Section 1: Introduction Questions

What is the legal name of the lead applicant organisation?	Shetland Islands Council	
Where is your bid being delivered?	Scotland	
Select your local authority	Shetland Islands	
Enter the name of your bid	Fair Isle Ferry Infrastructure Project	
Does your bid contain any projects previously submitted in round 1?	Yes	
Bid manager contact details	Full name	Lee Coutts
	Position	Team Leader: Marine Engineering and Transport Planning
	Telephone number	01595744929
	Email address	lee.coutts@shetland.gov.uk
	Postal address	8 North Ness Business Park Lerwick Shetland Islands ZE1 0LZ
Senior Responsible Officer contact details	Full name	Michael Craigie
	Position	Executive Manager: Transport Planning
	Telephone number	01595744160
	Email address	Michael.Craigie@shetland.gov.uk
Chief Finance Officer contact details	Full name	Jamie Manson
	Telephone number	01595744607
	Email address	jamie.manson@shetland.gov.uk
Local Authority Leader contact details	Full name	Emma Macdonald
	Position	Political Leader
	Telephone number	0739 212 0742
	Email address	emma.macdonald@shetland.gov.uk
Enter the name of any consultancy companies involved in the preparation of the bid	Shetland Islands Council has a longstanding partnership with Stantec UK Ltd and their partners Mott MacDonald Ltd in the development of our business cases for new vessels and marine infrastructure. Both organisations supported the preparation of this application and, in partnership with SMEs ProVersa Ltd and Spencer Marine Consulting Ltd, prepared a comprehensive Outline Business Case (OBC) for a new Fair Isle ferry and supporting terminal infrastructure. The OBC is provided as Appendix 3 to this application.	

	Shetland Islands Council, together with our supporting consultancy team, would be happy to discuss any element of this application and the supporting Outline Business Case with you. It should be noted that the OBC was completed in 2019, but we updated the costs, programme and risks to Q1 2021 for the first LUF bid. The OBC report remains as per June 2021, but we have further updated costs, programme and risks to Q1 2022 in this application. This will provide UK Government with full confidence in the proposition we are presenting. Mott MacDonald and Stantec are currently progressing the outline design, ground investigations and consenting for the project.	
Enter the total grant requested from the Levelling Up Fund	£26,762,313	
Investment themes	Regeneration and town centre	0%
	Cultural	0%
	Transport	100%

Section 2: Eligibility and gateway criteria

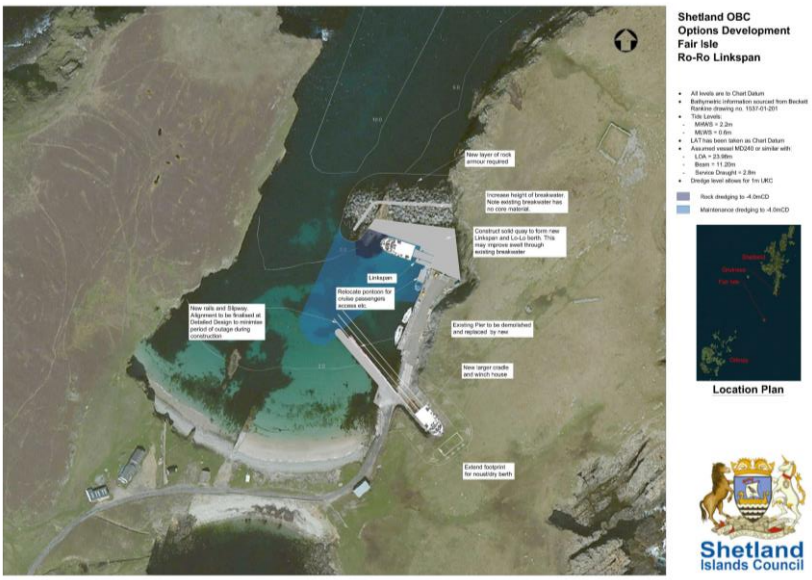
Which bid allowance are you using?	Transport Allowance		
Is your bid at least 90% investment in the transport theme with the remaining percentage invested in transport related activity?	Yes		
How many component projects are there in your bid?	1		
Do you have the support of all the authorities with the relevant statutory responsibility before proceeding?	Yes		
**** File upload 1 ****	*Upload pro forma 1*	LUF Round 2 Pro formas V6.1 Proforma 1 - Shetland Islands Council.pdf	
Are you submitting a joint bid?	No		
Are you submitting a large transport bid?	Yes		
Grant value declaration	I confirm that the bid does not exceed £50 million grant value		✓
	I confirm that at least 90% of the investment is in the transport theme and that the remaining investment is related to the transport project		✓
Gateway criteria: costings, planning and defrayment	I confirm that some LUF grant funding will be defrayed in the 2022/23 financial year		✓
**** File upload 2 ****	Costings and Planning Workbook	LUF_Single_Project_Costings _and_Planning_Wkbook_v2.00 - Shetland Islands Council.xlsx	

Section 3: Bid summary

Provide bid name	Fair Isle Ferry Infrastructure Project
Provide a short description of your bid	Our bid would deliver a new roll-on, roll-off (Ro-Ro) ferry for Fair Isle. This would be supplemented by harbour works at: North Haven in Fair Isle to deliver a new linkspan berth and a replacement winch, cradle and noust for withdrawing the vessel from the water Grutness in Shetland Mainland, where a new linkspan berth for the ferry would be constructed. The Fair Isle ferry is a lifeline transport connection for the island, supporting its supply-chain, resident and visitor travel. The current vessel is life-expired and, without its replacement in the short-term, there is a substantial risk of community failure.
Provide a more detailed overview of your bid proposal	There are four elements of the overall Fair Isle Ferry Replacement Project – these are detailed below with cross-references to the OBC. **1) New Fair Isle Ferry** The preferred vessel option is procurement of a maximum 24 metre length overall (LOA) Ro-Ro ferry. The vessel will be coded as a 'workboat', limiting the number of passengers to 12 – ensuring that it can be sustainably crewed from the island. The likely procurement methodology is for the Council to develop an outline specification and seek a concept design from the market or undertake a single source procurement for a modified version of an existing vessel. **2) Fair Isle ferry terminal** The ferry terminal at Fair Isle will need to be upgraded to accommodate the new vessel. Details can be found in Section 7.8 of the OBC but, in summary, this will include: - Construction of a new linkspan berth to the north of the existing solid quay in an east-west orientation. - An extension, north and west, of the existing solid quay and provide a vehicular approach to the linkspan and berth. - Increase in height of the existing breakwater and an additional layer of rock armour provided on the north face to improve shelter at the new linkspan berth. - Expansion of the 'noust' – the gap hewn in the quayside rock to house the vessel ashore; including provision of a new winch, winch-house and cradle.

- Dredging to reduce the level of rock outcrop located within the existing breakwater, providing 1m under keel clearance (UKC).

See image 1 - Appendix 5



3) Grutness ferry terminal

Grutness ferry terminal on Shetland mainland will also need to be upgraded to accommodate the new vessel. Full details can again be found in Section 7.8 of the OBC but, in summary, this will include:

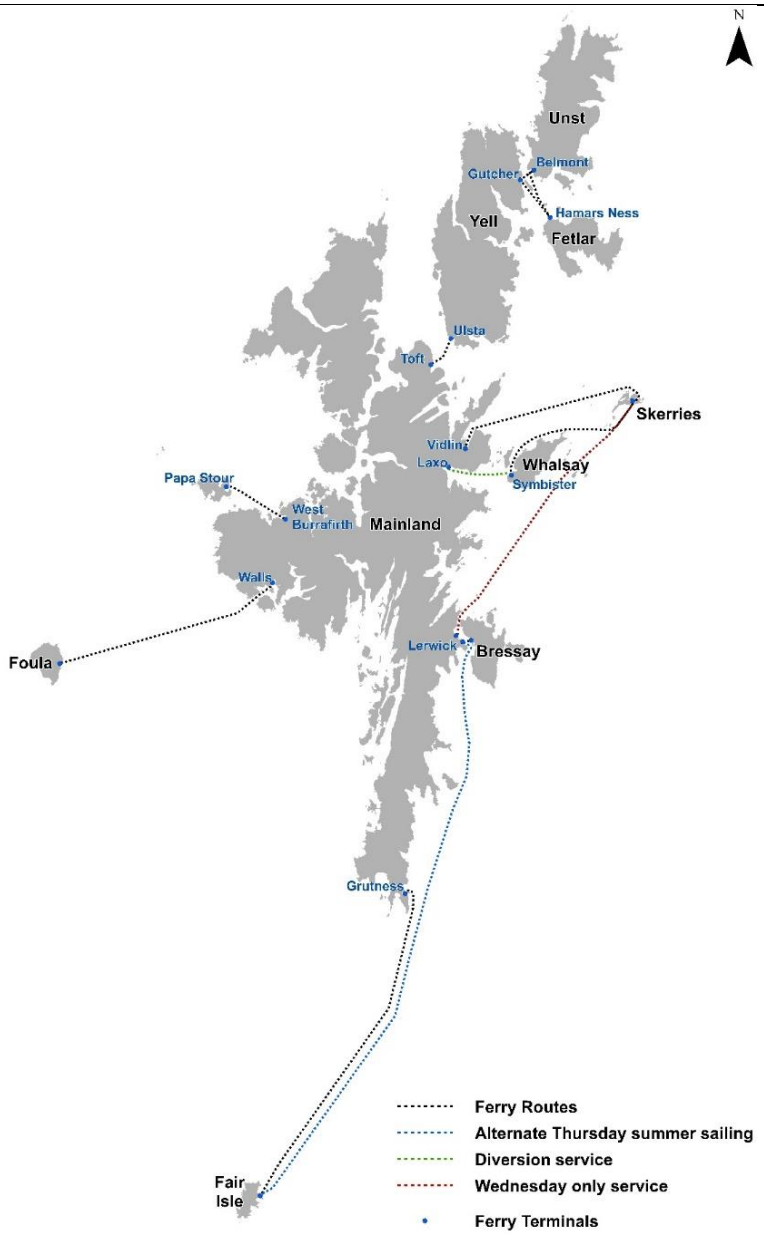
- Construction of a new linkspan to the south-east of the existing berth.

- Extension to the north-west of the existing solid quay and rock armour protection to the north to improve shelter on the linkspan berth.

- Dredging will be required alongside the existing and extended solid quay to provide 1m UKC.

See image 2 - Appendix 5

	 **4) Crew training** (note - not part this bid but included for completeness) A strategic choice made in the OBC (Section 7.4) is that the new vessel should be based on and crewed from Fair Isle. This is essential both from an operational perspective (allowing the service to operate in weather windows) and in terms of maintaining high-quality salaried jobs on Fair Isle (retaining the crew and their families on-island). As the new vessel would undertake the same operation as MV Good Shepherd IV, the number of crew would remain the same. However, the new vessel would require the Engineer to possess a Marine Engineer Operating Licence. This would entail a 30-hour training course followed by an oral exam. Current crew will be supported through this qualification as part of the overall investment programme.
Provide a short description of the area where the investment will take place	This application is focused on the island of Fair Isle, the United Kingdom's most remote community, lying 24 miles south of Shetland mainland. The island is separated from Shetland Mainland by a body of water known as the 'Roost', which has a reputation of being one of the most demanding stretches of water in Europe. The island is within the Shetland Islands Council administrative area and is connected to mainland Shetland by two transport services. The main passenger link is through an air service by means of an eight-seat aircraft. The ferry service provides the critically important supply-chain link as well as capacity for 12 passengers per sailing. Part of the wider Council operated ferry network, the Fair Isle ferry, MV Good Shepherd IV, is island-based. Weather permitting, it operates on a summer Tuesday, Thursday and Saturday to Grutness (Lerwick on alternative Thursdays) and a winter Tuesday to Grutness. The journey time is 160 minutes to Grutness and 300 minutes to Lerwick. The route is shown in image 3, Appendix 5



MV Good Shepherd IV:-

MV Good Shepherd IV is 36-years old. The vessel is entirely deficient in meeting disabled access requirements. It is also significantly beyond what should be its service life and its condition puts it within five years of 'end-of-life'.

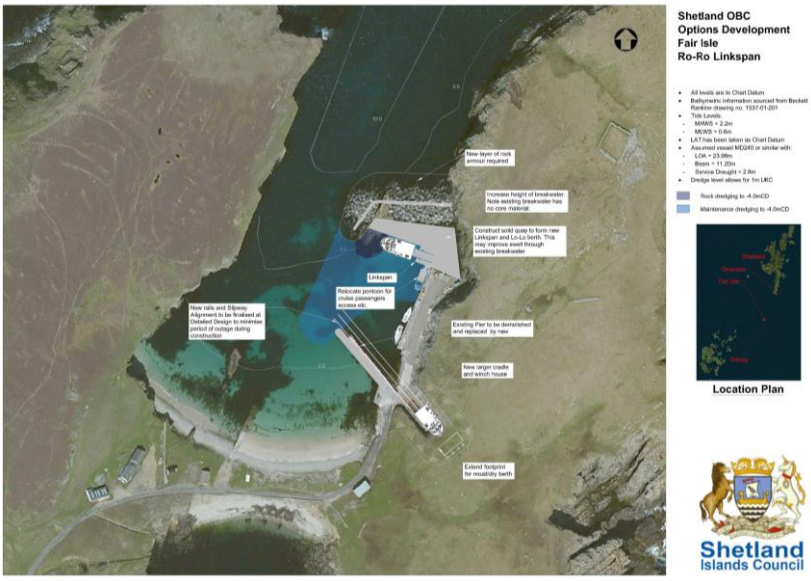
Fair Isle:-

Owned by the National Trust for Scotland (NTS), Fair Isle is rich in wildlife, cultural heritage and community spirit. In addition to its famous knitwear, Fair Isle is best known for its bird observatory (FIBO), founded in 1948. FIBO has provided a continuous record of bird migration patterns and thus plays an essential role in UK scientific research, particularly as we seek to better understand the implications of climate change on avian life and migration patterns.

	However, the island has suffered from population decline in recent years and the main reason given by those leaving is the poor reliability and experience of the transport links. Furthermore, in March 2019, the island suffered the devastating loss to fire of one of its defining features, the recently completed FIBO building, a facility of international reputation that attracted visitors from all over the world. Fair Isle is now in a perilous position – it is not an exaggeration to say that, if the life-expired vessel and inadequate infrastructure are not replaced in the immediate future, there is a serious threat to the sustainability of the community. In a small island, it only takes one or two families to leave to undermine key services such as the primary school, health care or fire cover at the airfield. **Ferry terminal infrastructure:-** The ferry overnights at North Haven in Fair Isle, a small bay with a quay for loading/unloading the vessel and a slipway, cradle and winch for withdrawing the vessel from the water and securing it in the 'noust' (conditions in North Haven mean the vessel cannot be left in the water overnight). The mainland ferry terminal, Grutness, consists of a short solid quay and basic stores and passenger facilities.
Optional Map Upload **** File upload 3 ****	Shetland Island Ferry Route Map.pdf
Does your bid include any transport projects?	Yes
Provide a short description of the transport project	**Vessel:-** The proposed new vessel for Fair Isle will be permanently based in and crewed from the island. **Fair Isle:-** The Fair Isle ferry berth is located within the harbour at North Haven on the north-east of the island. The natural harbour also provides berths for other users and is typically busy with visiting pleasure craft during the summer. Northerly conditions cause significant wave motion at the berth and therefore the 'noust' is used to house the vessel overnight. The photograph shows the view from the north onto the harbour, which is followed by an annotated image: See images 4 and 5, Appendix 5

For context, image 6 - Appendix 5 is showing MV Good Shepherd IV secured in the 'noust'.

Image 1, Appendix 5, is a General Arrangement drawing showing the proposed marine infrastructure work at North Haven.



The linkspan will be constructed to the north of the existing solid quay, in an east-west orientation. An extension to the north and west of the existing solid quay will provide the vehicular approach to the linkspan and Ro-Ro berth, ensuring appropriate space for vehicle manoeuvring. Due to the proximity of the linkspan to the existing breakwater and the lack of core material within it, the new solid quay structure may further improve conditions on the linkspan berth.

