

TRANSPORT SCOTLAND



CALMAC FERRIES LTD



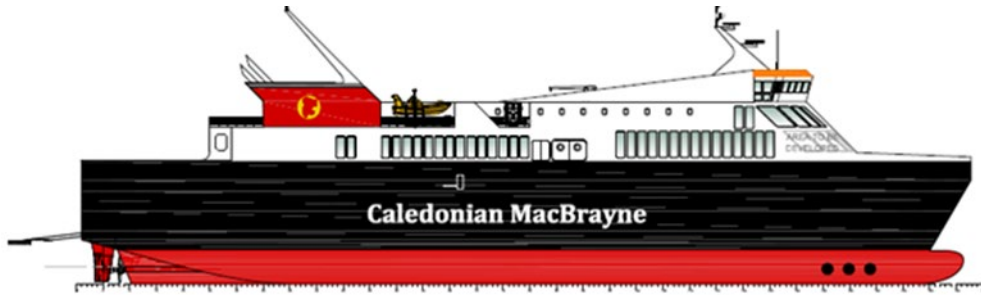
Caledonian MacBrayne
Hebridean & Clyde Ferries

CALEDONIAN MARITIME ASSETS LIMITED



Project:

New Vessels 1 & 2



Document:

Final Business Case

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1 EXECUTIVE SUMMARY

1.1 Purpose of the Business Case

The Business Case is a principle component of the Project Initiation Document (PID). Its purpose is to outline the justification for the project and to help with the assessment of the project's overall success. The two primary uses of the document are to ensure that the project has a sound basis before asking the Steering Group to make any major commitment to the project and to provide a baseline document against which the Steering Group and Project Manager can assess progress, issues and on-going viability.

The document seeks to answer the following fundamental aspects of the project:

- Why do we need to undertake the project?
- What are the business benefits?
- What are the risks?
- What are the potential costs?
- How long will the project take?
- Who will be involved in managing the project and what are their roles and responsibilities?

1.2 Scope Overview

This Business Case addresses only the part of the project concerned with the procurement of two vessels. All other aspects of the tripartite project (procurement of LNG service, port infrastructure works, communication and operational readiness) are addressed in separate or / and individual business cases, which will also form part of the overall Project Initiation Document.

The scope of this business case therefore is the procurement of two 100m dual fuel vessels, intended to initially be operated on the Uig Triangle and Ardrossan to Brodick routes. This is directly related to the recommendations of the VR&DP 2014, and the subsequent Minister for Transport approval on 15/10/2014.

1.3 High Level Costs

The capital costs for the procurement of 2 x 100m major vessels has been approved in 2014-15 and beyond. The advantage of ordering 2 ships together is that there should be an economy of scale in construction costs; there are also operational benefits and potential savings (in cost of spares for example) in building two sister-ships.

1.3.1 Capital Costs

- Procurement of 2 vessels: **REDACTED**
- Project Management costs, CMAL: **REDACTED**

¹ Refer to Annex A; Ferries Plan – Extract from Appendix 2

- Project Management costs, CFL: are included in the above CMAL management costs).
- Total capital costs **REDACTED**

1.3.2 Operational Costs

Annual costs are estimated to be:

- Day only operation: **REDACTED**
- Day & night operation: **REDACTED**

These costs:

- Include the leasing payments from CFL to CMAL which CMAL will use to repay the capital costs set out above – the operational costs therefore include the cost of capital;
- Include **REDACTED** leasing costs which will fund the repayment of the TS loan to CMAL for the capital costs.
- Are the gross costs of operating the vessels and therefore do not represent the additional (net) costs to CFL (and, through the public service contract, TS). The actual increased operating costs will be set out in a New Vessel Revised Base Case in accordance with the future CHFS contract.

. So there is an element of 'double-counting' here which we should draw out. In addition we should clarify that these costs are gross and that the additional cost to CFL (and TS) should be less as there should be savings from the current services.

