## ANNEX I

RECONFIGURED FERRY OPTION

Bressay Link STAG 2 Annex

# Annex I Option 3 - Reconfigured Ferry Service and Option 4 - Do Minimum/Current Ferry Service (assumptions and worksheets)

This appendix sets out the assumptions used for costing the above options and the worksheets used.

#### These options assume:

- · the existing crossing is retained;
- a working life of 20 years for vessels. The working life of a ship is generally determined by the scantling requirements specified before construction (basically the thickness of the hull). The assumed working life for coastal ferries is generally accepted as being 20 years, in line with the normal depreciation policy used by commercial shipping companies;
- as with the working life of ferries, above, the usual Residual value for vessels is based on the depreciation policy and is assumed to be straightline depreciation over 20 years, with final value of 10% of purchase price. The principles explained above are based on accountancy criteria rather than operational requirements for the purposes of consistent appraisal. They do not mean that the existing vessel, m.v."Leirna", cannot continue in service after 2012 (unless legislation changes in the meantime) but vessels retained beyond their designed working life usually incur increased repairs and maintenance;
- mechanical parts of terminals have life of 20 years and civil parts have life of 60 years;
- residual value for terminals, disposal value of linkspan are included;
- assume crews can be rostered as required. Costs based on pro rata of current hours (NB. Single status issues); and
- no change in fares income, except where specified.

#### Therefore for Option 3 – Reconfigured Ferry Service:

- In terms of capital costs:
  - o Of vessel: appropriate replacement in 2012, 2032, 2052;
  - Of terminal: replacement link span in 2015, 2035 and 2055; replacement pier structure in 2035.
- In terms of crewing arrangements and costs:
  - 19.5 hours duty, 5 days per week (0515 to 0045) 97.5 manned ship hours total:
  - 21.25 hours duty, 2 days per week (0515 to 0230) 42.5 hours total:
  - Removal of Sunday maintenance and drill periods extra 4 hours/week;
  - Therefore 144 manned ship hours per week, a 14.3% increase on Do Minimum.
- In terms of fuel costs:
  - Assume 22% increase, for lengthen day and increased frequency (more fuel is used for manoeuvring than idling).

#### Therefore for Option 4 – Do Minimum:

In terms of capital costs:

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- o Of vessel: appropriate replacement in 2012, 2032, 2052;
- Of terminal: replacement link span in 2015, 2035 and 2055; replacement pier structure in 2035.
- In terms of crewing arrangements and costs:
  - 17 hours duty, 5 days per week (0630 to 2330) 85 hours for 5 days;
  - 19 hours duty, 2 days per week (0630 to 0130) 38 hours for 2 days;
  - Maintenance and drills carried out instead of scheduled sailings on Sunday mornings as at present.
  - o Therefore 126 hours per week.

#### In terms of fuel costs:

• As is.

Fares applied on same basis as currently.

### **Worksheet I1 Costs for Reconfigured Ferry Service**

REPLACEMENT TERMINALS	
Berthing structure	
Lerwick	£2.5m
Bressay	£3.5m
Linkspan	£500k

NEW VESSEL COSTS			
Like for like "Leirna" replacement	£6m	Based on "Hendra" replacement at 2007 prices.	
		Increased for inflation and reduced for lower classificat	

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	2007/08 BUDGET				RECONFIGURED FERRY	
	EXISTING SERVICE	FERRY	ADJUST BASE	TO 08/09	Crew increased by	14.30%
				2.50%	Fuel increased by	22%
	£	£		£		
Employee costs	729785		748,030		854,998	
Administration	14020		14,371		14,371	
Supplies & Services	7000		7,175		7,175	
Transport & mobile plant	2050		2,101		2,101	
SERVICE EXPENDITURE		752,855		771,676		878,645
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Fuel	97,491		99,928		118,939	
Other vessel costs	217,416		222,851		222,851	
TOTAL VESSEL COSTS		314,907		322,779		341,790
TOTAL TERMINAL COSTS		18,537		19,000		19,000
			,			
Central costs	138,591		142,056		142,056	
Engineering services	40,991		42,016		42,016	
Stores	4,229		4,335		4,335	
TOTAL RECHARGES		183,811		188,406		188,406
				1	1	
TOTAL COSTS (excl FINANCING)		1,270,109		1,301,862		1,427,841
Fares income	-331,000					
Other income	-27,514	050 544				
TOTAL INCOME		-358,514	<u> </u>	-367,477		-367,477
NET SERVICE COST		911,595		934,385		1,060,364
Financing costs		102,672		,		
Total net budget in SIC accounts		1,014,267				

## Worksheet I2 Costs for Do Minimum – Current Ferry Service

REPLACEMENT TERMINALS	
Berthing structure	
Lerwick	£2.5m
Bressay	£3.5m
Linkspan	£500k

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	2007/08 BU	DGET		
	<b>EXISTING F</b>	EXISTING FERRY SERVICE		O 08/09 BASE
				2.50%
	£	£		£
Employee costs	729785		748,030	
Administration	14020		14,371	
Supplies & Services	7000		7,175	
Transport & mobile plant	2050		2,101	
SERVICE EXPENDITURE		752,855		771,676
Fuel	£97,491		99,928	
Other vessel costs	217,416		222,851	
TOTAL VESSEL COSTS	, -	314,907	,	322,779
TOTAL TERMINAL COSTS		18,537		19,000
Central costs	138,591		142,056	
Engineering services	40,991		42,016	
Stores	4,229		4,335	
TOTAL RECHARGES	-,	183,811	1,000	188,406
TOTAL COSTS (excl FINANCING)		1,270,109		1,301,862
Fares income	-331,000			
Other income	-27,514			
TOTAL INCOME		-358,514		-367,477
NET SERVICE COST		911,595		934,385
Financing costs		102,672		
Total net budget in SIC accounts		1,014,267		