In ensuring the operational safety of a linkspan/vessel interface, there is a requirement to ensure suitable wave climate on the linkspan berth. At Fair Isle, it is anticipated that the height of the existing breakwater will require to be increased and an additional layer of rock armour provided on the

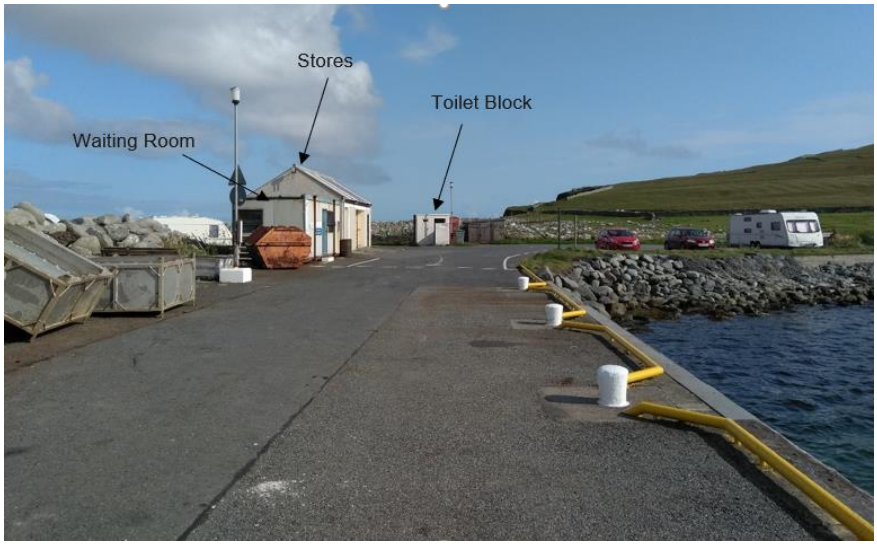
north face to improve shelter at the berth. Wave modelling is being undertaken during the design development stage to confirm suitability of the wave climate.

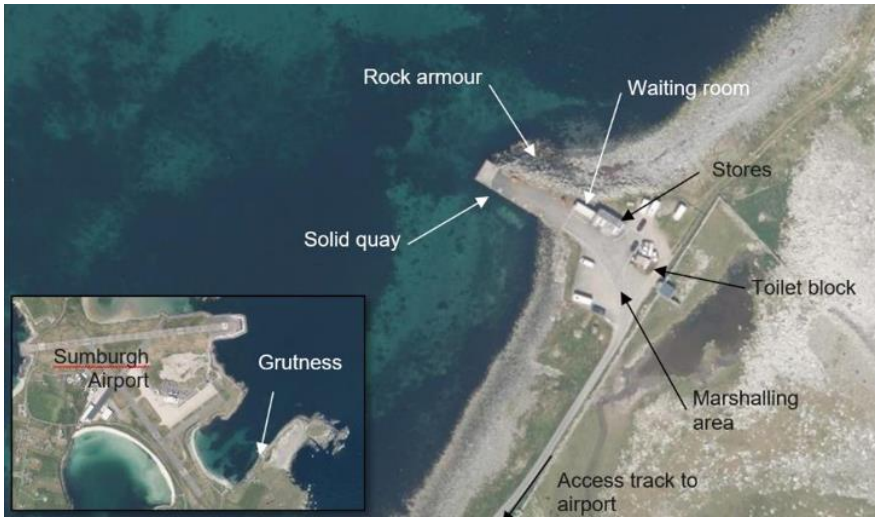
Dredging will be required to reduce the level of the rock outcrop located within the existing breakwater to provide appropriate under keel clearance.

Grutness:-

Grutness ferry terminal is located at Sumburgh Head on the southern tip of Shetland Mainland, opposite Sumburgh Airport. The harbour is generally sheltered from the south and west by land and open to the north and east. The harbour is very exposed from the east through to the north-east.

Images 7 and 8, Appendix 5, shows the view from the end of the pier looking back towards land, and is followed by an annotated image of the terminal.





<table>
<tr><td></td><td colspan="3">Image 2, Appendix 5, is a General Arrangement drawing showing the proposed marine infrastructure work at Grutness.

It is proposed that the linkspan will be constructed to the south-east of the existing berth. An extension to the north-west of the existing quay and rock armour protection to the north will improve shelter on the berth. It is anticipated that general repairs and refurbishment will be required to the existing quay. Dredging will be required along the existing and extended solid quay to provide appropriate under keel clearance.

The investment will be fully contained within the Orkney and Shetland constituency and the Shetland Islands Council administrative area.</td></tr>
<tr><td rowspan="10">Provide location information</td><td colspan="3">Location 1</td></tr>
<tr><td colspan="2">Enter location postcode</td><td>ZE2 9JU</td></tr>
<tr><td colspan="2">Enter location grid reference</td><td>422515, 1072506</td></tr>
<tr><td colspan="2">Percentage of bid invested at the location</td><td>76%</td></tr>
<tr><td colspan="2">Optional GIS file upload for the location</td><td></td></tr>
<tr><td colspan="3">Location 2</td></tr>
<tr><td colspan="2">Enter location postcode</td><td>ZE3 9JN</td></tr>
<tr><td colspan="2">Enter location grid reference</td><td>440502, 1110133</td></tr>
<tr><td colspan="2">Percentage of bid invested at the location</td><td>24%</td></tr>
<tr><td colspan="2">Optional GIS file upload for the location</td><td></td></tr>
<tr><td rowspan="3">Select the constituencies covered in the bid</td><td colspan="3">Constituency 1</td></tr>
<tr><td>Constituency name</td><td colspan="2">Orkney and Shetland</td></tr>
<tr><td>Estimate the percentage of the bid invested in this constituency</td><td colspan="2">100%</td></tr>
<tr><td rowspan="3">Select the local authorities covered in the bid</td><td colspan="3">Local Authority 1</td></tr>
<tr><td>Local authority name</td><td colspan="2">Shetland Islands</td></tr>
<tr><td>Estimate the percentage of the bid invested in this local authority</td><td colspan="2">100%</td></tr>
</table>

Sub-categories that are relevant to your investment	Select one or more transport sub-categories that are relevant to your investment	Maritime
Provide details of any applications made to other funding schemes for this same bid that are currently pending an outcome	We have not submitted applications to any other funding scheme for this bid. The Levelling-Up Fund is the first funding scheme of relevance to emerge for Fair Isle.	
Provide VAT number if applicable to your organisation	267858304	

Section 4: Equalities

Bidders are invited to outline how their bid will promote good community relations, help reduce disparities amongst different groups, or strengthen integration across the local community	Fair Isle is the most remote island in the United Kingdom. Shetland Islands Council has worked closely with the Community on developing this project over a period of almost three years. It has been a collaborative approach between the Community and the Council that has led to a thorough understanding of the Community's needs both currently and in the future. Frequent and detailed feedback has been a feature of the project development process and has included, at some time or other, every single member of the Community. This has promoted shared understanding amongst all who are invested in the project. One of the key objectives of the project is to provide a transport solution that meets modern day standards of accessibility for the island as a whole through improved supply chain access, as well as for individuals travelling to and from the island, particularly those with reduced or limited mobility. In Fair Isle, issues of an ageing population, under-employment, low wages and a seasonal economy, high costs of living, fuel poverty, limited affordable housing, limited transport and digital connectivity, as well as constrained access to essential services are all experienced. There are other challenges affecting the Fair Isle economy, specifically brought about by geographical location. Specific wider key issues also include: - Availability of jobs (including public sector). - Critical infrastructure (including transport and broadband). - Provision of and accessibility to public services. - Attracting and retaining young people. In terms of socio-economic disadvantage, the project will improve connectivity and accessibility, shortening the time needed overcome the significant distance from Shetland Mainland over a difficult and challenging stretch of water. This will lead to increased reliability. A fully accessible vessel, and with increased capacity for the movement of goods, will support economic development and jobs retention (including ferry crew) and job growth, which in turn will support increased household incomes and reduce socio-economic disadvantage. In terms of integration with the wider Shetland community, the project delivers improved access to social and leisure opportunities as well as better access to key services on Shetland Mainland such as health, education and personal business. A faster, more reliable journey, and a timetable focussed around optimising time on Shetland Mainland for islanders and time on Fair Isle for service providers and tourists will further improve accessibility. The ferry is a more affordable travel option for the traveller than the Inter-Island air service and the project, will significantly

	enhance the resilience of the island as part of the combined lifeline travel network. The project will provide a vessel and harbour infrastructure which will for the first time in the history of transport to Fair Isle, provide a solution that will meet the requirements of those with accessibility needs, where the current vessel does not and cannot. This in conjunction with the introduction of a Roll on - Roll off (Ro-Ro) ferry service means passenger with additional accessibility/mobility needs will have a significantly improved service whereby the vessel can be accessed via a linkspan and direct access to a passenger saloon, all on a single level. This is in great contrast to current operations whereby passengers with physical accessibility needs would have to be lifted aboard the Good Shepherd IV via the on board crane. The introduction of a new vessel and harbour infrastructure will create a more resilient, physically accessible service which opens up travel to Shetland Mainland for all those that require it, including those with reduced mobility; thus reducing barriers to health and care, creating opportunities to access leisure activities also; minimising health inequalities through equal access - combined with a timetable focussed on maximising time on Shetland Mainland as well as greatly improving access to services, markets and supply chains.

Section 5: Subsidy control and state aid analysis

Is the support provided by a 'public authority' and does the support constitute a financial (or in kind) contribution such as a grant, loan or guarantee?	Yes
Does the support measure confer an economic advantage on one or more economic actors?	No
Provide further information supporting your answer	The support measure is for public infrastructure. The contracts for the construction of the new vessel and the associated harbour works will be procured in accordance with the Public Contracts (Scotland) Regulations 2015 (and/or any other legislation deemed relevant to the procurement of the proposed project as described herein). Section 3 of the Subsidy Control Act 2022 confirms that financial assistance is not considered to confer an economic advantage if it could reasonably be considered to have been provided on the same terms on the market. As explained above and elsewhere, in the event this application is successful, Shetland Islands Council intends to conduct a procurement exercise in accordance with the Public Contracts (Scotland) Regulations 2015 (and/or any other legislation deemed relevant to the procurement of the proposed project as described herein). Prospective tenderers will therefore have an opportunity to lodge their respective tenders as part of a competitive process.
Is the support measure specific insofar as it benefits, as a matter of law or fact, certain economic actors over others in relation to the production of certain goods or services?	No
Provide further information supporting your answer	The support measure is intended to provide a new vessel and associated harbour works for a 'lifeline' ferry route and which would not otherwise be commercially provided. The support measure will not be used to benefit one or more enterprises over one or more other enterprises with respect to the production of goods or the provision of services. As mentioned

	above, Shetland Islands Council intends to conduct a procurement exercise in accordance with the Public Contracts (Scotland) Regulations 2015 (and/or any other legislation deemed relevant to the procurement of the proposed project as described herein). The support measure will instead be used to provide the means of payment for that / those successful tenderer(s) providing the goods / services they agreed to provide as part of their respective bid(s).
Does the support measure have the potential to cause a distortion in or harm to competition, trade or investment?	No
Provide further information supporting your answer	The contracts for the construction of the new vessel and the associated harbour works will be procured in accordance with the Public Contracts (Scotland) Regulations 2015 (and/or any other legislation deemed relevant to the procurement of the proposed project as described herein), thereby ensuring a competitive procedure within which different enterprises will have equal opportunity to bid for the work / contracts being made available by Shetland Islands Council as part of the wider project narrated elsewhere in this application (should this application prove successful). Shetland Islands Council will work to ensure that the basis upon which it procures relevant goods / services as part of the project narrated elsewhere in this application does not distort competition in the market and that the terms of tendering and the terms of funding will not provide any bidder with an unfair advantage or otherwise distort competition.
Will you be disbursing the funds as a potential subsidy to third parties?	No

Section 6: Strategic fit

<table>
<tr><td rowspan="4">Has an MP given formal priority support for this bid?

*** File upload 4 ***</td><td colspan="2">Yes</td></tr>
<tr><td>Full name of MP</td><td>Alistair Carmichael</td></tr>
<tr><td>MP's constituency</td><td>Orkney and Shetland</td></tr>
<tr><td>Upload pro forma 6</td><td>Pro Forma 6 - Alistair Carmichael MP.pdf</td></tr>
<tr><td>Describe what engagement you have undertaken with local relevant stakeholders. How has this informed your bid and what support do you have from them?</td><td colspan="2">Intensive engagement is integral to the delivery of transport projects in small island communities. The entire Fair Isle community has been engaged and their feedback has underpinned the business case process throughout.

Additional to consulting on problems, opportunities and options, engagement in this context is also essential in ensuring that:

- The community has the human resource to support the delivery and ongoing operation of any project.

- There are no unintended negative consequences.

In the Shetland-wide SOBC, we:

- Reviewed (then) recently published consultation material on problems and opportunities with the current Fair Isle ferry service.

- Consulted statutory consultees to identify any constraints relating to the emerging options.

- Attended a public exhibition on Fair Isle (August 2016):- 22 island residents attended and 13 feedback forms were completed.

- Presented the full SOBC findings to Council Members, providing an opportunity for political input.

In the Fair Isle OBC, we undertook an extensive programme of public, stakeholder and operational engagement to ensure that the preferred option has community support and is deliverable - we:

- Worked in partnership with the crew of MV Good Shepherd IV, with the study benefiting from their knowledge and experience.

- Undertook a household survey of island residents to obtain views on Fair Isle’s transport connections and how these impact their lives. 22 island households (almost all households on the island) responded to the survey.</td></tr>
</table>

	- Engaged with Fair Isle Bird Observatory (FIBO) (the main business on island) to obtain information on the tourism market and visitor transport logistics. We also engaged with other small businesses, including guest houses. - Worked with the Community Planning Partnership, Highlands & Islands Enterprise and the Council 'Islands of Small Populations' workstream to ensure that the preferred option integrates with prevailing policy. - Consulted with the National Trust for Scotland, the island's owner. - Consulted with the Council Education Service, NHS Shetland and Scottish & Southern Energy to understand the role the ferry plays in service delivery. - Consulted with Shetland wholesalers and other suppliers of goods to Fair Isle, allowing us to build-up a detailed picture of the supply-chain and role of the ferry service within it. - Liaised with Airtask – provider of air services to Fair Isle – to understand how the ferry service complements their operation. At the conclusion of the Economic Case, a public exhibition was held in Fair Isle (May 2019) to present the preferred option. 40 members of the public (almost the entire adult population of Fair Isle) attended, with 24 completing a feedback form. Subsequent to the public engagement, the Strategic and Economic Cases were presented at a: - Full Council Meeting, to ensure political buy-in (June 2019). - One-to-one meeting with the then Scottish Government Minister for Energy, Connectivity and the Islands, Paul Wheelhouse MSP (June 2019). Through this extensive engagement programme, we have confirmed that the preferred option is fully supported by stakeholders and the community. There has been continued engagement with the community as the project progresses.
Has your proposal faced any opposition?	No, the proposal has not faced any opposition. Respondents to the public exhibition feedback form unanimously agreed with the preferred option. The Outline Business Case has also been approved by ZetTrans, Shetland's Regional Transport Partnership, (31st May 2021); Shetland Islands Council

	Environment and Transport Committee (1st June 2021); Shetland Islands Council Policy and Resources Committee (8th June 2021); and Full Council (16th June 2021). The key outcomes aspired to by island residents in relation to this project are: - The new vessel should be island-based, providing maximum flexibility to respond to weather windows. - The crew should be island-based, providing operational flexibility, buy-in to the service and retention of these secure salaried jobs on the island (and by extension the crewmen and their families). - The new vessel and infrastructure should be fully accessible, with step-free access from the shore to the passenger lounge. The preferred option will successfully deliver each of the above outcomes. Since the submitting our first LUF application in June 2021, we have continued to brief the community and Members on progress and have liaised closely with the community and statutory stakeholders as part of the outline design and consenting process.
Do you have statutory responsibility for the delivery of all aspects of the bid?	Yes
Provide evidence of the local challenges / barriers to growth and context that the bid is seeking to respond to	The case for investment is set out in Chapter 6 of the SOBC and summarised in the OBC. The key points are as follows: - The current vessel is 36-years old and does not meet current accessibility standards. It has a maximum of five-years remaining service life with some expenditure, after which the service will cease to operate. The island would instead be supplied by irregular services from Shetland mainland. - The service is very unreliable, in part due to the vessel, and there are consequences of this in terms of: > Supply-chain:- e.g., import of fresh produce, export of goods etc; > Service provision:- e.g., providing healthcare and facilitating access to secondary school; > Personal travel:- e.g., missed appointments and limited opportunities on mainland for Fair Isle residents; > Visitors and tourists to Fair Isle, both in terms of the choice to visit the island and travel disruption en-route or when returning.