REDACTED

1.4 High Level Milestones

Milestone Description - Procurement	Target Start Date	Target Completion Date
Pre-Qualifying Questionnaire	15.10.14	19.11.14
Invitation To Tender Open	08.12.15	31.03.15
Tender Clarifications, Evaluation & Selection	01.04.15	31.08.15
Contract Award	30.09.15	

Milestone Description – Vessel Yard No. 801	Target Start Date	Target Completion Date
Receipt of Refund Guarantee	30 Oct 2015	
Procurement Deposits Long Lead Items (1)	12 Nov 2015	

Milestone Description – Vessel Yard No. 801	Target Start Date	Target Completion Date
Cutting of Steel	15 Dec 2015	
Procurement Deposits Long Lead Items (2)	15 Jan 2016	
10% Fabrication	18 Apr 2016	
25% Fabrication	14 Jun 2016	
35% Fabrication	15 Aug 2016	
50% Fabrication	14 Oct 2016	
Major Equipment and Lock Out Items Installations	14 Nov 2016	
75% Fabrication	15 Dec 2016	
100% Fabrication	16 Jan 2017	
Berth Join Up	14 Mar 2017	
Hull Inspection Prior to Paint	17 Apr 2017	
Launch	14 Aug 2017	
Delivery	25 May 2018	

Milestone Description – Vessel Yard No. 802	Target Start Date	Target Completion Date
Procurement Deposits Long Lead Items (1)	12 Nov 2015	
Cutting of Steel	15 Dec 2015	
Procurement Deposits Long Lead Items (2)	15 Jan 2016	
10% Fabrication	18 Apr 2016	
25% Fabrication	14 Jun 2016	
35% Fabrication	15 Aug 2016	
50% Fabrication	14 Oct 2016	
Major Equipment and Lock Out Items Installations	14 Nov 2016	
75% Fabrication	15 Dec 2016	
100% Fabrication	16 Jan 2017	
Berth Join Up	14 Mar 2017	
Hull Inspection Prior to Paint	17 Apr 2017	
Launch	12 Oct 2017	
Delivery	26 Jul 2018	

2 STRATEGIC FIT

2.1 Business Need

The business need is driven from the requirement to deliver the ²Ferries Plan, which was published in December 2012. The Ferries Plan included an outline proposed Vessel Replacement Programme as well as a proposed programme of Port and Harbour Works. In October 2013 Transport Scotland sponsored the Vessel Replacement & Deployment Plan (VR&DP) project, working with CMAL and CFL, to develop a programme of vessel retentions, cascades, acquisitions and disposals in order that the delivery of the Ferries Plan could be fulfilled in the timescales required by the Scottish Government.

The published *Vessel Replacement and Deployment Plan – Annual Report 2014* (VDRP) summarises the outputs from the Project up to the end of 2014.

This report sets out a vessel replacement program which satisfies the following criteria:-

- ✓ Ensures new vessels must fit existing (or under construction) berths;
- ✓ Continues to deliver the on-going improvements brought about through the Ferries Plan;
- ✓ Is closely aligned to the full demand-led solution;
- ✓ Does not compromise the overall delivery of the Vessel Replacement and Deployment Plan;
- ✓ Deviates from the demand-led plan in timing only, by bringing forward identified investment; and
- ✓ Facilitates commencement of the procurement process before the end of 2014.

It was therefore agreed to proceed with the procurement of 2 new vessels, which would initially be operated on the Uig Triangle and Ardrossan-Brodick routes. This solution would bring additional capacity in response to current demand pressures, be designed to use existing berths without significant redevelopment, and contribute to the delivery of the Ferries Plan and improve reliability and passenger experience. This approach also delivers part of the longer term VRDP recommendations. The procurement of the 2 new vessels was announced by the then Transport Minister Keith Brown MSP on 15 October 2014.

Accordingly, project *New Vessels 1 & 2* has been established to manage the costs, deliverables, schedule and quality.

2.2 Organisational Overview

The project is a tripartite project, meaning that Caledonian Maritime Assets Ltd, Caledonian Ferries Ltd and Transport Scotland are equally invested in the project outcomes and committed to its delivery.

TS

- Transport Scotland is the transport agency for Scotland, delivering the Scottish Government's vision for transport.
- It has the responsibility for legislation, policy and guidance to ferry services, ports, harbours and canals in Scotland.

² *The Scottish Ferry Services: Ferries Plan (2013 – 2022) sets out the future of ferry services until 2022.*

- TS aims to enhance Scotland's ferry services and related infrastructure to support businesses' and employment opportunities in pursuit of a wealthier and fairer Scotland.
- Key current projects include Mull Ferry Services project (part of the Network Strategy Programme) and the Stornoway / Ullapool Project (complete).

