, Spaceport 1 requires construction of the proposed launch site which comprises a range of capital investments over a four month period. The total construction costs have been valued at £3.1 million. This has the potential to generate further front-ended economic benefits for the Outer Hebrides, which have been estimated as being £1.0 million GVA and 21.4 job-years.

7.10 In addition to the estimated economic impacts arriving from the successful deployment of Spaceport 1 there a range of wider, longer term and harder to measure socio-economic benefits pertinent to this proposal including:

- Supporting new economic growth and employment opportunities, to an area which is economically fragile and dependent on a narrow base on economic activities;
- Higher value jobs, and wider supply chain opportunities, can both encourage people of working age to find work on the Island, as well as encourage new people and investment to the Island;
- By creating a new economic sector, not only will the new direct jobs support the economy, but these are expected to grow over time, and help restructure the economy away from a narrow base of lower value, and seasonal, activities;
- Further the tourism sector and aid its post-pandemic recovery, notably business tourism in the local area, whilst not harming the leisure tourism appeal of the sector, as agreed and ratified by a 2019 survey of local tourism business across the Uists;
- Importantly, the launches which happen outside the main tourism season can help extend the tourism appeal of the island and support tourism businesses in the shoulder season and off-peak season;
- Spaceport 1 presents an opportunity to bring the public, private and community sectors together. As with other proposed Spaceports, Spaceport 1 will offer a return on investment for its private sector partners. However, unlike competitor sites, the business model is founded on the principles of public participation and community benefit. Both the landowner (the local authority) and the community - via the already established community interest company - will receive a share of profits each year;
- Enhancing the MOD Hebrides Range / QinetiQ offering, this partnership is uniquely placed to be able to work with the MOD to offer complementary services. This is in a nascent phase of discussion, but significant interest is being shown by customers and suppliers alike. This could enhance the appeal of the Range to a national and international audience and potentially secure bookings for future years;

- Help to protect the existing high paid professional jobs with QinetiQ, and creating new jobs in an innovative high paying space industry sector; and

- Spaceport 1 is supported by sustainable economic development policies at all spatial levels, from local, through to regional, sub-regional, sectoral and national (Scotland and UK) strategies.

7.11 Spaceport 1 can bring immediate economic impacts to the local area, an area in need of investment and jobs. These higher value jobs have the potential to bring further investment into the area as the sector grows and develops, and as the launches develop and continue. A hub of activity around a new economic sector can play a major role in helping the restructuring of the Island community into new activities. These will not replace traditional activities but can add-to the type of economic activity, encouraging local people to find local work, stay on the Islands, as well as attract new people to the Islands.

Annex A – Socio-Economic Baseline Tables

Table 1: SIMD Data					
Indicator Grouping	Indicator	Scolpaig (S01009021)	Benbecula & North Uist	Na h-Eileanan Siar	Scotland
Demographic	Total Pop	700	2,908	26,950	5,463,300
	Working-Age Pop	391	1,709	15,827	3,494,791
	Working Age %	56	59	59	64
Economy	% Income Deprived	8	8	10	12
	% Unemployment	6	7	8	10
	Mean House Price (£)	£109,788	£94,557	£108,700	£181,457
Education	% School Attendance	85	85	88	81
	School Leaver Attainment	5.93	5.67	5.76	5.33
	Working Age No Qualifications*	84	91	94	102
	% NEET 16-19	3	1	1	4
Access to Services	% University 17-21	18	10	9	9
	% No Superfast Broadband	29	24	21	7
	Drive to Secondary School (Minutes)	36	20	18	6
	Drive to Retail Centre (Minutes)	20	11	16	5

Scottish Government (2020)

**Calculated as a standardised ratio of a Scotland average for a population with the same age and sex profile. 100 is the average. Values below 100 are below the average, and values above 100 are above the average.*

Table 2 NRS Outer Hebrides Age Breakdowns					
Age group	**Male**	**Female**	**All people**	**Na h-Eileanan Siar % of population**	**Scotland % of population**
All people	13,247	13,583	26,830	100.0	100.0
0 to 15	2,262	2,066	4,328	16.1	16.9
16 to 24	1,119	1,038	2,157	8.0	10.7
25 to 44	2,646	2,767	5,413	20.2	25.9
45 to 64	4,107	4,000	8,107	30.2	27.6
65 to 74	1,842	1,823	3,665	13.7	10.5
75 and over	1,271	1,889	3,160	11.8	8.4

NRS (2019)

