

Part 1 Appraisal Summary Tables

Proposal Details			
Name and address of authority or organisation promoting the proposal: (Also provide name of any subsidiary organisations also involved in promoting the proposal)		Mr Michael Craigie, 01595 744 160, michael.craigie@shetland.gov.uk Shetland Islands Council, Development Service, Transport Planning Service, 6 North Ness, Lerwick, Shetland, ZE1 0LZ	
Proposal Name:	Option CO2: Replace the MV <i>Leirna</i> with one larger vessel.	Name of Planner:	Stephen Canning, Peter Brett Associates
Proposal Description:	<p>In each of the 'one larger vessel' options in this study, we have typically planned on the basis of a 50% uplift in PCU capacity. However, in the context of Bressay, the MV <i>Leirna</i> has a relatively high PCU carrying relative to her LOA. Scaling up to +50% in terms of PCUs would therefore involve the use of a vessel akin to the MV <i>Daggri</i> in terms of the generic vessels under consideration. This would seem disproportionate and we have therefore considered a larger version of the current sheltered water vessel here, which would be capable of accommodating circa 28 PCUs (i.e. approximately a 50% uplift).</p> <p>In order to accommodate a larger vessel, significant harbour work would be required at Bressay including a new piled jetty, replacement of the linkspan and dredging. A new berthing dolphin and linkspan would be required in</p>	Estimated Total Public Sector Funding Requirement:	<i>Capital costs/grant</i> £7.55 million.
			<i>Current revenue support</i> £804k (rounded) per annum.
			<i>Annual revenue support</i> £791k (rounded) per annum.

	Lerwick.		
Funding Sought From: (if applicable)	Transport Scotland	Amount of Application:	<i>Present Value of Cost to Govt.</i> Costs in this study are all reported in 2016 prices only. The costs would reflect those set out above.
Background Information			
Geographic Context:	<p>The island of Bressay is 7 miles long by 3 miles wide and is separated from Lerwick by the sheltered Bressay Sound. Rough grazing covers most of the island, and the coast is formed of steep cliffs and beaches.</p> <p>In many respects, Bressay benefits significantly from its proximity to Lerwick and the access to services that this provides. However, geographic proximity and good transport links can be something of a double edged sword for the island, with a constant challenge to prevent economic leakage and maintain local services.</p> <p>Transport connectivity is wholly delivered by the frequent ferry service, which links Bressay with Lerwick, the journey time being seven minutes. The MV <i>Leirna</i> currently lies overnight at Bressay.</p>		
Social Context:	<p>Despite strong population growth towards the end of the 20th century, Bressay has experienced a recent decline in population, something which the recent closure of the school may accelerate. During our consultation with HIE, they expressed a concern that the island is becoming increasingly fragile.</p> <p>The lack of readily available social housing on Bressay and the relatively static property market suggests that housing could be a constraint to growth on the island and could have been a factor in the decline of its population.</p> <p>Bressay is the only one of the nine islands in this study where on-island nursery and primary school provision is not available. Whilst the rationale underpinning the closure of the school was perhaps sound, there is a potentially longer-term impact in terms of the attractiveness of the island for in-migrants.</p> <p>Medical provision for Bressay is provided by Lerwick Health Centre.</p>		
Economic Context:	<p>There is limited on-island activity on Bressay, with the majority of residents being geared towards the Lerwick jobs market. The fishmeal factory is likely to be the largest single private sector employer. There has been an overall downturn in services in the island in recent years.</p> <p>Bressay has a very high economic activity rate (akin to that of Shetland as a whole), although the majority of full-time employees are likely to commute to Lerwick.</p>		
Planning Objectives			

Objective:	Performance against planning objective:
<p><i>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</i></p>	<p>Performance against Transport Planning Objective: Moderate Positive</p> <p>The introduction of a vessel with a higher PCU carrying capacity onto the Lerwick – Bressay route would make a moderate positive contribution in terms of this objective.</p> <p>Car deck capacity on certain AM peak departures from Bressay and PM peak departures from Lerwick max out, meaning some vehicles cannot get onto the ferry. This can lead to late arrival into work and education or missed interchange with an onward connection. In terms of the evidence to support this problem, carryings data show that the 0830 departure from Bressay frequently has a vehicle deck utilisation in-excess of 80% (above which a sailing is defined as high utilisation), particularly in the summer months. Some seventy-four 0830 departures sailed over the 80% threshold in summer 2013/14, suggesting capacity on this service, which is key to accessing employment and education, is a problem. This service is less highly utilised in the winter, with >80% sailings typically on a Monday and Tuesday. The 1715 service from Lerwick is relatively highly utilised during the winter (31 sailings >80% utilised).¹</p>
<p><i>TPO2a: Where an island has a 'commutable' combined ferry or drive / public transport / walk time to a main employment centre (e.g. 80 minutes), the connections provided should reliably facilitate commuting</i></p>	<p>Performance against Transport Planning Objective: Moderate Positive</p> <p>This provision of a single larger ferry on the route would support this objective through addressing the capacity issues on the ferry, ensuring reliable access to the peak services for commuters.</p>
<p><i>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 at least a half day (e.g. 4 hours) in Lerwick 7 days a week, all year round.</i></p>	<p>Performance against Transport Planning Objective: Neutral</p> <p>This objective is not relevant for Bressay.</p>
<p><i>TPO3: The scheduled time between connections should be minimised to increase flexibility for passengers and freight by maximising the number of island</i></p>	<p>Performance against Transport Planning Objective: Neutral</p> <p>This option would have no impact on the frequency of the service.</p>