CMAL

- CMAL owns the ferries, and much of the port and harbour infrastructure to enable the vital ferry services servicing the West of Scotland and the Clyde Estuary.
- They aim to provide efficient, cost effective and safe ferries, harbours and port infrastructure for operators, communities and users in and around Scotland.
- CMAL is wholly owned by the Scottish Government, with Scottish Ministers being the sole shareholders.
- Key current projects include Brodick Ferry Terminal (new terminal building, car parking facilities and passenger access system) to be complete in 2016, Gourock Ferry Terminal Improvements, Third Hybrid Ferry and Weymyss Bay Harbour Improvements

CFL

- CFL is the current operator responsible for operating the Clyde and Hebrides Ferry Services, together with associated harbour services, through tendered contract with Scottish Ministers.
- The three year contract runs from October 2013 to September 2016. Under the terms of the contract, CFL are bound to use the vessels of CMAL and lease arrangements are in place.
- CFL aim to improve value for the investment made through focused customer service, and adding value within the contract specification for communities, businesses, tourism, employees and the tax payer.
- CFL is a wholly owned subsidiary of David MacBrayne Ltd, which is wholly owned by Scottish Ministers.
- Key current projects include Weymyss Bay Harbour Improvements

2.3 Contribution to Key Objectives

The objectives for vessel replacement align with the Government's objectives as set out in the Scottish Ferries Plan, which in turn supports the National Transport Strategy objectives; provision of world-class, lifeline services to the many peninsular and island communities around Scotland, requires a fleet of vessels which support an operation which is:-

- Safe
- Reliable – mechanical and weather
- Flexible – interchangeable across the network
- Operationally efficient

The specific objective of this Business Plan is to ensure that vessel replacement occurs in a cost-effective and targeted manner, to maximise the benefits to existing and new ferry users, as well as minimising future subsidy requirements from the public purse.

Specifically, the project will increase capacity on identified routes, as per the demand led programme outlined in the VR&DP 2014.

Key Objective	Contribution
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Increase capacity on Uig services	Provision of new vessels capable of carrying minimum 1000 PAX and 127 cars
Increase capacity on Arran / Brodick service	
Increase operational flexibility	Vessels should be able to operate on 13 identified key routes
Increase operational resilience	Vessels should be able to operate on 13 identified key routes
Optimise fuel efficiency	Choice of fuel types enabling optimal fuel costs.
Lower emissions	Use of LNG lowers emissions

2.4 Stakeholders

The following stakeholder groups have been identified for this project:

- (will be completed from output of agreed PID / Communication Plan)

Name	Stakeholder Group	Priority Assessment
		Keep satisfied
		Keep informed
		Key player
		Monitor

2.5 Existing Arrangements

- There are currently 32 vessels within the CHFS fleet, serving 27 destinations. These vessels are chartered from CMAL by CFL. The fleet of vessels serve 49 ports across the west coast of Scotland with facilities ranging from unmanned slipways to ports with multiple linkspan berths.
- High level charter arrangements
- CFL is solely responsible for deciding, in line with operational requirements, which vessels are deployed on which routes in order to deliver the CHFS contract.
- CMAL owns many of the ports and harbours of the CHFS network.
- Other port owners include councils, such as Argyll and Bute, Highland and Western Isles councils, and other authorities such as Mallaig, Stornoway and Tarbert, along with the National Trust and Ullapool Harbour Trustees.
- Harbour dues are paid by CalMac to all port authorities, including CMAL.
- Port Operations (CalMac)
- Current status of port infrastructure
- Technical ? maintenance....?

Question – should this section describe, as now, the network as a whole or focus on the 2 routes the vessels are initially earmarked for? The latter approach enables this section to be more specific, but would also need to be reflected within the overall costs / benefits.

2.6 Scope

The overall project objective of the project is to deliver two new Ro-Ro Passenger Ferries (vessels) into service by Q2 of 2018. The scope of this Business Case is limited to the procurement of 2 new vessels;

- The vessels are to be designed as a “Euro-B” Class, so as to specifically suit operation on multiple routes along the West Coast of Scotland, with emphasis on medium distance journeys (between 30mins and 5hrs).
- The vessels are to be capable of running on dual fuel (Marine Gas Oil, MGO, and Liquid Natural Gas, LNG) to provide the opportunity to lower emissions and minimise fuel costs.
- The vessels should have good ship / shore interface with the required ports, in order to provide flexibility and resilience within the fleet / network.