	- In the 2019 Fair Isle household survey, two-thirds of respondents indicated that aspects of the ferry service prevent more frequent travel to the mainland; more than half of respondents cited comfort, crossing time and the absence of Ro-Ro as key barriers to travelling more by ferry. - The current crane-based Lo-Lo operation: > Poses a potential medium-term regulatory risk to the continuation of the service; > Places severe limits on the weight/type of goods carried; > Affects vessel turnaround times. - There is a local desire for improvements; in the household survey: > 85% did not think the current air and ferry connections to the mainland are sufficient for their family's day-to-day needs, now and in future; > 2/3 thought that connections were not sufficient for tourism, the main industry on the island; > 1/4 felt current connections were not sufficient to ensure the long-term sustainability of Fair Isle; > 80% felt that better connections would make Fair Isle more attractive for those minded to island life. At its heart, the case for investment is about securing the future of the island. Despite its international renown and scientific importance, Fair Isle's population is now around the 50-mark and the loss of the Bird Observatory building to fire in 2019 has left the island in a precarious position. The ferry service plays a critical role in meeting the island's supply-chain, service and personal travel needs. If it is not replaced in the short-term, irreparable damage will be done to the economy of the island, threatening the long-term sustainability of the community. As well as the supply-chain and travel impacts, the seven crew are amongst the few salaried employees on the island, fulfilling multiple roles including the provision of airfield fire cover. In the event that the ferry service ceased to operate from the island, a proportion of the crew and their families would likely leave, causing skills shortages in key roles and undermining local services such as the primary school. A new, reliable and accessible island-based ferry is therefore essential to the future survival of the island.
Explain why Government investment is needed (what is the market failure)	The Fair Isle ferry service is a 'lifeline' connection – it generates very little revenue and all capital and operating costs are met by the public sector, the Council in this instance. There is no realistic prospect of a commercial ferry company ever operating a regular service to or from Fair Isle given the low demand; cost of operating such a long crossing; the challenges with delivering a reliable service; and the diversity of cargoes that need to be shipped. Therefore, to all intents and purposes, the Fair Isle ferry is a public good.

	The question of market failure here is however much more extensive. In many cases, the argument being made for LUF funding will be to address a market failure which is leading to comparatively poor economic performance. In the Fair Isle context however, the argument is not about relative economic performance, rather it is about the future sustainability of the island as a functioning community. The operation of the ferry service is directly connected to the economic wellbeing of the island. Without it, the supply-chain could not function, preventing essential goods getting to the island (e.g., fuel oil, food, agricultural goods) and the export of products such as livestock; residential and commercial developments would be almost impossible to deliver; and public service delivery would be undermined. Indeed, delivering the essential needs of the island is challenging enough as it is when working with Lo-Lo crane-based operations, which impose significant limitations on the movement of goods. Under the current model of ferry service delivery in the Shetland Islands, the Council is responsible for the capital funding needs of new vessels and terminal infrastructure. In the absence of external capital funding, the implications for the Council are as follows: - In line with the Council's Capital Expenditure Policy, the project costs will require to be funded by borrowing and will add to the Council's external debt. - Under the Local Government in Scotland Act 2003 there is a requirement that local authorities should adhere to the 'CIPFA Prudential Code for Capital Finance in Local Authorities'. The Prudential Code seeks to concentrate primarily on ensuring that local authorities' capital spending plans are prudent, affordable and sustainable. - The Council's approved Prudential Indicator for its authorised limit for external debt, which should not be breached, is £106m which is already fully committed. Without external funding, this proposal would breach the Council's authorised limit and conflict with the Council's statutory obligations under the Prudential Code. - Further, the Council's Medium Term Financial Plan, which sets out the Council's forecast income and expenditure over the next five years, indicates further financial pressure on its revenue budgets in the next five-year period. While the operational revenue costs are factored into the Council's medium-term financial plans, further borrowing will result in additional revenue costs that exceed the headroom available within Council's capital budget and the framework of the Prudential Code. Additional revenue costs in relation to borrowing will therefore compound the issue of the Council's financial sustainability.

	In short, without external financial support the funding of this project is not affordable or sustainable for the Council. With the Council not in the position to fund a replacement ferry and associated harbour infrastructure independently and the need for investment becoming increasingly urgent, there is a clearly definable and urgent market failure which needs to be addressed.
Explain what you are proposing to invest in and why the proposed interventions in the bid will address those challenges and barriers	To recap, the investment proposition is: - A new Ro-Ro ferry of maximum 24m LOA and workboat classification - Supporting terminal infrastructure at Fair Isle and Grutness, which includes the conversion from Lo-Lo to Ro-Ro and the upgrade of the overnight berth - Crew training to obtain the necessary certification to operate the new vessel (funded separately by the Council) A comprehensive statement of how the proposed interventions will address the identified challenges and barriers is set out in Chapter 7 of the OBC. To summarise: **Vessel and terminal infrastructure:-** - The most immediate challenge is the impending life expiry of MV Good Shepherd IV, which has a remaining service life of fewer than five years, even with some investment. There is no available replacement vessel within the Shetland Islands Council fleet. A new vessel will have a minimum 30-year design life and will remove the immediate resilience risk for the community. - The procurement of a workboat-coded vessel will facilitate an island-based service, which is operationally essential in terms of delivering sailings when weather permits. Basing the vessel in Fair Isle also protects the employment of the seven island crew. This is essential to the economic wellbeing of Fair Isle, both in terms of the direct income of the crew (who hold some of the few salaried posts on the island) and also in ensuring that they and their families remain in the island and continue to fulfil their multiple other roles, such as providing fire cover at the airfield. Without this, the island could not function. - The cradle and winch to withdraw the vessel from the water at Fair Isle are also in urgent need of replacement, which this investment will again address. If the cradle and winch are not replaced, they will eventually fail and this would mean that the vessel could no longer overnight on Fair Isle, with consequential impacts on service reliability and island crew retention.

- The new vessel will comply with all modern standards in terms of passenger accessibility. Moreover, the conversion to Ro-Ro will allow level-access boarding by passengers at all states of the tide. The Fair Isle population is aging, and this upgrade is long overdue.

- The emerging specification for the ferry defines a faster vessel than that currently operated. The increase in speed will reduce crossing times and, coupled with Ro-Ro operation, allow for working in tighter weather windows, thus improving compliance with the timetable and potentially facilitating a higher frequency service.

- The new vessel will also have higher deadweight capacity and will thus be less limited in the quantity of goods which she can move in a single sailing. This will assist in importing e.g., construction materials to the island, allowing larger island-based cars to be moved to the mainland for servicing etc.

- The new vessel will also operate using a 'green' propulsion system, reducing the emissions associated with the current diesel vessel, aligning with the Council's net zero target.

- The adoption of Ro-Ro addresses several of the identified challenges:

  > The regulatory risk associated with Lo-Lo operations on exposed berths will be removed, and health and safety risks overall will be reduced. At present, it is possible that an accident with a Lo-Lo vessel elsewhere could lead to restrictions being imposed on the Fair Isle service, with negative consequences for the island;

  > The limitation on the weight and type of goods carried on the ferry will no longer be determined by the lifting capacity of the crane. This will improve the efficiency of the island supply-chain and business productivity;

  > A reduction in the time required to load/offload cargo will accelerate turnaround times and allow services to be operated in tighter weather windows, thus improving reliability.

Crew training:-

- The crew training programme will ensure that the core and relief crew can operate the new vessel. This will facilitate the island-based vessel and ensure a reliable and resilient service.

- The training programme will also be nested within a wider succession planning exercise, ensuring the long-term resilience of the service and creating a secure and well-paid career path for those living in or minded to relocate to Fair Isle.

	By addressing the transport problems and opportunities, the proposed investment will generate positive transport outcomes and socio-economic impacts, as detailed in the following question. An Option Assessment Summary Report is included, which takes the form of a Scottish Transport Appraisal Guidance study (equivalent to an SOBC). This was further developed in the OBC.
Upload Option Assessment report (optional) **** File upload 5 ****	LUF BID Options Appraisal Report - Shetland Islands Council.pdf
How will you deliver the outputs and confirm how results are likely to flow from the interventions?	Sections 10.9-10.10 of the OBC detail the benefits realisation and monitoring and evaluation plan for the investment. The project 'Theory of Change'/logic map is attached. This logic map identifies the outputs, transport outcomes and societal impacts of the proposed investment, mapping the investment through to the benefits which will be realised. The Council has invested heavily in developing a robust Strategic Case, ensuring that we understand in detail the strategic need. We have also worked closely with our in-house team and experienced consultants to develop a proportionate and deliverable set of inputs and anticipated outputs and transport outcomes. The key benefits realisation issue is the extent to which the transport outcomes translate into the wider societal impacts which are sought. As well as detailing these in the logic map, Section 10.9 of the OBC identified how the outputs will contribute towards the aims set at SOBC, as follows: - The inter-island transport network should support and promote inclusive economic growth. It will: > Mitigate the reduced access to opportunities associated with living in an island community; > Mitigate the increased cost associated within living and/or doing business in an island community; > Mitigate the potential competitive disadvantage associated with basing a business in an island community; > Provide broad equality of opportunity for island residents, including vulnerable groups, both in a local and national context; > Reduce income inequality across the islands where this is brought about by constrained access to employment opportunities and essential services;

	> Provide access to a wide labour market and source of raw materials. - The inter-island transport network should support improved access to opportunities and services on mainland Shetland, including employment, health, education and personal services. It will: > Provide access to a wide labour market for mainland-based concentrations of employment (and vice versa); > Enable island residents to access essential public services, whether delivered on or off-island; > Work towards providing island residents with a fair and consistent level of connectivity, where no island is unduly disadvantaged relative to other islands in Shetland; > Maximise 'at home' time for children educated off-island, making the island a more viable place to live; > Enable people and goods to broadly travel at the time they wish, with a high certainty of supply; > Reduce the time and money costs to service providers of providing island communities with essential services, both public and private. - The inter-island transport network should promote population retention, a balanced island demographic and capacity within the local community. It will: > Help to achieve/maintain critical mass in terms of population; > Support higher levels of economic concentration on the islands; > Make the islands a practical proposition for those potentially mind to island-life (i.e., in-migration). - The inter-island transport network should support enhanced productivity and economic connectivity within the Shetland Islands. It will help: > To increase the total number of tourists visiting the islands; > The island group to function more effectively as a single economic unit through increasing productivity/agglomeration.
Theory of change upload (optional)	Logic Map - Theory of Change - Shetland Islands Council.pdf

**** File upload 6 ****	
Set out how other public and private funding will be leveraged as part of the intervention	As noted in our response to the question "Explain why Government investment is needed (what is the market failure)", the Fair Isle ferry service is a 'lifeline' connection – it generates very little revenue and all capital and operating costs are met by the public sector, the Council in this instance. Out with the Council's proposed contribution to the project, there is no opportunity to leverage other public or private sector funding.
Explain how your bid aligns to and supports relevant local strategies and local objectives for investment, improving infrastructure and levelling up	The SOBC incorporated a policy review, economic baseline and future planning horizon for islands served by Council operated ferry services. The proposed Fair Isle investment strongly aligns with and supports relevant local policies and strategies. At the most local level, the Islands with Small Populations Locality Plan establishes a statutory plan for Fair Isle to deliver improved outcomes for the island. It provides an ambitious future vision that takes account of the following specific sea-based transport problems faced by Fair Isle which require to be addressed if this vision is to be realised: - The freight capacity of the ferry is insufficient, reducing the certainty of travel at short notice. - The ferry service is susceptible to significant weather-related disruption. - The speed of MV Good Shepherd IV and comfort on passage are considered a deterrent to use, increasing pressure on the capacity constrained and weather-disrupted air service (note: the air service cannot be easily expanded). - The basing of the ferry in Fair Isle provides operational flexibility for the service and secure and high-paid employment for the island. Retention of an island-based crew is considered essential. The consequential impacts of these problems, mainly linked to population retention and growth, are: - Engagement with current residents and a survey of the island diaspora highlighted transport connectivity as a major challenge in attracting people to live in Fair Isle. - The FIDP expresses a desire to retain an on-island nurse to improve care and health provision for an ageing population. However, the FIDP and consultation with NHS Shetland has indicated that current transport services make this challenging. - The physical capacity of MV Good Shepherd IV means it can be difficult and expensive to move building materials, inhibiting efforts to maintain the island housing stock and build new houses.

	- The current connections impose a cap on visitor numbers and act as a deterrent amongst less frequent travellers. Shetland's Islands with Small Populations Locality Plan work took a public sector-wide view of the future of Fair Isle. The delivery of a new vessel and supporting infrastructure was identified as the main priority for the island. ZetTrans, the statutory regional transport partnership for Shetland, is currently refreshing its Regional Transport Strategy. Whilst the proposed investment aligns with the current RTS, it is anticipated that even greater alignment will be achieved with the new RTS, which will have a strong emphasis on delivering the Council's Climate Change Strategy (currently under development, which will set out targets for achieving 'net-zero') and reducing transport-related inequalities. At Scotland-level, the National Transport Strategy 2 (2020) recognises the challenges faced by islands. Under the 'Reduces Inequalities' priority, there is a specific outcome to: "Minimise the connectivity and cost disadvantages faced by island communities, including the safeguarding of lifeline services". Investment in a new ferry and supporting infrastructure for Fair Isle is therefore widely supported by policy. At its heart is the aspiration to support the levelling-up of opportunity and service provision for this internationally significant but fragile community.
Explain how the bid aligns to and supports the UK Government policy objectives	**Levelling-Up:-** This project is in many respects the definition of levelling-up in that it is about safeguarding the future of a unique community. **Decarbonisation:-** The project will contribute towards: - UK Government commitment to reduce CO2 emissions by 78% by 2035 compared to 1990 levels and achieve net zero by 2050. - Climate Change (Emissions Reduction Targets) (Scotland) Act 2019, which seeks to reduce greenhouse gas emissions by 75% by 2030 compared to 1990 levels, by 90% by 2040 and achieve net zero by 2045. The Shetland Islands Council Carbon Management Plan notes that the inter-island ferry fleet accounts for 42% of all Council energy usage. A key strand of our emerging Climate Change Strategy and ZetTrans Regional Transport Strategy is the 'greening' of our inter-island ferry fleet. As a ferry

	typically has a 30-year service life, it is essential that the next cycle of vessel replacement incorporates low/zero emission propulsion technology. MV Good Shepherd IV is a conventional diesel vessel. The Commercial Case of the OBC highlights our intention for her replacement to be powered by a low/zero emission propulsion system – this will be a non-negotiable component of the specification issued to tenderers. However, given the limited electrical supply on Fair Isle, electric propulsion may be difficult to achieve – we will therefore seek solutions from the market during the detailed design stage and ahead of the FBC. There are few local environmental problems at Fair Isle and Grutness. However, our proposed solution will enhance the globally significant environmental identity and reputation of Fair Isle, which is incorporated within Scotland's only Demonstration and Research Marine Protected Area. As the first project in our next cycle of ferry replacement, this project will also act as an exemplar of what we are trying to achieve and how we will engage the market to deliver the outcome of a low/zero emission ferry fleet. **Build Back Better Plan for Growth:-** Whilst there was not a single COVID-19 case recorded in Fair Isle, the pandemic isolated the island and further undermined an economy already suffering as a result of the FIBO fire. The new ferry will be integral to the community's aspirations to 'build back better' from the pandemic. **Devolved Policy:-** At the devolved level, the investment will support the four 'Priorities' of the Scottish National Transport Strategy 2 (2020), namely: - Reduces inequalities. - Takes climate action. - Helps deliver inclusive economic growth. - Improves our health and wellbeing. A new ferry will support several of the 'Strategic Objectives' of the National Plan for Scotland's Islands (2019), including to: - Improve transport services. - Address population decline and ensure a healthy and balanced population profile. - Improve and promote sustainable economic development.