Table 3: NRS Outer Hebrides Projections

Year	Population	% Na h-Eileanan Siar change from 2018	Scotland % change from 2018
2018	26,830	0.0	0.0
2019	26,669	-0.6	0.3
2020	26,535	-1.1	0.5
2021	26,375	-1.7	0.7
2022	26,203	-2.3	0.9
2023	26,025	-3.0	1.1
2024	25,855	-3.6	1.2
2025	25,689	-4.3	1.4
2026	25,524	-4.9	1.5
2027	25,347	-5.5	1.7
2028	25,181	-6.1	1.8

Table 4: NRS Outer Hebrides Migration

Year	In	Out	Net
2001-02	970	1,020	-60
2002-03	990	910	80
2003-04	1,230	990	250
2004-05	1,220	950	270
2005-06	1,090	960	130
2006-07	1,030	960	70
2007-08	1,030	1,010	20
2008-09	970	900	70
2009-10	970	810	170

NRS (2019)

Table 5: NOMIS Labour Market Statistics			
Indicator	**Na h-Eileanan Siar (Numbers)**	**Na h-Eileanan Siar (%)**	**Scotland**
Economically Active			
All People	13,900	85.5	76.5
In Employment	13,500	83.1	73.8
Self-Employed	10,700	67.6	65.1
Unemployed	400	2.8	3.5
Economically Inactive			
All people	2,200	14.5	23.5
Student	#	#	16.6
Carers	500	23.7	16.6
Long-term Sick	#	22.2	27.9
Retired	#	18.9	14.2
Workless Households	1,000	14.7	17.7
Employment by Occupation			
SOC 2010 1-3	4,400	32.8	46.4
SOC 2010 4-5	3,500	26.0	19.4
SOC 2010 6-7	2,500	18.9	18.1
SOC 2010 8-9	3,000	22.3	16.1
Qualifications			
NVQ4 and Above	6,400	42.1	45.3
NVQ3 and Above	10,300	67.3	60.8
NVQ2 and Above	12,500	82.1	75.6
NVQ1 and Above	13,700	89.6	83.5
Other Qualifications	900	6.0	6.7
No Qualifications	700	4.4	9.8
Earnings (Full-Time Workers)			
	Na h-Eileanan Siar (£)	**Scotland (£)**	
Gross Weekly Pay £	562.0	595	
Hourly Pay (No Overtime) £	14.60	15.63	
	Na h-Eileanan Siar (Numbers)	**Na h-Eileanan Siar (%)**	**Scotland**
Out-Of-Work Benefits (Age)			
All People	755	4.9	5.9
Aged 16-24	115	7.4	8.3
Aged 25-49	350	4.8	6.5
Aged 50+	295	4.7	4.5
Out-Of-Work Benefits (Type)			
All People	1,690	10.6	13.0
Job Seekers	220	1.4	1.4
ESA and Incapacity	980	6.1	7.8
Lone Parents	70	0.4	0.9
Carers	210	1.3	1.7
Disabled	140	0.9	0.9
Bereaved	40	0.3	0.2

NOMIS (2021)

Table 6: NOMIS Industry Statistics			
Indicator	**Na h-Eileanan Siar (Numbers)**	**Na h-Eileanan Siar (%)**	**Scotland**
Jobs by Industry			
B: Mining and Quarrying	20	0.2	1.1
C: Manufacturing	800	7.3	6.8
D: Electricity, Gas, Air Conditioning	50	0.5	0.7
E: Water, Sewage, Waste	40	0.4	0.8
F: Construction	700	6.4	5.5
G: Wholesale, Retail, Repair	1,250	11.4	13.5
H: Transportation & Storage	500	4.5	4.2
I: Accommodation and Food	1,250	11.4	8.3
J: Information & Communication	200	1.8	3.4
K: Financial and Insurance	75	0.7	3.4
L: Real Estate	200	1.8	1.5
M: Professional, Scientific, Technical	400	3.6	7.2
N: Administration & Support	350	3.2	8.2
O: Public Admin, Defence, Social Security	12,50	11.4	6.3
P: Education	1,000	9.1	8.3
Q: Human Health & Social Work	2,000	18.2	16.0
R: Arts, Entertainment, Recreation	250	2.3	2.8
S: Other Service Activities	150	1.4	1.7
Businesses			
Enterprises			
Micro (0-9)	1,055	89.0	88.0
Small (10-49)	115	9.7	10.0
Medium (50-249)	10	0.8	1.6
Large (250+)	0	0.0	1.6
Local Units			
Micro (0-9)	1,250	83.1	81.2
Small (10-49)	225	15.0	15.2
Medium (50-249)	30	2.0	3.1
Large (250+)	0	0.0	0.5

NOMIS (2021)