2.7 Constraints

- Time – In order to meet the recommended schedule of the VR&DP 2014, 1) the new vessels need to be handed over to service by no later than Summer 2018. 2) any pier and harbour works need to be completed in advance of Summer 2018 in order to operate the vessels safely and efficiently
- Funding - availability of funds/borrowing requirements in order to 1) procure the vessels and 2) deliver the required pier alterations;
- Resources – Availability of suitable personnel to complete the required work to schedule;
- Quality – Restricted berthing and / or approach speeds, particularly in poor weather conditions, may affect the quality of service being provided.

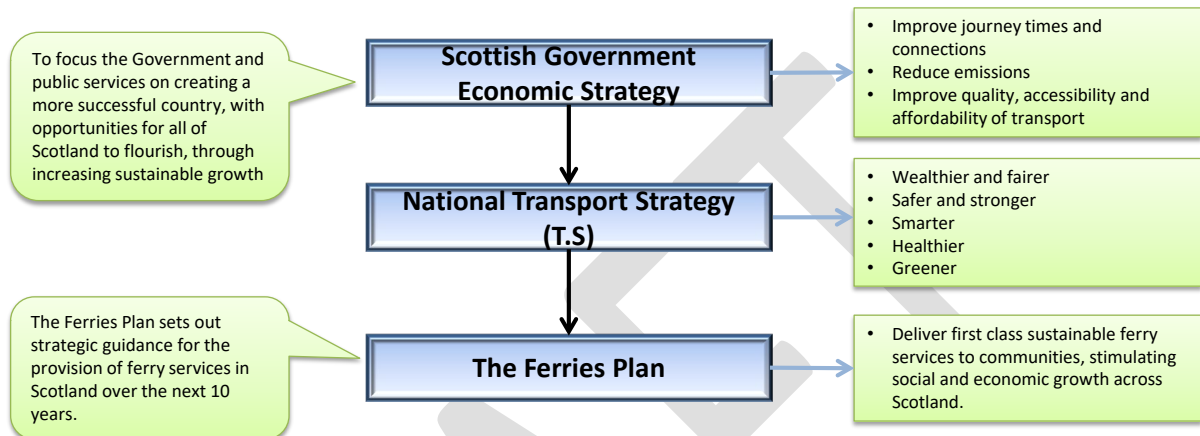
2.8 Dependencies

Dependency Description	Criticality	Impact date	Contingency Actions
[WHAT] All infrastructure works need to be completed by Q1 of 2018 [WHY] so that the new vessels can berth safely [EFFECT] in order that the vessels can enter into service.	Moderate	31/08/15	1. Reduce vessel approach speed for particular weather conditions 2. Operate to specific guidance and parameters.
[WHAT] The LNG supply is required to be in place [WHY] in order to run the vessels on LNG fuel [EFFECT] so that the potential project benefits (optimal choice of fuel type at any given time) may be	Moderate	31/05/15	None

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2.9 Strategic Benefits

The objectives of the project are informed by the cascade of strategy from the Scottish Government, from the National Transport Strategy, the Scottish Ferries Plan along with the Vessel Replacement and Deployment Plan.



The specific objective of this project is to ensure that vessel replacement occurs in a cost-effective and targeted manner, to maximise the benefits to existing and new ferry users, as well as minimising future subsidy requirements from the public purse.

The following key benefits are anticipated from the proposal set out in the VR&DP 2014:

- Reduction of a current constraint on demand through the provision of a larger vessel and increasing revenue. Capacity is particularly constrained on Uig-based services with levels of vehicle capacity utilisation the highest in the CalMac network.
- Enables implementation of the Ferries Plan commitment to a year-round 2-vessel service on the Ardrossan-Brodick route.
- Increased revenue through removal of a current constraint on demand through the provision of a larger vessel.
- Increased local economic activity in the areas served.
- A potential increase in visitor numbers to the island resulting in increased opportunities for local tourism and other businesses;
- Increased operational flexibility and resilience;
- Further addition of safe, reliable and flexible vessels to the Clyde and Hebrides fleet
- Dual fuel (LNG and MGO) model provides opportunity to exploit market changes, effectively managing fuel costs, mitigating increases in operating costs and subsidy, ultimately ensuring efficient use of public purse.
- LNG fuel virtually eliminates Sulphur Oxide emissions and reduces other harmful gases.