	- Improve housing. - Improve and promote health, social care and wellbeing. - Improve and promote environmental wellbeing and deal with biosecurity. - To contribute to climate change mitigation and adaptation. - To empower diverse communities and different places. - To promote and improve education for all throughout life.	
Alignment and support for existing investments ***Where applicable explain how the bid complements or aligns to and supports existing and/or planned investments in the same locality***	The new ferry will improve connections to the rebuilt FIBO and also provide additional capacity for the carriage of equipment and other supplies for the observatory. Fair Isle has also been designated as a 'Demonstration and Research Marine Protected Area (DRMPA)', which will identify species and habitats supported by its marine environment, explore the health of species and habitats and identify their relationships and ecosystem functions. This will initiate an evidence-based approach to marine management to safeguard marine life within Scotland's only DRMPA and demonstrate the relationship between a fully functioning marine environment and the socio-economic stability of coastal communities.	
Explain how the bid aligns to and supports the government's expectation that all local road projects will deliver or improve cycling and walking infrastructure	Whilst this question is not directly applicable to this application, two points are worth noting: - Fair Isle has a very limited road network, consisting only of rough surface single-track roads. A potential concern in relation to the adoption of Ro-Ro is the potential for increased vehicular traffic on island. Whilst the size of the vessel and the length and frequency of the crossing will always limit this to some degree, implementation of a permit system akin to that used on islands such as Iona and the Small Isles will be actively considered. - The new vessel will be better equipped to carry bicycles, whether accompanied by the passenger or freight only if the passenger chooses to travel by air. This would improve the visitor experience to Fair Isle.	
Confirm which Levelling Up White Paper Missions your project contributes to	Select Levelling Up White Paper Missions (p.120-21)	Transport Infrastructure
Write a short sentence to demonstrate how	This project will specifically contribute to the Transport Infrastructure Mission. Whilst the focus of this Mission as stated in the White Paper is not directly relevant to Fair Isle, the project will reduce the comparative	

your bid contributes to the Mission(s)	disadvantage faced by Fair Isle residents in terms transport connectivity, reliability, physical accessibility and resilience. Whilst the indicators associated with each Mission are understandably not well suited to Fair Isle, it is our view that the replacement ferry project can contribute to the sentiment of each of these Missions, including: - The Research and Development Mission through supporting and revitalising the globally important Fair Isle Bird Observatory. - The Education Mission through improving access to Secondary School education for Fair Isle children and supporting the ongoing delivery of primary school education on-island. - The Health Mission, by allowing Fair Isle residents to more easily access health care on the Shetland and Scottish Mainlands and facilitating access to the island for visiting health professionals. - The Pride in Place mission by sustaining and promoting the development of Fair Isle, a unique community in the United Kingdom. - The Housing Mission, by making it easier and less costly to renovate and build social and private housing on the island. The challenges with house maintenance and building have been a long-term 'push' factor in out-migration. - The Local Leadership Mission – whilst Fair Isle is owned by the National Trust for Scotland and is under the administrative responsibility of Shetland Islands Council, it is the local community leadership and pride which ensures that the island functions as it does. Fair Isle is characterised by a resilient, independent and versatile population, where those who live there fulfil multiple jobs to ensure an effective and cohesive community. Indeed, those moving to the island have to go through an application process, so as to ensure that they are suited to island life.

Section 7: Economic case

Provide up to date evidence to demonstrate the scale and significance of local problems and issues	The OBC sets out in detail the scale and significance of the local transport problems, summary points include: - The MV Good Shepherd IV Life Expectancy Report notes that the vessel has less than five-year residual life, with expenditure. She fails to meet the most basic physical accessibility standards. - Fair Isle had no transport connections (ferry or air) on 221 days in 2017. In winter, there were only 23-days with connections (ferry or air) across the months of January, February, November and December, a level of severance unprecedented elsewhere in the UK. - In 2018: > Only 22% of sailings operated to timetable; > 37% of sailings operated on the scheduled day but not to scheduled times; > 41% of sailings were cancelled on the scheduled day; these sailings then took place on alternative days; > There were 170 completed sailings against a scheduled 194 across the year. - The current mix of connections provides very limited time on Shetland Mainland to carry out personal business, particularly given the need for a transfer from Tingwall airfield or Grutness to Lerwick, the main service centre. In the period October to December 2017, this never exceeded 4-hours, with the smallest amount of time being 54 minutes (i.e., not possible to make a meaningful day-return trip). - Data suggests that the physical limitations of the vessel and its crane are constraining the movement of goods/vehicles, with implications for the supply-chain and economy of Fair Isle. Freight manifests highlight two-thirds of sailings between January and July 2019 were full. Whilst these data are drawn from the OBC, the issues remain current. The transport problems generate negative travel behaviour outcomes, including: - Journeys which are still made are negatively affected by deficient physical accessibility to the vessel, poor passenger comfort, long journey times and poor journey time reliability.

	- Economically or socially valuable journeys are not made, reducing resident life chances and business opportunities and impacts on-island service delivery. This in turn leads to consequential negative societal impacts, including: - Difficulties in retaining people on the island, as has been evidenced by the long-term reduction in population. Fair Isle is close to a critically low threshold of population at which point life on the island could not be sustained. - Challenges in attracting people to move to Fair Isle. - High costs of moving even basic goods to and from the island. This significantly constrains new development such as house building, which is a known barrier to in-migration. - High costs of service delivery for the Council, both in terms of on-island provision of e.g., health, social care and education and the requirement to pay for overnight costs for off-island healthcare. - Difficulties in ensuring that island primary school children can fully engage with their peer group, as happens for other islands in Shetland. - High school children spending a minimum of three and often six weeks away from home. - Reduction in tourism bed nights and thus income associated with this essential industry.
Demonstrate the quality assurance of data analysis and evidence for explaining the scale and significance of local problems and issues	The following data were used in establishing the evidence of the scale and significance of local problems and issues. Whilst these data are drawn from the OBC (completed in 2019 and updated in 2021), the issues remain current. - Sailing-by-sailing logbook data for calendar years 2010-18. For each scheduled sailing, the logbooks define: > Number of passengers carried; > Number of vehicles carried, split by vehicle type; > Whether the sailing: operated to timetable/on the scheduled day but not to timetable/was cancelled but operated on a different day. - Freight manifest data for all sailings from January to July 2019. This consisted of individual delivery receipts for each customer and

	commodity delivered, which were manually collated into a record of tonnage moved, cross-referenced against the logbook data. - 2017 air passenger numbers were provided by Airtask (monthly data). These were used to compare the relative importance of the air and ferry services for passenger movements. - 2017 air service flight records were provided and were cross-referenced with ferry sailings data to determine: (i) days on which there was a connection; and (ii) total time on Shetland mainland by day. - Crew details including role, certification, age, pay and contracted hours were used to establish the current and anticipated future crew complement and identify skills gaps to be addressed and succession planning requirements for the future vessel to be based in Fair Isle. - To provide an up-to-date planning horizon, the Council Ferry Operations team undertook a condition assessment of MV Good Shepherd IV in April 2021, providing a high level of confidence in the vessel life expectancy assessment. - An assessment of infrastructure condition at Fair Isle was undertaken in 2021 and thus there is confidence in our assessment of need. Similarly, the much simpler Grutness infrastructure was inspected in 2021. - Limited Bathymetric data was available for Fair Isle, with better but historic bathymetric data available for Grutness; used to inform the outline designs. Current detailed bathymetry is being collected as part of the outline design phase, ahead of FBC. - All financial data related to the ferry service were provided by the Council Finance Service and have a high degree of confidence attached to them. - In developing the socio-economic profile of the island, standard socio-economic datasets such as Census were used. However, given the issues of lag, level of spatial disaggregation and an under-recording of island employment (most island residents hold several jobs and undertake a significant amount of voluntary work), these datasets had to be supplemented by in-depth consultations with businesses, suppliers and service providers (e.g., the Council Education Service, NHS Shetland etc). - A survey of all island households was carried out in early 2019 exploring views on Fair Isle's transport connections and how these impact on residents' lives (e.g., accessing services, travel-to-school etc). 22 responses were received, thus capturing the majority of island households;

	- FIBO provided a 5-year time series of data on visitor numbers and net bed nights lost/gained through transport disruption.
Demonstrate that the data and evidence supplied is appropriate to the area of influence of the interventions	Our response to the previous question observed that the geography and size of Fair Isle means that the datasets typically used in transport appraisal are not readily applicable to the island. We recognised this issue at the outset of the OBC and made a significant investment of time and resources in collecting island specific data through: (i) engagement across Council services; (ii) engagement with public sector partners such as NHS Shetland; (iii) collation and input of manually recorded data such as freight manifests; (iv) partnership working with the crew of MV Good Shepherd IV ensuring that we fully understood all of the operational complexities of the route; and (iv) in partnership with our appointed consultants, in-depth engagement with the community through the household survey, telephone consultations and public exhibitions. Since the completion of the OBC, we have continued to invest heavily in collecting local data to inform the design and thus provide increased cost certainty. This includes the development of bathymetric and topographical surveys; local and regional wave modelling; engagement with naval architects on necessary vessel design characteristics; and the planned carrying out of ground investigations at Fair Isle and Grutness. We are therefore confident that our investment in the collection of the above information provides us with an in-depth knowledge of the personal travel, supply-chain and service delivery needs of Fair Isle. It has also provided the basis of identifying the anticipated transport outcomes and societal impacts which can be expected from addressing each of the transport problems evidenced.
Provide analysis and evidence to demonstrate how the proposal will address existing or anticipated future problems	This section summarises how our proposal will address existing and future transport problems. The transport outcomes and societal impacts which will flow from this are summarised in response to the question "**How will you deliver the outputs and confirm how results are likely to flow from the interventions?**" Chapter 7 of the OBC includes an options appraisal which identifies how the preferred option has been defined. The case for investment in Fair Isle does not easily lend itself to conventional transport and/or economic modelling and thus it pivots off the 'theory of change', which has been informed by the local data collection. The theory of change highlighted the following transport problems/opportunities: - The current vessel has less than five-years of remaining life and does not meet current accessibility standards. Without funding/investment, the Council cannot afford the project and

	therefore the service becomes less reliable and ceases to operate at the point at which the vessel is no longer considered safe. - The service is unreliable and prevents more frequent travel by island residents and visitors. - Lo-Lo operation presents a medium-term regulatory risk, limits the weight/type of goods which can be carried and impacts vessel turnaround times. - There is a requirement to maintain an island-based vessel to maximise operational flexibility and protect crew jobs, which are essential to the island economy. Addressing the above problems/opportunities was central to the option development and appraisal process and the selection of a preferred option, as follows: - In terms of the strategic approach, the preferred option is for the new ferry to be based on the island to maximise flexibility in responding to weather windows, thus improving reliability. Based on current crew certification, the vessel will be coded as a 'workboat'; requiring a lower level of crew certification/qualification, being more sustainable for an island with a small population. This is a proportionate solution working within the physical and operational constraints of the service. - The new vessel will be faster and fully accessible; built to modern standards. This will: (i) address the vessel replacement requirement and current accessibility issues; (ii) improve reliability, with increased speed allowing the service to operate in tighter weather windows; (iii) maximise hold capacity, reducing instances of 'short-shipped' cargo. - Linkspan interface at both Fair Isle and Grutness. This will: (i) remove regulatory risks around Lo-Lo operations; (ii) remove the crane-based weight restriction with Lo-Lo; (iii) reduce turnaround times and thus overall journey times, allowing the service to operate in tighter weather windows; (iv) allow level-boarding of the vessel across the linkspan. - The vessel will be removed from the water overnight using a new slipway and cradle arrangement; essential for the safety of the vessel and the continuation of an island-based service. This configuration will greatly enhance the connection to the island through modernising the service to provide capacity for vehicles and more efficient containerised freight, meaning safer and faster operations. As the new vessel will be larger and built to modern standards, it will have improved reliability (i.e., seakeeping) and resilience. Combined with a greater service speed, overall return journey and turnaround times will be

	greatly reduced (up to 30%) leading to improved reliability through the ability to exploit shorter weather windows. It will also safeguard the island-based service and the essential local employment attached to it. We are keen to stress that, since the completion of the OBC, the Council has invested significant resource in further developing the proposal to ensure a 'shovel-ready' project. This has included undertaking the outline design and consenting processes, in which we are investing £251K. There are three components to this: - Developing a scope/specification for engagement of naval architects, the objective being to establish the basis of a new fully accessible Ro-Ro vessel which can be based in and crewed from Fair Isle. - Further development of the infrastructure design at Fair Isle and Grutness. This is being informed by bathymetric and topographical surveys, wave modelling and ground investigations (£1m), with a view to ensuring that the infrastructure can safely/reliably accommodate the new vessel. - Commencing the statutory consenting processes, including applying for planning permission and marine licences, scoping the Environmental Impact Assessment, Habitat Risk Assessment and Island Communities Impact Assessment. Through this ongoing package of design and consenting work, we are seeking to ensure that our proposal will fully address the identified existing and future transport problems. By doing this, the theory of change highlights that this will lead to positive travel behaviour outcomes and consequential societal impacts.
Describe the robustness of the analysis and evidence supplied such as the forecasting assumptions, methodology and model outputs	Given the nature of this proposal, conventional modelling and forecasting is inappropriate and was not undertaken; the proposition is focused on ensuring the long-term viability of Fair Isle as a community rather than on generating conventional social welfare benefits (associated with travel time and vehicle operating cost savings) and wider economic impacts (associated with agglomeration, labour market impacts, etc). The case for investment is being driven, above all else, by the impending life expiry of MV Good Shepherd IV. Whilst there are many limitations with the current vessel, the community has learned to work around them. However, it is not an exaggeration to state that failure to replace the current vessel before life expiry (the 'Do Nothing' option) could fatally undermine the viability of the Fair Isle community. It would be extremely difficult and expensive to effectively serve the island from Shetland Mainland, as opposed to the current and proposed island-based service. The precise operational benefits of a new vessel and infrastructure will not become clear until detailed design is completed (the project is currently at outline design stage, with detailed design to be completed by October

	2023). Even then, it is important to acknowledge that Fair Isle is separated from Shetland Mainland by a 24-mile stretch of water known as the 'Roost', acknowledged to be one of the most challenging stretches of water in Europe. Strong and gusting winds; a long fetch (the distance of open water over which the wind generates waves); very short winter daylight hours; summer haar (coastal fog); no ports of refuge; and significant constraints on vessel size in Fair Isle make this one of the most challenging ferry routes in the world to operate. The actual operational benefits will therefore only become fully clear when the service is in operation. However, even a marginal improvement in frequency and reliability could be transformative for the island. Research and dialogue with the crew of MV Good Shepherd IV and the outline design work confirms that a faster Ro-Ro vessel will allow the service to be operated in tighter weather windows, thus: - Increasing the number of days on which the service is operated to timetable/at all; - Providing scope for scaling-up the number of connections across the year; - Reducing overall journey times, with our working assumption being an overall reduction of 30% > Whilst journey time benefits would typically be recorded in the TEE component of a transport appraisal, such benefits would be minimal in this case (the ferry carried 702 passengers in 2018), rather the benefit would be around being able to operate the service more frequently, reliably supporting the island supply-chain. The outline design work is providing increased confidence that the above listed benefits will be realised: - Ongoing engagement with the Council Ferry Service and naval architects is shaping an appropriate vessel specification for Fair Isle; - The landside infrastructure design will also ensure that the berths at Fair Isle and Grutness are afforded maximum protection from both wind and swell
Explain how the economic costs of the bid have been calculated, including the whole life costs	Full economic costs (in Q1 2021 prices) of the bid are included in Section 7.9 of the OBC. These have been inflated to Q1 2022 prices for the purpose of this application – the ONS shows average construction cost inflation of 8% over the period March 2021-March 2022, and this has been used as the basis of producing Q1 2022 costs. The following further assumptions have been made:

- The base year for the appraisal period is 2022/23, which is the first year that costs are expected to incur.

- The appraisal period for the intervention is 60-years, which is the typical lifespan of marine infrastructure in Scotland. A replacement vessel would likely be required after 30-40 years, but this is not included in the calculation as it would be a new/separate project at that point in time.

- A discount rate of 3.5% for years 0-30 and then 3% for years 31-60 has been used.

- All costs will accrue over the first four years, which is the duration of the build.

- Maintenance costs are internalised within the Council's operational budget and not included in the figures which follow.

- It is assumed that the assets would have zero residual value at the end of the appraisal period.