¹ SIITS Carryings and Utilisation Analysis (Peter Brett Associates, 2015), Bressay – Lerwick Capacity Analysis Table

connections across the operating day.		
TPO4: The level of connectivity provided should minimise the variation within and between weekdays, evenings, Saturdays and Sundays.	Performance against Transport Planning Objective: Neutral This option would have no impact on the timetable.	
TPO5: Where practicable, islanders should be provided with links to strategic onward transport connections without the need for an overnight stay on Shetland mainland.	Performance against Transport Planning Objective: Neutral This option would have no impact on strategic connectivity.	
Rationale for Selection or Rejection of Proposal:	This option will be retained for further consideration. 1 * larger <i>Leirna</i> type vessel would alleviate the peak vehicle capacity issues on the route. The costs and benefits of this compared to a like-for-like replacement (Option CO1) need to be established and quantified.	
Implementability Appraisal		
Technical:	Significant harbour work would be required at Bressay including a new piled jetty, replacement of the linkspan and dredging. A new berthing dolphin and linkspan would be required in Lerwick.	
Operational:	There are no operational feasibility issues associated with this option.	
Financial:	The capital cost would be £7.55 million, with annual revenue support estimated at £791k, a reduction of £13k per annum on the current day figure.	
Public:	This option was identified as an acceptable ferry based option.	
STAG Criteria		
Criterion	Assessment Summary	Supporting Information
Environment:	✓	<p>The replacement of the MV <i>Leirna</i> with a more modern vessel gives rise to a potential reduction in emissions (although emissions would be slightly higher than the Do Minimum, which would be a smaller hull form). There would be no other environmental issues associated with this option.</p> <p>The following impacts have been identified in terms of environmental sub-criteria</p> <ul style="list-style-type: none"> Noise & vibration: Short-term impacts of harbour works at closest properties during construction (particularly in Lerwick) but unlikely to be significant in context of existing harbour operations. Local air quality: Provision for more vehicles has potential to generate increased road traffic at port areas but unlikely to impact significantly on local air quality.

		<ul style="list-style-type: none"> • Water quality, drainage & flood defence: Some short term impacts on marine water quality during construction and from dredging activities but unlikely to be significant in context of existing harbour operations. • Biodiversity & habitats: Short term impacts on otter and/or marine mammals etc but unlikely to be significant in context of disturbance in existing harbour. Impacts on marine habitats likely to be limited as new works in existing harbours. • Landscape: Small permanent effect from new car park provision. • Visual amenity: Short term impacts during construction. Permanent works unlikely to be significant in the context of working harbours. • Cultural heritage: Bressay works unlikely to be of a scale to impact on the setting of Gardie House. Works in Lerwick in Conservation Area but within context of working harbour. Impacts on setting of listed buildings and scheduled monuments in Lerwick unlikely to be significant in context of existing harbour <p>Environmental Constraints</p> <p>The environmental constraints for the Bressay route are provided below for information</p> <p>Bressay Ferry Terminal</p> <ul style="list-style-type: none"> • Residential properties within 150m to the north of the harbour (Maryfield House Hotel within 180m) and in close proximity to fixed link (if previous line is used at Hogan) • Easter Rova Head Geological SSSI approximately 4km north • Gardie House Garden and Designed Landscape within 100m (to north) of harbour • Listed buildings within 100m of harbour • Coastal flooding risk • Generally good air quality <p>Lerwick Port (Bressay Service Ferry Terminal)</p> <ul style="list-style-type: none"> • Residential properties within 50m of the harbour • Core path CPPL04 Coastal Walk • Easter Rova Head Geological SSSI approximately 4km north • Listed buildings within 100m • Ferry terminal located in Lerwick Conservation Area
Safety:	Neutral	This option would have no impact on safety.
Economy:	✓	This option would record a minor benefit in terms of the Economy criterion. The alleviation of capacity issues and ensured reliability for commuters would record minor TEE benefits for users.

Integration:	Neutral	This option would have no impact on integration.
Accessibility and Social Inclusion:	✓	<p>The replacement of the MV <i>Leirna</i> with a new vessel would deliver a minor benefit in terms of accessibility & social inclusion as a new vessel would meet current disabled access requirements.</p> <p>The larger vessel would in all likelihood address existing vehicle capacity issues which can act as a barrier to accessibility.</p>