- LNG fuel option supports the Scottish Government’s carbon reduction targets as per the Climate Change Act (Scotland) 2009.

2.10 Strategic Risks

The table below refers only to the key financial and strategic risks.

Risk Description	Inherent Rating	Risk Mitigation	Residual Rating
IF funding cannot be secured for the necessary infrastructure works in the required timescale THEN the vessels may not be able to operate from the ports RESULTING IN reduction of project benefits and reputational damage	1 Very Severe P= M I = VHI	1. Engage stakeholders at earliest stage to secure buy-in 2. Enlist Ministerial support as and when required 3. Investigate all funding options available.	2 Severe P=L I = VHI
IF at any time the cost of LNG equals or is more than the cost of diesel (MGO) THEN any cost savings are negated RESULTING IN reduced project benefits	1 Very Severe P= H I = H	Negotiate price advantage with supplier	1 Very Severe P= H I = H
IF vessel construction costs are not managed closely THEN agreed budgets may be breached RESULTING IN additional costs and / or reduction in quality of deliverables.	1 Very Severe P= M I = VHI	1. CMAL to maintain “Vessel Procurement and Construction Risk Register” 2. Construction costs to be monitored and reported on a quarterly basis.	3 Significant P= LO I = M
IF CMAL project management costs are not managed closely THEN agreed budgets may be breached RESULTING IN additional costs and / or reduction in project management resource effort and therefore oversight.	1 Very Severe P= M I = VHI	1. CMAL to maintain “Vessel Procurement and Construction Risk Register” 2. Project management costs to be monitored and reported on a monthly basis.	3 Significant P= LO I = M
IF the vessels do not perform as required THEN the benefits may not be delivered RESULTING IN wasted public money, customer dissatisfaction and reputational damage	2 Severe P=L I = VHI	1. CMAL to ensure adequate oversight of design spec and build 2. CMAL to ensure adequate quality control mechanisms are in place at yard.	3 Significant P= VLO I = H

2.11 Critical Success Factors

Objective	Critical Success Factor
Vessels are specifically suitable for	1. Vessels delivered are ‘Euro B’ Class

operation on multiple routes along the West Coast, on journeys of between 30 and 50 minutes.	
Lower emissions	2. Vessels are capable of running Liquid Natural Gas
Minimised fuel costs.	3. Vessels are capable of running on dual fuel (Marine Gas Oil, MGO, and Liquid Natural Gas, LNG)
Flexibility and resilience within the fleet.	4. The vessels should have good ship / shore interface with the required ports 5.
Vessels can berth safely and efficiently in required ports.	6. Timetables unaffected 7. Turnaround times unaffected 8. Required port infrastructure works complete by XXXX
Meet expected increases in demand	9. Vessels can accommodate up to 127 cars 10. Vessels can accommodate up to 1000 passengers (split 65% / 35% inside / outside) 11. Vessels in operation by XXXX
Vessels are 'fit for purpose'	12. The vessels deliver the aspects / criteria set out in the Operator's High Level Design .
Vessels 1 and 2 are in operation by XXXX and XXXXX respectively.	13. Target dates achieved.
	14.
	15.

3 OPTIONS APPRAISAL

3.1 Options

The options have been outlined and considered within the following associated documents and therefore further elaboration is not required within this section. Given the extensive appraisal and consultation work carried out, it was acknowledged by Ministers that a full ³STAG would not be required.

- Vessel Replacement & Deployment Plan 2014
- VRS Options Paper; Proposal – Iteration 1; Major Vessels_V4
- VR&DP Annual Report 2014_Final
- VR&DP Summary 2014_Final

The capex savings which are realisable if two identical vessels are ordered together are significant. This option to purchase two identical 100m vessels has been agreed as the only option for consideration in this paper.

³ Scottish Transport Appraisal Guidance (STAG)

4 COMMERCIAL ASPECTS

4.1 Outcomes and Outputs / Output Based Specification

- The vessels are to be designed as a “Euro-B” Class, so as to specifically suit operation on multiple routes along the West Coast of Scotland, with emphasis on medium distance journeys (between 30mins and 5hrs).
- The vessels are to be capable of running on dual fuel (Marine Gas Oil, MGO, and Liquid Natural Gas, LNG) to provide the opportunity to lower emissions and minimise fuel costs.
- The vessels should have good ship / shore interface with identified ports, in order to provide flexibility and resilience within the fleet / network.