- Inflation projections for Financial Year 2022/23 to Financial Year 2025/26 have been drawn from the BCIS Five Year Civil Engineering Forecast – June 2022 (civil engineering tender prices). Inflation is thereafter assumed to return to the Bank of England's 2% target rate.

- Optimism bias was applied based on the STAG technical database Table 13.4. Marine infrastructure is not listed but is assumed to be under the 'Roads' category. The STAG Technical Database recommends application of 44% OB at SOBC, reducing to 15% at OBC. However, in marine civil engineering, a package of work is required to obtain greater cost certainty, including ground investigations and wave modelling. These are significant undertakings and are not typically pursued until 'detailed design' stage, which precedes FBC. OB on marine infrastructure was therefore retained at 44%.

A summary of costs by item is provided below:

	Cost in unadjusted Q1 2022 prices
Vessel	£5,520,000
Naval architecture	£552,000
Fair Isle ferry terminal infrastructure	£11,845,000
Grutness ferry terminal infrastructure	£4,611,500
Ground Investigation and surveys	£1,138,500
Civil engineering consultancy	£2,035,500
Final/Full Business Case consultancy	£40,250
Total	**£25,742,750**

The Fair Isle costs include an allowance of circa £1.24m to reflect the challenges of delivering a major civil engineering project on this geographically remote island. These challenges include mobilisation, weather, transport to and from site, working around the avian migration season and securing accommodation for the workforce.

The economic costs are summarised below:

- Nominal undiscounted costs, inclusive of optimism bias.
- Base-year, real discounted prices (£, PVC) by financial year:

	FY2022/23	FY2023/24	FY2024/25	FY2025/26	Total
Nominal, undiscounted costs, inclusive of Optimism Bias	£1,144,627	£7,285,641	£19,282,091	£15,107,341	**£42,819,700**
Economic costs in base-year, real discounted prices (£PVC)	£1,144,627	£6,762,024	£16,626,061	£12,125,106	**£36,657,818**

Describe how the economic benefits have been estimated

As has been alluded to throughout this application, the focus of the proposed investment is on ensuring the long-term sustainable future of the Fair Isle community. There are not therefore any significant monetisable benefits in terms of conventional transport appraisal, for example journey time savings, agglomeration, land value uplift, reduced vehicle operating costs etc. This question is not therefore directly applicable.

However, unlike most transport investments, the 'do nothing' option in this context does not imply a continuation of the current day situation, rather it would entail a significant deterioration in the position of Fair Isle. There is therefore some benefit in setting out the potential implications of the 'do nothing' for Fair Isle (the eventual withdrawal of MV Good Shepherd IV), highlighting the impact of not investing:

- Whilst the Fair Isle ferry service has a published timetable, the weather and sea conditions en-route meant that only 22% of sailings operated to timetable in 2018. As the current crew is island-based and heavily invested in the community, they will operate a sailing as soon as the weather permits if the timetabled service is cancelled (the crew operate on an average hours contract, which provides significant flexibility, whilst a Shetland mainland crew would likely work on a fixed hours contract, providing less flexibility to respond to weather windows). If MV Good Shepherd IV is not replaced and withdrawn from service, Fair Isle will have to be served by a mainland vessel and crew. This will significantly limit timetable flexibility due to restrictions on crew operating hours and markedly reduce the overall number of

	connections to the island. Indeed, given the pressure on ferry availability in Shetland at present, this would lead to the worsening of connectivity for one or more of the other islands. - If the vessel was no longer based in Fair Isle, the seven permanent crew would need to relocate to Shetland mainland or be made redundant from their role. > If the crew and their families relocated, this could potentially reduce the permanent population of Fair Isle by a quarter or more, bringing into question the long-term sustainability of the island, particularly given that the crew fulfil multiple roles, providing fire cover at the airfield for example. It would also put further downward pressure on key services, such as on-island education and health provision; > If the crew remained on-island, there would be a significant reduction in their disposable income and thus overall income for the island. - The island supply-chain would also be severely disrupted. This would impact on both inbound consumables (e.g., food, building materials, animal feed, plant, diesel and fuel oil etc.) and exports, particularly livestock which must be moved within regulated travel times. - The scientific, cultural and tourism importance of Fair Isle would also be compromised and potentially lost. Of particular importance - when set against the impact of changing climate patterns on wildlife - is the impact on the Fair Isle Migration Project, a now 60-plus year time series of information on avian migration patterns. FIBO opened in 1948 and is currently undergoing a rebuild following the destruction of the building by fire in 2019. The Observatory is estimated to directly contribute £350,000 per annum to the local economy and the rebuilt facility will support seven full-time equivalent jobs – this is a significant level of economic activity in Fair Isle, where the population is around 50 and the economy is otherwise founded on agriculture, cottage industries and public service delivery. - Tourism is important more generally in Fair Isle, and the loss of the ferry would again undermine this. Total visitor expenditure in Shetland in 2019 was £36m. Figures from the Shetland Visitor Survey 2019 estimate that 3% of all leisure visitors to Shetland visited Fair Isle at some point in their stay in Shetland, equal to just over 1,200 visitors. When applied to all visitors (including business and those visiting friends and relatives) the figure is just over 1,600 visitors to Fair Isle in 2019. Average visitor spend per person in Shetland in 2019 (excluding travel to and from the UK Mainland) was £448, although it is difficult to calculate a Fair Isle spend

	without information on how much of their trip each visitor spent in Fair Isle. Ultimately, the impact of not investing could be a failed community. This is a negative outcome in any context, but particularly for an island that makes a major scientific contribution to the United Kingdom.
Provide a summary of the overall Value for Money of the proposal	As per our response to the previous question: "**Describe how the economic benefits have been estimated**" – in the context of conventional transport appraisal, there are no significant quantifiable benefits associated with this investment. A BCR has not therefore been developed for the Fair Isle ferry project.
Upload explanatory note (optional)	N/A
Have you estimated a Benefit Cost Ratio (BCR)?	No
Describe the non-monetised impacts the bid will have and provide a summary of how these have been assessed	The non-monetised benefits, together with the highly negative consequences of the 'Do Nothing', are the main driver of this project. To emphasise again, the primary benefit of this project is ensuring the long-term viability of Fair Isle as a sustainable and thriving community. Non-monetised benefits are expressed as 'Impacts' in the 'Theory of Change', in summary, the project will: - Protect the future sustainability of Fair Isle as a community through supporting population retention, growth and a balanced age demographic (including protecting the long-term sustainability of the essential Fair Isle migration project). - It also addresses the inequalities faced by members of the community who cannot or find it difficult to access the ferry. - Provide a career path and progression opportunities for island residents working on the vessel. The ferry crew are amongst the few salaried individuals on the island and their income is important to its economic wellbeing; this is therefore intrinsically linked to supporting population retention and a balanced demographic profile. - Reduce the cost of moving goods to/from the island. Ro-Ro will allow goods to be wheeled on and off of the ferry and will remove the dependence on a weight limited crane. This will allow for economies of scale to be realised and will also largely end the costly practice of chartering vessels to move larger and heavier goods, e.g., larger cars, building materials etc. This is a key benefit given that the incomes of island residents are low.

	- Reduce the cost/increase the efficiency of maintaining essential island assets; this includes fixed island assets such as the electricity network and mobile assets which are moved to Shetland mainland for servicing/maintenance, e.g., tractors. At present, inventories of essential goods/parts are held on the island given the complexity of shipping in replacements in the event of a failure. For example, Scottish and Southern Energy maintain spare parts for the electrical system on-island which would normally be held centrally and deployed rapidly if required; they noted that these parts may reach obsolescence without ever being used but have to be held locally on a 'just-in-case' basis. - Increase the viability of new house building and refurbishment, an important issue given that the size and quality of the housing stock is a current constraint to population growth. - Improve the efficiency and coverage of public service delivery, particularly education and health. This includes both on-island service delivery (e.g., providing staff cover in the medical centre and primary school) and supporting Fair Isle residents to access high school in Lerwick and healthcare on the Shetland and Scottish Mainlands. - Support increased tourism to the island and reduce the number of tourism bed-nights lost to transport-related disruption. Re-establishing the tourism product will be essential in promoting the post-FIBO fire and post-COVID recovery of the island. This project will be a major step in the 'levelling-up' of opportunities for one of the UK's most remote and fragile communities, but one which makes a disproportionately large cultural and scientific contribution.
Provide an assessment of the risks and uncertainties that could affect the overall Value for Money of the bid	There are few risks in terms of impacts, benefits, costs and overall value for money. The investment will provide a step-change in the quality, reliability and potentially connectivity provided by the ferry service. The main risks stem from either: (i) the vessel failing to meet the needs of the community in terms of capacity, reliability, speed etc.; or (ii) the landside infrastructure being inadequate for berthing and cargo handling. These risks are minimal; we have worked closely with the crew of MV Good Shepherd IV to develop an understanding of route needs and appointed globally respected maritime civil engineers Mott MacDonald to advise on infrastructure design. Our vessel procurement approach will also minimise risk; we will either develop an output specification and seek a concept design from the market or undertake a single source procurement for a modified version of an existing vessel. This will allow the Council to iterate the solution to ensure it fully delivers the island's requirements.

	We are also commissioning the outline design work and ground investigations at Fair Isle and Grutness to inform infrastructure design. This will be undertaken in tandem with vessel design and will ensure an optimum solution which maximises service reliability. The Council is also currently developing a crew training programme and undertaking succession planning to ensure that there are no human resource risks attached to the solution. We must however emphasise again that the risk of the 'Do Nothing' significantly exceeds any of the risks associated with the investment.	
Upload an Appraisal Summary Table to enable a full range of impacts to be considered **** File upload 7 ****	Appraisal Summary Table 1	
	Upload appraisal summary table	LUF BID Preferred Option Summary Table - Shetland Islands Council.pdf
Additional evidence for economic case	None selected	

Section 8: Deliverability

Confirm the total value of your bid	£29,735,903
Confirm the value of the capital grant you are requesting from LUF	£26,762,313
Confirm the value of match funding secured	£2,973,590
Evidence of match funding (optional) **** File upload 8 ****	LUF 10 percent contribution minute of Shetland Islands Council meeting.pdf
Where match funding is still to be secured please set out details below	Not Applicable
Land contribution If you are intending to make a land contribution (via the use of existing owned land), provide further details below	Not Applicable
Upload letter from an independent valuer	N/A
Confirm if your budget includes unrecoverable VAT costs and describe what these are, providing further details below	There are no unrecoverable VAT costs for Shetland Islands Council
Describe what benchmarking or research activity you have undertaken to help you determine the costs you have proposed in your budget	It is important to note at the outset that the Council recognises the cost challenges and risks associated with working in remote island communities – it is something that we deal with on a day-to-day basis. To this end, we have invested £251k in outline design work incorporating an extensive local data collection programme to maximise cost certainty. This will soon be supplemented by a further £1m of spend on ground investigations. Given the specialist nature of the works and the remote locations of Grutness and Fair Isle, industry standard published pricing guides such as Spons Civil Engineering and Highway Works Price Book 2022 are not applicable. This is because they do not adequately cover the nature of the marine works to be undertaken, or the cost implications of working in remote locations, rather these published rates and prices are more

	applicable to works undertaken in urban or semi-rural areas on the UK mainland. The outline design and cost estimating to date has been undertaken by the Scottish port and coastal consulting engineering team from Mott MacDonald. This team works extensively in Shetland and across the Scottish islands and specialises in the design of lifeline ferry related and other maritime engineering works in remote island locations. They maintain their own schedule of rates for marine construction activities in these remote locations, developed over dozens of projects. This schedule of rates has been successfully and reliably used to prepare cost estimates for numerous projects over recent years and is regularly reviewed and updated based on recent tenders, including other works in Shetland. In developing the cost estimates which feed into the Financial Case and therefore the budget, Mott MacDonald prepared preliminary designs, followed by a detailed quantity take-off to determine the quantities of varying materials/types of work and then applied the appropriate rates. This gave a base cost for the construction works, to which an allowance was added for preliminary items (based on experience this is an assumed 20%), together with appropriate sums to cover items such as mobilisation of specialist floating plant. Lastly for Fair Isle, an extremely remote island location, a further 'remoteness factor' was added. For Fair Isle, this was an assumed 15% on all previously mentioned costs. This approach gives the estimated construction cost for each of Grutness and Fair Isle. In addition to the estimated construction costs for each location, other engineering costs, namely Design and Construction Supervision and Ground Investigation are estimated and added to create the budget cost estimate for the project. Initially Design and Construction Supervision were estimated at 10% of the construction cost, but recently a more detailed bottom-up cost estimate for this has been developed which closely matches and confirms the previous 10% allowance. The cost of the Ground Investigation was estimated based on rates applied to the number of marine and land-based boreholes and vibrocores, plus allowances for in-situ testing, laboratory testing, supervision, preliminaries, reporting and mobilisation/demobilisation of floating plant. Consideration was also given to the time of year and the associated weather risk. Following market engagement, feedback from contractors specialising in marine ground investigation highlighted that the initial estimates may have under-estimated the risks associated with mobilising a jack-up barge to Fair Isle and re-mobilising to Grutness at the required time of year i.e., March & April. The cost estimate for Ground Investigation was subsequently increased to reflect the advice received. The costs proposed in the budget are therefore based on the consultant's experience of costs for similar works in remote locations, including current works on Shetland, together with feedback from appropriate contractors and a further uplift to reflect the particular risks and challenges of undertaking work in Fair Isle.

	Lastly, as is industry standard practice, a 15% contingency has been applied to the cost estimates included in the budget cost. The OBC presented costs in Q1 2021 prices. To arrive at the value of the bid, the Q1 2021 costs presented in the OBC have been updated to Q1 2022 using 8% inflation as identified in the ONS, OPI Construction Index. These Q1 2022 sums have then been inflated through the detailed design and construction period using the June 2022 BCIS forecast, which gives the following forecast inflation on tender returns 2022/23 3.0%; 2023/24 4.1%; 2024/25 4.0%; and 2025/26 3.8%
Provide information on margins and contingencies that have been allowed for and the rationale behind them	A 15% of contingency has been applied to the naval architecture consultancy and vessel build. This is a standard figure and in our view is appropriate because: - It is proportionate to the size of the vessel; - It reflects our proposed low-risk approach to vessel specification of: > Developing an output specification and seeking a concept design from the market given that, after several searches over the preceding five years, only one pre-existing suitable vessel design has been identified; or > Following the recent development of a more detailed requirements list for the vessel, split by 'essential' and 'desirable' features and the mapping across of these features to the previously identified suitable vessel (the Marin Design MD240), the adoption of a single source procurement and adaptation of this proven vessel design to meet the operational requirements. - Vessel costs estimates have been informed by indicative quotes from yards. As discussed in our response to the previous question, all civil engineering infrastructure cost estimates have been developed from preliminary design followed by the take-off of quantities and the application of appropriate rates drawing on Mott MacDonald's specialist schedule of rates for maritime civil engineering in remote Scottish island locations. This schedule of rates is evidence-based and is regularly reviewed and updated based on recent tenders for similar works in remote island and rural coastal locations, including Shetland. Consequently, these rates already include a margin for remote locations. It is considered that this approach generally gives an acceptable level of confidence in the cost estimating. However, in the case of the works on Fair Isle, home to the UK's most remote community, an additional 'Fair Isle Remoteness Factor' (or margin) of 15% has been applied to reflect the additional logistical challenges of working in such a remote location. As Grutness is on the Shetland Mainland and more

<table>
<tr><td></td><td>easily accessible, no additional margin has been added to the Grutness cost estimate.

A 15% contingency has also been applied to the terminal infrastructure component of the investment, including ground investigations and surveys; civil engineering consultancy; and the construction itself. This is again the standard figure for works of this nature. Shetland is a mature industrial economy and has the on-island expertise and supply-chain equivalent to that found on the UK mainland to facilitate a build of this nature

As indicated above, the Fair Isle ferry terminal construction costs include an allowance of circa £1.4m (2022 cost) to reflect the challenges of delivering a major civil engineering project on a weather-exposed and geographically remote island with several environmental designations. These challenges include mobilisation, weather, transport to and from site, working around the avian migration season and securing accommodation for the workforce.</td></tr>
<tr><td>Describe the main financial risks and how they will be mitigated</td><td>As noted in our response to the previous question, the project contingencies which we have applied reflect the specific financial risks of this project, most notably the delivery of terminal infrastructure at Fair Isle.

We have actively sought to reduce risks since the LUF Round 1 application by commissioning the outline design work and ground investigations. We now have increased cost certainty but acknowledge that, as the Council will manage the delivery of the project, we are financially liable for meeting all cost over-runs.

The full project risk register is included in the attachment for this question. The main financial risks can be summarised as follows:

<table>
<tr><th>Risk Item</th><th>Strategy</th><th>Comment / Mitigation</th></tr>
<tr><td colspan="3">Vessel</td></tr>
<tr><td>Council overpays for the vessel</td><td>Manage</td><td>The Find a Tender procedure is likely to attract a limited number of bids compared to a commercial approach of working through shipbrokers. There is therefore a risk that the lowest cost is not achieved. However, it is mandatory for the Council to work through this process. This risk can therefore only be managed.</td></tr>
<tr><td>Cost of constructing the vessel exceeds forecast costs</td><td>Transfer</td><td>It is standard practice for shipyards to take the risk on the cost of newbuild vessels as they are best placed to manage that risk. This risk will therefore be transferred through a fixed price contract for an agreed design specification. Care will be taken to ensure that the final design is that of the shipyard, as then any design error costs are for their account and not a claim against the Council.</td></tr>
<tr><td>Construction process does not go to plan</td><td>Transfer & Manage</td><td>As the Council has limited recent experience in managing a ship build, we will transfer this risk by appointing a specialist firm (with relevant experience and professional indemnity insurance) to supervise and manage the build.</td></tr>
</table>
</td></tr>
</table>

			If the cost of appointing a specialist firm is excessive, this risk will be **managed**.
	Vessel is not completed on-time or at all because the shipyard encounters financial difficulties	Transfer or Manage depending on cost	The Council will **transfer** this risk through applying an appropriate financial standing threshold in the PQQ (without it being punitive) and the purchase of Freight, Demurrage and Defence (FD&D) insurance. We will also seek a refund guarantee. If the premiums for FD&D insurance are excessive, this risk will be **managed**.
	Vessel's completion is delayed	Transfer or Manage depending on cost	Delays to new vessels are highly common. We may **transfer** this risk by including delay damages within the contract, although not to the extent that they are punitive and deter yards from bidding. However, this could increase the cost of the contract/reduce competition and, if this is considered likely, this risk will be **managed** through regular progress meetings with the yard.
	Landside Infrastructure		
	Outturn cost identified through tenders is higher than anticipated.	Manage & Transfer	Costs will be updated through detailed design and FBC stage and an appropriate contingency retained until final tender prices are received – i.e., this risk will be **managed**. Once tenders are received, this risk will be transferred to the contractor. Our preferred procurement strategy involves fixed price lump sum contracts for the works at both Fair Isle and Grutness.
	Inflation over the delivery period exceeds forecasts	Manage	Annual Inflation assumptions have been applied to the costs and will be reviewed regularly throughout the project. Contingency is included to **manage** and mitigate this risk, but the Council ultimately accepts ownership of this risk.
	Limited contractor market availability/ resource and/or limited appetite for risks associated with working in a very remote area	Manage	The Scottish marine maintenance and construction market is buoyant due to the generational nature of maintenance and replacement works, so this is a key risk. It is a particular risk in Shetland given large local windfarm construction projects. The contingency – including the additional Fair Isle 'remoteness contingency' – is intended to account for the risk of inflated costs associated with a buoyant market. Costs risks associated with market conditions will be reviewed regularly throughout the project to **manage** this risk, and the Council again ultimately accepts ownership of this risk.

It should be noted that, for Ground Investigations, we are utilising an Early Contractor Involvement (ECI) phase to jointly assess, mitigate and manage risks, including ownership. This is aimed at reducing the cost risk associated with availability of on-island accommodation, weather risk on mobilisation and remobilisation between sites and vessel charter for getting land-based plant to Fair Isle. An ECI approach may be considered for the main works.

Upload risk register	Fair Isle Ferry Project LUF Bid Risk Register - Shetland Islands Council.pdf

**** File upload 9 ****	
If you are intending to award a share of your LUF grant to a partner via a contract or sub-grant, please advise below	N/A
What legal / governance structure do you intend to put in place with any bid partners who have a financial interest in the project?	Not applicable – Shetland Islands Council is the sole bidder for this application.
Summarise your commercial structure, risk allocation and procurement strategy which sets out the rationale for the strategy selected and other options considered and discounted	Chapter 9 of the OBC, the Commercial Case, sets out our preferred commercial structure, risk allocation and procurement strategy. This is summarised below. It should be noted that our preferred approach reflects the direct experience of the combined Council and consultant team in successfully specifying, procuring, delivering and managing new vessel and marine infrastructure projects. **Commercial Structure:-** The project will be delivered directly by the Council supported by external professional advisers as described in the Management Case of the OBC. The project will be delivered within the project governance framework of the Council and in accordance with all requirements of the LUF fund. The following contracts will be procured: - Outline design and Ground Investigation specification and tender procedures (already procured). - Ground Investigation Works (out to tender). - Landside infrastructure detailed design and supervision of GI works and construction works. - Naval architecture services. - Vessel construction. - North Haven (Fair Isle) construction works. - Grutness construction works. **Procurement Strategy:-** **Vessel:** Five potential options were considered for procurement of the vessel: 1) Procuring a bespoke vessel based on a precise specification. 2) Providing an output specification to the market. 3) Using an existing proven design. 4) Developing a concept design to take to market to complete detailed design and build. 5) Identifying suitable second-hand tonnage.

The sea conditions and shoreside interface issues on the Fair Isle route mean that a bespoke or modified existing vessel design will be required. Given the multitude of requirements for any future vessel, the preferred option is for the Council to develop an output specification and seek a concept/existing design from the market based on this or pursue a single source procurement for a modified version of the MD240 vessel.

The vessel will be maximum 24 metres length overall and there are numerous shipyards around the UK and abroad that could bid for this work.

Terminal infrastructure:
The information below summarises the preferred approach to delivering the infrastructure works at Fair Isle and Grutness:

	Fair Isle	Grutness
Type of Contract	Traditional, with some Design & Construct elements (winch and cradle etc).	Traditional
Single or Multiple Contracts	1No. contract	1No. contract
Open or Restricted	Restricted (shortlist established before tender documents issued)	Restricted (shortlist established before tender documents issued)
Lump Sum or Remeasurable	Lump Sum	Lump Sum
Fixed Price or Target Price	Fixed Price	Fixed Price
Form of Contract	ECC Option A (NEC4)	ECC Option A (NEC4)

Our approach to the landside infrastructure procurement is standard for contracts of this nature. However, we have split the Fair Isle and Grutness works into separate contracts as they are two distinct sites which are a considerable distance apart, with different risk profiles, consenting requirements and specialist skills required. This approach spreads resource risk. Early Contractor Involvement (ECI) is also being considered as a means of mitigating design and construction risks.

Sourcing Options:
As a public body, the Council is required to procure the new vessel and landside infrastructure in accordance with the Public Contracts (Scotland) Regulations 2015 (P(C)SR 2015). The proposed scale of works in this context will exceed the financial thresholds for works laid down in P(C)SR 2015 and thus are subject to the full set of requirements under the legislation. We will though pursue a restricted procedure for the landside infrastructure to ensure that we have a high-quality shortlist established before tender documents are issued. The procurement procedure(s) to be adopted will be confirmed at FBC stage, following the completion of detailed design.

	Risks: The full project risk register is included as an attachment to the previous question. Given the limited residual life of the existing vessel and the seasonal nature of construction works at North Haven and Grutness, the project is programme critical and the key risk relating to the Commercial Case is potential delay to the procurement process due to the time required to get internal Council approvals, consents and secure funding. This is being mitigated in-part through initial working 'at risk' to tender works whilst funding is sought. We have also been actively engaging with statutory stakeholders in relation to obtaining consents for the ground investigation work and in seeking scoping and screening decisions for Fair Isle and Grutness respectively, thus de-risking the consent process and allowing supporting environmental surveys to be progressed early. **Management of contractors:** An experienced maritime civil engineering consultancy firm will be appointed to: - Supervise the undertaking of the Ground Investigation and construction works. - Administer the Ground Investigation and construction contracts. The procurement of these services will require review of CVs to ensure that only suitably qualified and experienced personnel are nominated for the required roles. The appointed firm will report to the Council's Project Manager For the Ground Investigation it is anticipated that site supervision can be on a part-time visiting basis at Grutness on Shetland Mainland but will be full time on Fair Isle. Head office support will be provided throughout, including contract administration, scheduling of laboratory testing and review of factual reports. For the construction works, it is anticipated that: - At Grutness, the NEC Supervisor will be on-site for several hours per day, each day the works are being undertaken. - At Fair Isle, the NEC Supervisor will be full time on-site. For both locations, the NEC Project Manager will virtually support the NEC Supervisor via MS Teams etc. and will physically visit site monthly. - Monthly Progress Meetings will be held while the NEC Project Manager is physically on site. To ensure availability of required personnel, Risk Reduction Meetings will be scheduled monthly, mid-way between Progress Meetings thus ensuring senior personnel meet at least fortnightly. Where necessary, additional Risk Reduction Meetings and/or technical meetings will be arranged on an ad hoc basis.

	It is anticipated that Progress and Risk Reduction meetings will be attended by senior contractors' staff, the NEC Project Manager, the NEC Supervisor and the Council Project Manager as a minimum. Other senior Council staff will occasionally attend. Progress reports including commercial and financial aspects such as forecast completion dates and out-turn costs will be issued at least monthly. The appointed Naval Architect will oversee vessel construction, providing construction supervision and contract administration services similar to those described above for the port infrastructure. The Naval Architect will report to the Council's Vessel Project Manager, who will report to the Council's Project Manager. The Council Project Manager will report into the SIC Project Board. **Net zero:** MV Good Shepherd IV is a diesel vessel and thus emits greenhouse gases. It is proposed to replace her with a low or zero emission vessel. The sea conditions on passage to Fair Isle together with limited electricity supply on the island means that we have not yet determined the most appropriate propulsion system, and this is something from which we will seek solutions from prospective suppliers. The Council, as a partner in the ORION Clean Energy Project, alongside Strathclyde University and industry partners, undertook a feasibility study, 'The Neptune Project', that aimed to develop a desk-based decision modelling tool to help analyse the current local maritime sector and the options/paths to decarbonise the local sector. The information, resources and outcomes from the project will be carried forward into the next stage of the Fair Isle project to inform the decision-making process for development of a replacement vessel and the effective options to reduce or achieve net zero emissions. Where net zero emissions are not possible consideration will be given as to how a replacement vessel will transition to net zero in the future. **Objectives of The Neptune Project:** - mapping the fleets operating around Shetland. - collecting data about their operations and power usage and what it is used for. - gathering data regarding potential energy generation within Islands for the Marine Sector. - mapping the port facilities and understand any limitations. - identifying appropriate clean decarbonised technologies for each type of ship. - creating digital model to capture scenarios for each vessel type. - creating desktop tool that can model vessels.

	- looking at what clean energy is applicable to them and build a digital model of the energy system within Shetland using the 'well to wake' system.
Who will lead on the procurement and contractor management on this bid and explain what expertise and skills do they have in managing procurements and contracts of this nature?	The project overall will be led by Shetland Islands Council, who will lead the procurement and overall governance of the project, with support from appropriate consultants. A dedicated Council Project Manager (Lee Coutts) has been appointed, providing continuity with the OBC preparation, detailed design work and this application. The Council has previously delivered several ferry build projects and regularly delivers marine infrastructure maintenance and replacement projects. This is therefore an area in which we have significant in-house expertise, a well-developed supply-chain and established relationships with shipyards and marine civil engineering contractors. We are also uniquely placed to understand the specific challenges of building in Fair Isle, having worked with Scottish & Southern Energy and Scottish Water to deliver major projects on the island. To date, the combined Council and consultant team (Stantec, Mott MacDonald, ProVersa and SMCL) have worked collaboratively drawing on their complimentary experience and expertise to deliver the Shetland Inter-Island Transport Study; develop the Outline Business Case for this project; and more recently to progress the project to the current state where surveys have been undertaken, infrastructure designs further developed, cost estimates refined, Ground Investigation works designed and the vessel requirements further refined. The engineering consultant Mott MacDonald has extensive experience in the design and procurement of marine ground investigations and in identifying associated risks. Supporting the Council, they have developed a procurement strategy to address the particular risk profile associated with undertaking marine GI at these locations in early spring in order to satisfy the environmental constraints reflected in the appropriate consents. The Ground Investigation Works are currently out to tender. To comply with public procurement regulations, the Council is developing tender documents to enter competitive procurement exercises to secure the services of: - A suitably qualified and experienced naval architect to support the design and procurement of the new vessel, together with construction supervision and contract administration. - A suitably qualified and experienced environmental consultant to develop the supporting environmental studies to support consent applications for Grutness and the Environmental Impact Assessment necessary to support consent applications for Fair Isle. - A transport planning consultant to develop the FBC. - A suitably qualified and experienced engineering consultant to supervise and manage the GI contract, develop the detailed designs and tender documents for the civils infrastructure at both

	locations, support the Council through the procurement exercise and ultimately to supervise construction and support the Council in management of the construction contracts. These procurement exercises will be sole source appointments or will involve a pre-qualification stage to ensure only suitably qualified and experienced tenderers progress to having their tenders evaluated. Recognising the specialist nature of the works and the remote location, the tenders will be based on best value and will be assessed on a weighted scoring of quality and price. The successful bidders will work collaboratively with the Council going forward. The consultants will be responsible for day-to-day supervision and management of the ground investigation, vessel build and civil engineering contracts reporting to the Council's Project Manager.
Are you intending to outsource or sub-contract any other work on this bid to third parties?	It is not Shetland Island Council's intention at present to outsource or sub-contract any other work related to the subject of this bid. Existing Council officers with long-term experience of the design, procurement, construction and operation of ferries and port facilities will continue to provide oversight of the project. Financial, legal and procurement oversight will also be provided from within the Council. As noted in our response to the previous question, we propose to procure the following expertise to deliver the project – a suitably qualified: - naval architect - transport planning consultant - environmental consultant - engineering consultant The appointment of the transport planning, environmental and engineering consultants will be undertaken through a sole source appointment from an established framework or a competitive best value tender process through the Public Contracts Scotland portal. Naval architecture is specialist, and we will therefore advertise this opportunity through the Public Contracts Scotland portal, likely using a 'Restricted Procedure' (Regulation 29). The current Council Project Manager will continue to take responsibility for day-to-day management of the project providing oversight and guidance where necessary to the appointed consultants. In turn, the appointed consultants will supervise construction and manage the construction contracts, reporting to the Council Project Manager. As per the Management Case of the OBC, it is possible depending on resources and expertise that we will appoint an external consultant to fill the Project Manager role. Specialist financial, legal and procurement advice will also be secured externally if required. The procurement approach for these roles would be defined at the point at which they are progressed. To

	reiterate however, it is our intention at present for these roles to be filled directly by the Council. For the construction contracts, Early Contractor Involvement (ECI) is being considered as a means of mitigating design and construction risks relative to working in a remote environment. This will bring in the contractors' supply-chains. A quality / price procurement process will be adopted. KPIs will be developed in accordance with the particular form and conditions of contract.
How will you engage with key suppliers to effectively manage their contracts so that they deliver your desired outcomes	The Council is currently preparing tender documents to engage with the consultants required to support it in taking this project forward. Subsequently, supported by the appointed consultants, we will engage with contractors to deliver the works. We cannot and will not lose sight of the fact that the selection/design of an appropriate vessel to provide a reliable ferry service and the seasonal construction of the necessary infrastructure on Fair Isle to support the UK's most remote community presents a unique set of challenges and risks. The selection and management of appropriate consultants and subsequently appropriate contractors is key to delivering the desired outcomes. Initial engagement with consultants will be through a sole source appointment or a best value procurement process including pre-qualification to ensure that only suitably qualified consultants with demonstrable relevant experience and the desired collaborative approach are appointed. Subsequently, a similar approach will be adopted in engaging construction contractors. Having appointed the consultants and contractors, we will engage with them to effectively manage their contracts, ensuring that they deliver the desired outcomes. This will be achieved as follows: **Governance:-** - The Council has appointed a suitably qualified Client Project Manager and contract-specific Project Managers. They will be available as necessary to manage the appointed consultants with a focus on ensuring that the desired outcomes are delivered. - The Client Project Manager will report to the Council Project Board who will have a scrutiny and management role and maintain oversight, ensuring appropriate strategic direction. - The Client Project Manager will set out clear roles and responsibilities (as described in the appropriate contracts) and will ensure that the correct procedures are in place and adhered to for change control whether scope, deliverables or objectives. - Communication requirements will be clearly established and delivered on, whether within disciplines or across disciplines e.g., the interface between naval architects and civil engineers. - Active risk management around consenting constraints and both the vessel and infrastructure design and construction will be

	adopted, thus managing the risk around the delivery of the project as a whole as well as the individual components. - Building a strong team culture across all parties. **Delivery:-** - Actively work with all teams to oversee and manage delivery, recognising that interfaces require additional management effort to ensure smooth delivery. - Monitor and manage both the overall project programme and the individual contract programmes on a continuous basis. Recognise the potential impacts of delay in one contract on related contracts and seek collaborative approaches to mitigate any such impacts. - Address items of concern early, engaging suppliers to identify the best solutions for the benefit of the project overall. All of the above will be achieved through regular contact, formal meetings such as progress meetings, coordination meetings and risk reduction meetings where appropriate. Supplier risks will be controlled and mitigated through the adoption of Early Contractor Involvement. The use of an ECI process brings contractors and suppliers into the process at a point where the planning and even the design can take account of the particular challenges of the project. To ensure that consultants deliver on quality, the following controls will be put in place: - The consultants will be procured either using a sole source appointment of consultants with an established track record of working in Shetland or on a quality/price basis, with the quality criteria focussed on consultants demonstrating an understanding of the client's objectives, the nature of the locations and the challenges of designing and constructing in these conditions. In the procurement process, we will seek references for similar projects. - We will implement a robust project management framework which will include a proportionate approach to risk and cost/progress monitoring, with performance indicators related to required quality criteria and outcomes. The appointed consultants will be responsible for ensuring the quality of vessel build and infrastructure construction. However, this will be supplemented by: - Regular visits to the shipyard and the infrastructure construction sites by experienced members of the client team. - Consideration of monitoring visits by a classification society such as Lloyds during build of the vessel. - Consideration of monitoring visits by an independent third party to periodically confirm construction of the infrastructure meets the specification requirements.