4.2 Sourcing Options

Procurement of the vessels will be managed through the Official Journal of the European Union (OJEU) procurement framework and will follow the Scottish Government’s Procurement Journey. This approach helps ensure that the Technical Needs, Compliance and value for money would be best served.

The tender specification will deal with fundamental requirements only, with the aim of encouraging design and solution innovation.

4.3 Payment Mechanisms

Scottish Ministers, empowered by the Transport (Scotland) Act 2001, will provide funding by way of voted loans to CMAL for the purpose of improving sea transport. Payment of the loan will be phased over the construction period of four years. The high level loan draw-down profile for the vessels are as follows:

2015/16	REDACTED
2016/17	REDACTED
2017/18	REDACTED (includes REDACTED for CMAL Project Management costs)
2018/19	REDACTED (includes REDACTED for CMAL Project Management costs)
Total	- REDACTED

The loan profile includes allowance for CMAL’s project management costs up to a maximum of **REDACTED** . Included in these project management costs are CMAL direct costs, CalMac project and crew familiarisation costs, and variations to contracts.

Further details are included in Appendix B.

The term loan plus accrued interest (at Public Works Loan Board rates) will be repayable over 25 years. The loan plus accrued interest will be repaid on an annuity basis in 50 instalments payable twice yearly together with applied interest on 31 March and 30 September.

5 PROJECT FINANCE

5.1 Financial Appraisal

Three items have been considered in the Financial Appraisal – Capital Expenditure, Operating Expenses and **Income from Users**. These are included in a single financial model with results showing the change in subsidy requirements on a route-by-route basis available with this approach. (Results tables are contained in Appendix xx.)

5.1.1 Capital Costs

The total costs of a new 100 metre vessel have been assumed as:

- **REDACTED** *for each vessel*;
- With Project Costs of **REDACTED** for vessel 1 and **REDACTED** for vessel 2.

If two identical vessels are ordered at the same time (albeit with delivery dates to be 3 to 6 months apart) a reduction in purchase price of between 8% and 15% will likely be realisable. An assumed reduction of 10% has been allowed for in this Business Case. No such reduction would apply to Project Costs.

A number of agencies are involved in the funding and repayments associated with the procurement of these two vessels. Transport Scotland (TS) will ultimately fund the vessels by way of loans to CMAL who will then pay the yard building the vessels. Loans are repaid with interest by CMAL to TS. Interest rates are fixed at point of vessel delivery at the Public Works Loan Board rate. CMAL will lease the vessels to CFL – this being funded directly through the subsidy payments from TS to CFL.

As indicated, CalMac Ferries, as operator of the vessels, will lease the vessels from CMAL. Payments will be made on a monthly basis during the life of the vessel's operation. **Therefore, from c. January 2018 CFL will pay CMAL approximately REDACTED per annum REDACTED in lease payments. These payments are expected to be for a period of 25 years.**

5.1.2 Caveats and Assumptions

- An assumed reduction in purchase price of 10% has been allowed for.
- The vessels are assumed to have a residual value of 10% of purchase price (before '2-of-class' discount) after the 30 years design life of the vessel.
-
- ***** input required *****

5.1.3 Operational Costs

Operating expenses will not be occurred until the new vessels are delivered. In the period between vessel delivery and entry into service (c. 1 month) operating costs of **REDACTED** have been assumed. During the life of the vessel all items of operating costs are included on an annual basis. The following cost headings are included:

5.1.3.1 Vessel Operating Expenditure

- Crew costs – based on budget costs for 2014/15 for existing vessels. New vessels are assumed to be MV Finlaggan plus four additional crew members. (A real increase of 1% per annum above CPI has been allowed for.)
- Fuel costs – The principal fuel consumed by the New Vessels will be LNG, however, it is expected that the vessels will be of a dual fuel design meaning that a small volume of Marine Gas Oil (MGO) will be consumed as a 'pilot' fuel. The model includes the two types of fuel. Each fuel type has its own annual escalator applied as industry/government commentators expect there to be a large and diverging variation in prices over the years. Forward fuel prices have been taken from two sources with results shown separately. The two sources are:
 - Department of Energy and Climate Change – DECC Fossil Fuel Price Projections (July 2013); and
 - Fuel Selection for New Super Eco 1000 Ships – University of Strathclyde: Naval Architecture, Ocean and Marine Engineering (August 2014).
- Running repairs and overhaul – based on budget costs for 2014/15 for existing vessels and MV Finlaggan +10% for each of the new builds. (A real increase of 1% per annum above CPI has been allowed for.)