The Council will specifically require a refund guarantee on the vessel contract, as is common practice for vessel builds.

To mitigate risks around the performance of construction contractors the following measures will be implemented during procurement:

- A restricted procedure with shortlist will be used to ensure that only suitably qualified and experienced contractors progress to tender.
- Financial checks will be undertaken on all prospective tenderers to ensure their financial wellbeing:
  - > 3 years of audited accounts will be requested and reviewed
  - > Bank guarantees will be required
  - > Credit checks will be undertaken
  - > Consideration will be given to the size of tenderers annual turnover compared to the estimated construction costs and duration, in order to confirm that tenderers can reasonably finance the project cashflow.

The Council utilises an in-house financial assessment tool which calculates the ratios from the financial information contained within the submitted company accounts.
Ratios and information analysed include:

- Net Worth
- Capital Employed
- Working Capital
- Liquidity
  - > Quick Ratio
  - > Current Ratio
- Profitability – pre-tax profit margin
- Assets
  - > Debtors Payment Terms
  - > Creditors Payment Terms
  - > Gearing

In addition, the Council will read the accounts management commentary and may seek an Equifax check. Providing contextual information and enabling comparison to particular industry standards, offsetting the financial risks of doing business with that supplier.

For any contracts issued throughout the project a Contract and Supplier Management (CSM) Plan will be established and agreed during a Contract Implementation Meeting. The CSM Plan will cover:

- CSM responsibilities matrix
- Communications
- Performance
- Supplier Motivation
- Payment schedule(s)
- Dispute/Conflict resolution
- Contractual development(s)

	- Exit/termination and its strategy including potential need for re-tendering - Continuous contract evaluation and frequency of contract and performance review meetings - Contract management reporting
Set out how you plan to deliver the bid	Chapter 10 of the OBC, Management Case, sets out how we propose to deliver this project. Since completion of the OBC in 2019 and its update for the LUF Round 1 bid (2021), we have commenced outline design, ground investigations and consenting, which has provided us with increased certainty around costs and programme delivery. The Delivery Plan is summarised below. **Milestones:-** The programme of work commenced in June 2021 and, given the requirement for seasonal working at Fair Isle, will conclude in September 2025. Four additional months of 'float' has been added to the programme as a contingency. It should be noted that, due to a combination of the critical path associated with replacing the vessel and the requirement for seasonal working, the vessel will enter service before the Ro-Ro infrastructure is completed and will operate on a Lo-Lo basis initially. Key milestones (completion dates) are as follows: - Award outline design and develop GI contract: awarded July 2021, for completion August 2022. - Appointment of naval architect and develop vessel specification: February 2023. - Award contract to shipyard: June 2023. - Ground investigations: contractor appointment August 2022, works complete July 2023. - Detailed design: October 2023. - Sign-off of vessel design: November 2023. - Final Business Case: April 2024. - Construction works at Fair Isle and Grutness; Phase 1: November 2024. - New vessel enters service: March 2025 (vessel will operate on Lo-Lo basis until infrastructure works completed). - Construction works at Fair Isle and Grutness; Phase 2: September 2025. **Dependencies:-** - Requirement to replace MV Good Shepherd IV by March 2025 (life-expiry date). - Award of consents for ground investigations and construction – work has commenced on this item with GI consents expected in July 2022 with consents for construction works to follow. - Completion of infrastructure works to accommodate new vessel when it enters service.

- Seasonal working windows – ground investigation and construction must take place April - September to minimise weather-related delays.

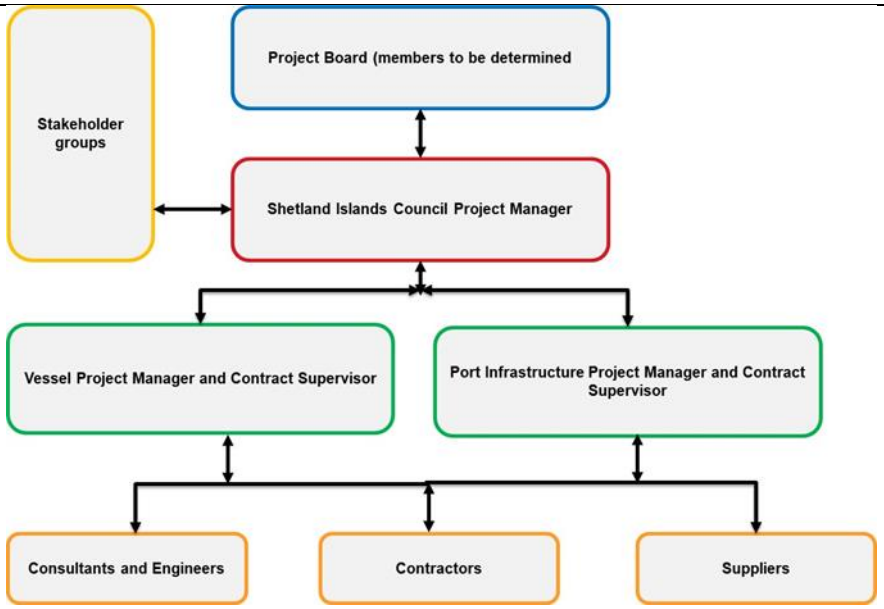
Roles and Responsibilities:-
The information below summarises the organisations and individuals which will fill each role in the project team:

Role	Individual / Organisation
Project Board	Representatives of external funding partners, Chair of ZetTrans/ Council Environment and Transport Committee, the Council Chief Executive, ZetTrans Lead Officer, selected Directors, Heads of Service and relevant Officers
Council Project Manager	Council Officer(s); and/or fixed-term appointment; and/or consultant
Client's Designers (Vessel and Infrastructure)	External appointments through competitive tender
Vessel Project Manager & Contract Supervisor	External appointment through competitive tender
Port Infrastructure Project Manager & Contract Supervisor	External appointment through competitive tender
Financial advisers	Shetland Islands Council Finance, with external advice procured where required
Legal advisers	Shetland Islands Council Legal, with external advice procured where required
Vessel contractor	To be determined through competitive tender
Fair Isle contractor(s)	To be determined through competitive tender
Grutness contractor(s)	To be determined through competitive tender

The Council Project Manager will deliver project management and governance, ensuring that the benefits set out in the business case are being realised.

Subject to assembly of the above team, we can confirm that there are no gaps in our skills, capability and capacity. We have previously delivered several successful vessel builds and ferry terminal upgrade projects, as well as infrastructure projects in Fair Isle, and are fully aware of the skills and human resource requirements attached to this.

Managing Delivery Partners:-
The delivery team will be structured as per image 9, Appendix 5.



To summarise:

- Ultimate responsibility for the delivery of the project will rest with the Project Board.
- The Board will be guided by an advisory Stakeholder Group, the composition of which is discussed in Section 10.4 of the OBC.
- Day-to-day management will be undertaken by the Council Project Manager.
- The vessel build and landside infrastructure workstreams will be led by dedicated Contract Project Managers, who will manage the programme, dependencies, budget and contractor interface.

The Council Project Manager will play a pivotal role, acting as the interface between the Board and the Contract Project Managers, ensuring that the project and its benefits are delivered as required, whilst also escalating any issues to the Board for consideration.

Stakeholder Management:-
The Council Project Manager will be responsible for developing and implementing a Stakeholder Management Plan, the purpose of which will be to ensure close liaison with stakeholders and the local community is maintained and that they are informed of plans, milestones, service impacts, FAQs etc. Stakeholders can broadly be split into four categories:

- Statutory
- Strategic
- Operational
- Local

Individual stakeholders in each category and the approach to engaging them is described in the OBC; it should though be noted that ongoing community engagement will be an integral component of project delivery. A project website will be established and maintained by the Council.

	Powers and Consents:- The following consents are required for Fair Isle and Grutness: - Planning permission. - Confirmation that the Harbour Order permits construction within the harbour limits. - Marine licences. - Amendments to lease agreements with the National Trust for Scotland and the Crown Estate. - An Environmental Impact Assessment, Equality Impact Assessment and Island Communities Impact Assessment will be required to support the applications for consents. Applications to statutory bodies for GI consents have been submitted. Applications for construction consents are under development but cannot be submitted until detailed design is well-progressed. The consenting timelines have been incorporated within the programme. **Progress Monitoring:-** Clear reporting arrangements should be established to ensure progress against the programme timescales and budget are communicated effectively. Project reporting will focus on the following aspects of project delivery: - Progress on each work stream – vessel, North Haven and Grutness - Key activities to be undertaken before the next report/meeting - Spend against budget - Review of strategic risks and issues - Benefits realisation Project reporting will be carried out throughout the project, with a weekly reporting cycle for each stream of work; e.g., the terminal infrastructure contractors will report to the Port Infrastructure PM, who will in turn report to the Council Project Manager and so forth.
Demonstrate that some bid activity can be delivered in 2022-23	Our programme demonstrates that work on this project commenced in June 2021 and thus we have already started delivering bid activity. Key tasks in financial year 2022/23 include: - Completion of the outline design - Undertaking of the GI at North Haven and Grutness - Tendering and commencement of the detailed design - Tendering of the Final Business Case - Appointment of a naval architect
Risk Management: Set out your detailed risk assessment	The risk management strategy is included in Section 10.8 of the OBC and the risk register attached. The information below summarises the main programme and delivery risks (i.e., non-financial risks) and mitigation associated with this project.

Risk	Mitigation
Vessel completion is delayed. This has particular implications given vessel life expectancy.	Potential inclusion of delay damages/early delivery bonus in vessel contract. Exploration of minimal life extension to MV *Good Shepherd IV* or, more realistically, serving Fair Isle with a Shetland mainland-based vessel for a short-period.
Inclement weather delays on-site work - this is a major risk in the context of Fair Isle, both in terms of physical work on-site and the movement of contractors/equipment to site.	This risk can only be managed rather than eliminated. As per the programme, site works will avoid the winter period to minimise the risk of disruption.
Landside infrastructure project completion delayed once on site. This is a major risk given vessel life expectancy.	Potential inclusion of delay damages/early delivery bonus in contract Use of new vessel on Lo-Lo basis pending construction of the linkspan.
Limitations on site works during avian breeding season	Issue is being explored through the consenting process and will be incorporated in the project plan in the FBC. This risk will be reassessed at that stage.
Inability to secure accommodation on Fair Isle for contractors and/or displacement of tourists	A site plan will be developed as part of the FBC and, in partnership with the Council PM, engagement with the local community will take place to explore how impacts can be minimised. A temporary accommodation camp is being considered; an approach frequently adopted with construction projects in Shetland.
Harbour closures during works periods	The detailed project plan will seek to minimise disruption and will identify any proposed harbour closures. Where Grutness is closed, the service will be redirected to Lerwick. The Fair Isle service is however operated on a highly flexible basis and the works are scheduled to minimise disruption to services and operation of the harbour, which will assist in reducing the impact of any closures.

Overall, this a relatively standard vessel and marine civil engineering project where common risk mitigation approaches will be appropriate. However, the two major exceptions are: (i) the weather-related risk associated with construction works on Fair Isle, which can only be managed rather than eliminated; (ii) consenting, which could impact the programme either through the time taken to gain consents or through conditions in the licences.

	The Council Project Manager will have full responsibility for risk management. This individual will maintain daily liaison with the Vessel and Port Infrastructure Project Managers escalating key risks to the Project Board as appropriate. The Council has significant experience of supporting building projects in Fair Isle and other remote islands such as Foula, including supporting SSE on moving labour and materials for the Fair Isle Electricity Project and the National Trust for Scotland for housebuilding/refurbishment, and thus is accustomed to the risks and delivery challenges associated with this.
Provide details of your core project team and provide evidence of their track record and experience of delivering schemes of this nature	The construction, operation and maintenance of ferries and terminal infrastructure is a core component of the Council's remit. We have funded, procured and own and operate a fleet of 12 ferries and 16 ferry terminals across the archipelago. Our operation is widely regarded as being an exemplar in efficiency, in terms of how we have procured assets and our operating philosophy, which is focused on short sea crossings and bespoke solutions for individual islands where necessary. Most recently, the Council has procured and delivered two tugs (2011) and four Ro-Ro ferries; MV Linga (2001), MV Filla (2003), MV Dagalien and MV Daggri (2004), and supporting infrastructure since 2000 with a total value of circa £50m. Our approach is based on collaborative working with shipyards and civil engineers and active risk sharing and management. We successfully delivered the four ferries referenced above on budget and with outturn costs well below those typically associated with new vessel builds in Scotland. The Senior Responsible Officer for this application oversaw these builds and brings direct experience in this area. Our Ferry Service also operates an intensive vessel maintenance and drydocking programme, ensuring that our vessels have lasted well beyond the expected 30-year lifespan in Scottish waters. As our ferries serve nine islands, we have extensive corporate experience of maintaining/upgrading marine infrastructure, e.g., the new Hamars Ness breakwater (2012) and linkspan life extension (2020-21) projects. Lessons learned are included in the OBC (Section 10.2). Whilst we have a proud delivery track record, we also recognise that, for reasons of both expertise and resource, external support is required to deliver such projects. We have adopted a long-term approach in this respect, weighting our tenders towards quality and building durable long-term relationships with our consultancy partners. It is essential for us that our contractors understand the specifics of working in Shetland and the particulars of our communities, which are often different from elsewhere. Rather than having a typical client-consultant relationship, we work as a single integrated team, with the Council inputting operational expertise, coordinating cross-Council data requirements and feeding in local knowledge to the work being undertaken.

	In developing this project, we have worked with a team of consultants with whom we have established a strong relationship over many years, these are: - Stantec UK Ltd, who led the development of the Fair Isle SOBC and OBC and who have also undertaken the consenting work as part of the outline design. Stantec has developed almost all ferry and marine infrastructure business cases in Scotland in recent years, as well as ferry-related business cases for Liverpool, London and Auckland. They bring UK-wide expertise, but also an extensive track record of working in Shetland (and Fair Isle specifically) where they have come to understand the key local issues and community aspirations. - Mott MacDonald Ltd, who input the infrastructure component of the OBC and are now leading the outline design work. As well as having a local presence in Shetland and leading the recent linkspan life extension work, Motts have also designed, developed and managed the delivery of ferry infrastructure projects in remote and rural areas across Scotland, including in Islay, Coll, Tiree and Mull. They bring particularly useful experience in terms of the costing and resourcing of marine infrastructure projects in remote rural areas. - Spencer Marine Consulting Ltd, whose Director Lorna Spencer was previously Director of Harbours and sat on the Board of the Scottish Government's marine asset owning company, Caledonian Maritime Assets Ltd. SMCL has provided direct experience of vessel and infrastructure procurement for publicly owned services in an island context and has advised us on the structuring of the project delivery team, governance and assurance. - ProVersa Ltd, an SME providing expert advice in freight and logistics and have advised on measures which could support the strengthening of the Fair Isle supply-chain, which was a strong component of the justification for a Ro-Ro solution. - Eyland Skyn, a Stronsay (Orkney) based SME recently brought into the team. They bring specific experience of carrying out Island Communities Impact Assessments and 'island-proofing' of options. We continue to work with the above organisations and will seek their support in: - Defining the job specification for the Council Project Manager. - Developing the tender documents for the GI and detailed design. - Preparing the FBC. - Developing the vessel specification requirements and the design of the tender for a naval architect. Depending on the outcomes of any future tendering, these organisations may directly support us in delivering the project.
Set out what governance	The Council has a number of processes and procedures in relation to projects to be undertaken, with the following a list of key documents:

procedures will be put in place to manage the grant and project	- Shetland Islands Council's Constitution, Parts A to H, covering Governance, Financial Regulations and Contract Standing orders, to name a few. - Employee Code of Conduct. - A six-stage 'Gateway Process' for the management of capital projects - this will be applied to this project (This is based on the PRINCE2 project management framework and, from a business case perspective, the *Green Book* and *Five Case Model)*. - A draft Integrated Approvals and Assurance Plan (IAAP) can be found in Appendix 4. The IAAP is currently in draft at this stage of the business case/project development, i.e., working towards a completed Final Business Case. The Council's Constitution and 'Gateway Process' documents outline the corporate governance structure and procedures for Council activities. For this project the key features of the project governance are: Project Board; SRO; Sponsor; Project Manager; Project Team; Asset Investment Group; - Executive Manager - Asset, Commissioning and Procurement (Chair) - Corporate Management Team Corporate Management Team; - Chief Executive - Directors > Infrastructure Services > Development Services > Corporate Services > Children's Service > Community Health & Social Care - Executive Manager - Finance (Section 95 Officer); - Executive Manager – Legal and Governance; - Executive Manager – Human Resources Committees include: Environment and Transport Committee; Policy and Resources Committee; Full Shetland Island Council. For any project to proceed through this process, a robust business case is first required. The Fair Isle OBC has been approved through the committee

	process and Full Council and features on the Council's 'Asset Investment Plan' (AIP). The Council operates a five-year AIP covering the medium-term financial planning period, where Council Managers have a key role to supply the Executive Manager - Finance and Executive Manager - Asset, Commissioning and Procurement with accurate and timeous information. Council approval of the AIP gives Managers the authority to incur appropriate expenditure so long as the expenditure is legal and the Gateway Process for the Management of Capital Projects has been followed. The Executive Manager – Asset, Commissioning and Procurement ensures, through the Gateway Process for the Management of Capital Projects, that all projects included on the AIP are linked with the Council's priorities as set out in the Corporate Plan and are assessed through the Gateway Process irrespective of the identified funding stream. No Capital expenditure should be incurred prior to the project being included in the Asset Investment Plan. An Assurances and Approvals Plan is set out in Section 10.5 of the OBC Management Case. Of particular note is the requirement to: - Undertake detailed design to achieve greater cost and technical certainty - Develop an FBC following detailed design, when a clearer position on costs, funding and procurement approach have been defined After Gateway 3, the project moves from the business case development stage into the implementation stage, which is where the resourcing and governance arrangements change to reflect the shift from a governance process to a technical one. The Council PM will provide a weekly dashboard report on progress against plan; budget forecast versus actual spend; and risk status (through an updated risk register). The Project Board will meet weekly to review these updates and, where a new risk has emerged or an existing risk is escalating, agree suitable mitigation. We assume that a UKG representative will sit on the Project Board but, if not, these updates will be provided to a nominated contact. At each stage of the project approval to progress is made through the Project Board, referral to the Asset Investment Group before reporting to the Policy and Resources Committee to make a recommendation to the Full Council. Where additional spend or cost has been identified through procurement and is out with the budget of the project, this is immediately reported to the Project Board, Head of Finance and reported to the Corporate Management Team, with recommendations as to whether the costs can be

	managed down or require funding. CMT may approve this plan or may require the Sponsor to report and seek approval from the relevant committee. The Council maintains strict procedures around the governance of suppliers and contractors. We apply robust financial standing checks on all parties bidding for Council work. We also require completion of certificates related to anti-bribery, non-collusion, non-conflict of interest and the provision of accreditation details on Quality Management Systems, cyber security and health and safety.
If applicable, explain how you will cover the operational costs for the day-to-day management of the new asset / facility once it is complete to ensure project benefits are realised	Annual operating and maintenance costs for Shetland Islands Council Ferries and Terminals are covered through the Council's budget setting process underpinned by Government grant, Council Tax receipts and sustainable returns on reserve investments. Future years' major planned cyclical capital maintenance will be addressed through the Council's Asset Investment planning process and funded from sustainable returns on reserve investments or borrowing as appropriate. The Council operates a fleet of 11 ferries of various sizes from 18 metres to 65 metres across 7 routes and their associated shore infrastructure within the Shetland Inter-Island Ferry network. The assets delivered by this project will be integrated into the Council service responsible for operating and maintaining the assets. A replacement ferry will be incorporated into the Ferry Services team and therefore into the processes and systems developed there over a number of years and audited and surveyed at least annually. The service operates to the Document of Compliance (DOC), which is renewed every five years and annually by the Maritime and Coastguard Agency (MCA). The Council cannot operate vessels without this. Additionally, the Ferry Service operates a 'Safety Management System' (SMS), an important aspect of the 'International Safety Management (ISM) Code, which details all the important policies, practices and procedures that are required to ensure the safe functioning of ships at sea. Compliance with the SMS is also audited annually by the MCA as part of the DOC audit. The Council also engage an independent audit of the SMS. Each vessel operated by the council will also be subject to various surveys, in relation to the operations and safety etc. by the MCA, Lloyds Register and other recognised regulatory bodies approved by the MCA. In undertaking the duties set out by the MCA the Council undertakes annual maintenance and verification of each vessel. This normally entails maintenance of all safety and vessel systems as required by legislation and/or planned maintenance schedules as laid out by manufacturers.

	In the operation of the ferry service there is a program of ongoing (monthly) budget review of the service as well as annual operation and maintenance planning and budget setting for the service. This work takes account of activities such as: - Crewing costs and requirements; - Certification and training; - Workforce planning; - Vessel certification requirements, including preparing for new and/or updated legislation/guidance/rules; - Fuel; - Maintenance - KPI's Shore infrastructure will be added to the ongoing survey and maintenance programme for all ports and harbours owned and operated by the council, thereby ensuring all maintenance requirements and activities are identified and programmed. The service produces an annual Capital maintenance plan for approval by committee and adoption into the Council's budget. The Council's ports engineering team are responsible for the infrastructure at the Sullom Voe Harbour (including Oil Terminal Jetties), Port of Scalloway and 11 small ports around the Shetland Islands. Within the ports and Harbours of Shetland, activities are planned and undertaken with regard for the 'Port Marine Safety Code' and 'Marine Safety Management System' which, similarly to the Ferry Service, is audited and checked by the appropriate regulatory bodies on a regular basis. In addition to maintaining the assets, we are actively investing in crew training and succession planning to ensure that the new vessel can be permanently based on Fair Isle. This will provide direct advantages to the community in terms of locking-in the benefits of the new vessel but will also maintain this essential employment on the island. Basing the vessel in Fair Isle is one of the fundamental principles of the business case and benefits of this project to deliver the needed ferry service and support the ongoing prosperity of the community, a direction supported by the Council through projects like this or the Islands of Small Populations project. By following this rigorous system of approvals and ongoing audits, surveys, maintenance, training, etc. there is high confidence of realising the benefits outlined within this project and delivering and maintaining quality, reliable and sustainable ferry services, as has been the case for over 40 years.
Upload further information (optional)	
Set out proportionate plans	***Data:-*** Given the limitations in published data for Fair Isle, the M&E framework will be informed by the following data collection:

for monitoring and evaluation

- Ferry logbook data
- Air service operation data
- FIBO tourism data (if available)
- Repeat of 2019 household survey
- Depth interviews with ferry crew; service providers; and businesses involved in the Fair Isle supply-chain
- Population (an annual Census of island population will be undertaken)
- Housing stock/house building/refurbishment data

The 'after' household survey will ask broadly the same question as the 2019 survey to ensure comparability.

The following sections set out the approach to M&E, with specific indicators listed in Table E of the *Single Project Costings and Planning Workbook*.

Inputs and Outputs:-
In the context of the 'theory of change' developed for this application, the monitoring of **inputs** and **outputs** is binary, focusing on whether the listed items have been delivered or otherwise.

Outcomes:-
The monitoring plan should first focus on assessing the extent to which the investment has delivered against the Transport Planning Objectives (TPOs), which define the **transport outcomes** sought.

In order to understand the impact of investment, it is important to have a pre-intervention baseline against which to compare. In the context of Fair Isle, this should be fairly simple to develop as, for most of the TPOs, there will be a factual 'before and after' position.

It should also be noted that M&E for transport services in Fair Isle can only sensibly be undertaken by considering the air and ferry services in tandem, and the plan below reflects this. Calendar year 2019 will be used as the baseline, as it will provide the last full year of data pre-COVID and pre-air service timetable change.

The summary below shows the monitoring requirements for each objective:

Transport Planning Objective	Required Monitoring Data
TPO1: The capacity of the services should not act as a constraint to regular and essential personal, vehicular and freight travel between the island(s) and Shetland mainland.	In terms of the physical characteristics of the vessel, this should be a straightforward comparison. However, in terms of capacity utilisation, a record of all occasions of when the vessel has been 'full' in terms of hold space and / or deadweight / crane capacity will be compiled.

TPO2b: Where an island does not have a 'commutable' combined ferry or air & drive / public transport / walk time to a main employment centre (e.g., 80 minutes), the connections provided should reliably permit a half day (e.g., 4-hours) in Lerwick, 7-days a week, all year round.	Record of 'time on mainland' (air and ferry) by day, air data permitting. Median return journey time (thus incorporating the journey time and turnaround time).
TPO3: The scheduled time between connections should be minimised to increase flexibility for passengers and freight by maximising the number of island connections across the operating day.	Connectivity calendar showing the number of connections across the year and number of services operated to timetable.
TPO4: The level of connectivity provided should minimise the variation within and between weekdays, evenings, Saturdays and Sundays.	As per TPO3
TPO5: Where practicable and realistic, islanders should be provided with links to strategic onward connections without the need for an overnight stay on Shetland mainland.	As per TPO3 – the ability to make a journey to/from Shetland mainland is a reasonable proxy for onward transport connections.

Impacts:-

The summary below shows the required monitoring data for each **societal impact** identified in the theory of change:

Impact	**Data Collection**
Population retention/growth	• Population • Household survey
Career path / development / progression for future island residents work on the vessel	• Depth interviews with ferry crew
Reduced cost of moving goods to and from the island and maintenance of on-island assets	• Household survey • Depth interviews with service providers • Depth interviews with island businesses
Housing development/refurbishment	• Housing stock/house building data
Efficiencies in service delivery	• Depth interviews with service providers
Increased tourism	• FIBO tourism data
Reduction in tourism bed-nights lost as a result of transport-related disruption	• FIBO tourism data

Evaluation:-

Outcome Evaluation

The outcome evaluation will compare the 'before and after' position with respect to the indicators identified in the appended spreadsheet.

However, it will also be expanded into a more comprehensive narrative ascertaining the extent to which the investment has delivered the:

	- TPOs - Appraisal aims set at the SOBC stage and included within the benefits realisation section of the OBC (Section 10.9) It is important to note that in a small and fragile community such as Fair Isle, even a very minor change such as a single family leaving the island, can have a major impact. Through the primary research, we will attempt to gather information on other factors influencing the economic wellbeing of the island, allowing the impact of the new vessel and infrastructure to be isolated as far as reasonably possible. In terms of timing, an outcome evaluation should be: - Undertaken 1-2 years after scheme completion to capture the immediate outcomes and early impacts of the investment. - Repeated after 3-5 years to capture longer-term impacts of the investment. ***Process Evaluation*** Whilst not specified for this application, it is important that a process evaluation is also undertaken. The process evaluation will involve an assessment of how the preferred option was selected and delivered. It will therefore focus on the process of implementation, with the aim of identifying the lessons that could be learned for delivering similar schemes in the future. The process evaluation will gather qualitative and quantitative data to understand what worked well and what did not and will involve carrying out document reviews and a series of mainly one-to-one interviews with staff involved in the delivery phase of the project. This will take place immediately after the delivery of the project. **Resourcing and Governance:-** The Council will allocate funding in 2025 (process evaluation), 2026 (outcome evaluation phase 1) and 2029/30 (outcome evaluation phase 2) to appoint consultants to carry out these independent evaluation exercises. The evaluation reports will be published on the Council website.

Section 9: Declarations and Attachments

Senior Responsible Owner Declaration	Upload pro forma 7 - Senior Responsible Owner Declaration	LUF Round 2 Pro formas V6.1 Proforma 7 - Shetland Islands Council.pdf
Chief Finance Officer Declaration	Upload pro forma 8 - Chief Finance Officer Declaration	LUF Round 2 Pro formas V6.1 Proforma 8 - Shetland Islands Council.pdf
Publishing	URL of website where this bid will be published	www.shetland.gov.uk/transport/levelling-up-fund

Additional attachments	
Appendix 1	SIITS SOBC Part 1
Appendix 2	SIITS SOBC Part 2
Appendix 3	OBC
Appendix 4	Integrated Assurance and Approval Plan - Draft
Appendix 5	Images
Appendix 6	Letter of Support – Beatrice Wishart, MSP
Appendix 7	Letter of Support – Emma Roddick, MSP
Appendix 8	Letter of Support – Ariane Burgess, MSP
Appendix 9	Letter of Support – Rhoda Grant, MSP
Appendix 10	Letter of Support - Jamie Halcro Johnston, MSP; Donald Cameron, MSP; Edward Mountain, MSP; Douglas Ross, MP, MSP
Appendix 11	Letter of Support – MV Good Shepherd IV - Crew
Appendix 12	Letter of Support – Dunrossness Community Council and Fair Isle Community Committee & Association
Appendix 13	Letter of Support – Fair Isle Bird Observatory Trust_DB
Appendix 14	Letter of Support – Fair Isle Bird Observatory Trust_MW
Appendix 15	Letter of Support – National Trust for Scotland
Appendix 16	Letter of Support – Northern Lighthouse Board
Appendix 17	Letter of Support – Scottish Water
Appendix 18	Letter of Support – Scottish and Southern Energy
Appendix 19	Letter of Support – NHS Shetland
Appendix 20	Project Programme
	LUF_transport_business_case_checklist
	LUF Round 2 Application (in PDF form)

Files uploaded with questions	
File 1 Upload	LUF Round 2 Pro formas V6.1 Proforma 1 - Shetland Islands Council.pdf
File 2 Upload	LUF_Single_Project_Costings_and_Planning_Wkbook_v2.00 - Shetland Islands Council.xlsx
File 3 Upload	Shetland Island Ferry Route Map.pdf
File 4 Upload	Pro Forma 6 - Alistair Carmichael MP.pdf
File 5 Upload	LUF BID Options Appraisal Report - Shetland Islands Council.pdf
File 6 Upload	Logic Map - Theory of Change - Shetland Islands Council.pdf
File 7 Upload	LUF BID Preferred Option Summary Table - Shetland Islands Council.pdf
File 8 Upload	LUF 10 percent contribution minute of Shetland Islands Council meeting.pdf
File 9 Upload	Fair Isle Ferry Project LUF Bid Risk Register - Shetland Islands Council.pdf