5.1.3.2 Port Operating Expenditure

- Traffic dues – the assumption is that current port charging arrangements will prevail and that per unit dues will be payable at Ardrossan and Lochmaddy only. (All other ports being considered are currently covered by a consolidated arrangement.)
- Berthing dues – Current consolidated arrangements give rise to an assumption of no change.
- Other port costs (including staff) – assume no change.

5.1.3.3 Other - Overhead Operating Expenditure

It is assumed that there will be no material change in overheads.

REDACTED

5.1.4 Caveats and Assumptions

- Day crew assumption 25, Day/night crew assumption 37.
- Fuel consumption assumed same as Loch Seaforth at current fuel prices.
- Fuel consumption based on Annual Fuel Plan 2015-16
- Fuel cost based on August actual average price for Scottish Fuels, including delivery
- Assume 3.5% for lubs
- Leasing cost estimate based on **REDACTED** build cost, 12% based on Loch Seaforth.
- Estimate based on Loch Seaforth.
- Estimate based on Loch Seaforth.
- Estimate based on Loch Seaforth.
- Estimate for additional miscellaneous costs.
- The costs above are gross figures and do not take account of the current cost of providing the services or the effects of cascading current vessels.

In developing the financial appraisal the starting point assumes that all of the relevant deliverables in the Ferries Plan are in place prior to any new vessel entering service.

A new vessel revised base case will determine the change in subsidy levels which will arise as a result of the introduction and subsequent cascading of vessels. This business case does not consider any change in costs and subsidy levels arising from the implementation of the Routes and Services Proposals contained in Appendix 1 of the Ferries Plan, in particular the implementation of a year-round 2 vessel service to Arran. These costs have been allowed for elsewhere and to include them here would be double counting.

Modelled costs and income have assumed CPI inflation with a real cost inflator applied where indicated. The inflation assumption for CPI is as follows:-

- 2.3% in 2014
- 1.6% in 2015
- 1.8% in 2016
- 1.9% in 2017
- 2.0% in 2018 and 2019
- 2.1% in 2020
- 2.2% in 2021 and thereafter

GDP deflators have been taken from *webTAG databook – ‘annual parameters – GDP deflator column’*.

No cash-flow considerations have been undertaken. As a number of agencies are involved there was no ‘one-size-fits-all’ and it has been assumed that this is outwith the scope of this Business Case.

5.1.5 Income

Fare-box income is based on 2013/14 actual yields. The exception to this is Ardrossan/Brodick where an assumption of post RET yields has been made – based on other routes pre and post RET behaviours.

Volumes are based on forecast levels of satisfied demand taken from the VR&DP model. No new vessel effect has been allowed for other than that resulting from a release of capacity constraints.

In addition to fare-box income an allowance has been included for spend-on-board profit per passenger. This is based on 2013/14 levels on the routes in question. No allowance has been made for any uplift in sales that may reasonably be expected from a new vessel.

6 AFFORDABILITY

Input required - could CFL provide 14/15 info?

6.1 Budget Based on Whole of Life Costs

6.2 Settlement Period

The term loan will be repayable over 25 years.

6.3 Income and Expenditure

6.4 Balance Sheet

Refer to Appendix B

6.5 Cash Flow

7 ACHIEVABILITY

7.1 Previous Projects

In recent years, several projects have been delivered to CMAL as part of the CHFS fleet, although specifically the MV Loch Seaforth and MV Finlaggan are the most comparable to the current proposed project in terms of scale.

The high level details below support the feasibility of the project in terms of basic requirements, cost and schedule expectations.

Vessel	Date entered service	Capacity	Fuel Type	Dimensions	Length of Project	Budget £
2 x New Vessels	2018	100 PAX 127 cars 16 HGV's	Duel; Diesel and LNG	Length: 100 m Breadth 17m Draught GT	Current	48.5 m per vessel
MV Loch Seaforth	2015	700 ⁴ PAX 143 Cars ? HGV's	Diesel	Length 116 m Breadth 18.4 m Draught ? ⁵ GT 7800 dwt	?	41.8 m
MV Hallaig	2013	150 PAX 23 Cars 2 HGV's	Hybrid; Diesel & Electric	Length 43.5 m Breadth 12.2 m Draught 1.73 m GT 499 dwt	?	
MV Lochinvar	2014	150 PAX 23 Cars 2 HGV's	Hybrid; Diesel & Electric	Length 43.5 m Breadth 12.2 m Draught 1.73 m GT 499 dwt	?	
MV Finlaggan	2011	550 PAX 85 Cars ? HGV's	Diesel (MGO)	Length 89.8m Breadth 16.4m Draught 13.4m GT 5209 dwt	?	24.5 m

⁴ Passengers?

⁵ Gross Tonnage

7.2 Project Structure

7.2.1 Roles

The three parties make various contributions to the project, by way of the following roles;

Stakeholder	Key Role
TS	Project Governance – Membership of Project Steering Group
	Project Sponsor - The Project Sponsor ⁱ is responsible for specifying the needs of those who will use the final product(s), for user liaison with the project team and for monitoring that the solution will meet those needs within the constraints of the Business Case.
	Project Manager – The Project Manager is responsible for the initiation, planning, execution, and closure of a project, within the constraints laid down by the Project Board (PSG). Their prime responsibility is to ensure that the project produces the required outputs to the agreed cost, quality, scope and time, as defined within the Project Initiation Document.
CMAL	Project Governance – Membership of Project Steering Group
	Worksteam Delivery –
	Subject Matter Expert (SME) - The SME has specialist skills specific to a project / programme's objectives and deliverables and is called upon to provide specific input to solution development or/ and testing.
	Business Lead - The Business Lead provides the business perspective for all decisions related to the way the solution's fitness for business purpose is defined and implemented. Coming from the business area being addressed, they provide business-related information from the perspective of those who will ultimately make direct use of the solution.
	Senior User - The Senior User represents the interests of all those who will use the final product (s) of the project, those for whom the product will achieve an objective or those who will use the product to deliver benefits
CFL	Project Governance – Membership of Project Steering Group
	Worksteam Delivery –
	Subject Matter Expert (SME) - The SME has specialist skills specific to a project / programme's objectives and deliverables and is called upon to provide specific input to solution development or/ and testing.
	Business Lead - The Business Lead provides the business perspective for all decisions related to the way the solution's fitness for business purpose is defined and implemented. Coming from the business area being addressed, they provide business-related information from the perspective of those who will ultimately make direct use of the solution.
	Senior User - The Senior User represents the interests of all those who will use the final product (s) of the project, those for whom the product will achieve an objective or those who will use the product to deliver benefits.

7.2.2 Project Workstreams

The project deliverables are split into manageable workstreams, with ownership depending aligned to organisational functions.

Each workstream is headed up by a Workstream Lead. These are:

Workstream	Tripartite Ownership	Workstream Lead	Key Objective
Vessel Procurement	CMAL	REDACTED	Deliver 2 new vessels to agreed high level specification
Port Infrastructure	CMAL	REDACTED	Prepare ports for vessel service as required
Comms / Engagement	TS	REDACTED	Communicate progress and key facts to internal and external stakeholders
LNG Procurement	CFL	REDACTED	Deliver LNG LNG supply, storage and bunkering solution
Operational Readiness	CFL	REDACTED	Prepare staff and auxiliary services for vessel operation

7.2.3 Project Organisation Chart

REDACTED

7.3 Procurement Strategy

The project procurement will follow the Scottish Model of Procurement. There are several pieces of legislation which inform the rules (regulatory framework) for public procurement across the Scottish public sector, and these are:

- Procurement Reform (Scotland) Act 2014
- EU Procurement Directive on public procurement
- EU Procurement Directive on the award of concession contracts
- EU Procurement Directive on the award of contracts by entities operating in the water, energy, transport and postal services sectors
- EU Procurement Directive for electronic invoicing in public procurement

As the overall ⁶total procurement costs are in excess of the Official Journal of the European Union (OJEU) threshold, and the level of risk is assessed as high, the Procurement Journey Route is Route 3.

Following this model, the procurement is expected to take 10 to 12 months. The key procurement milestones are as follows:

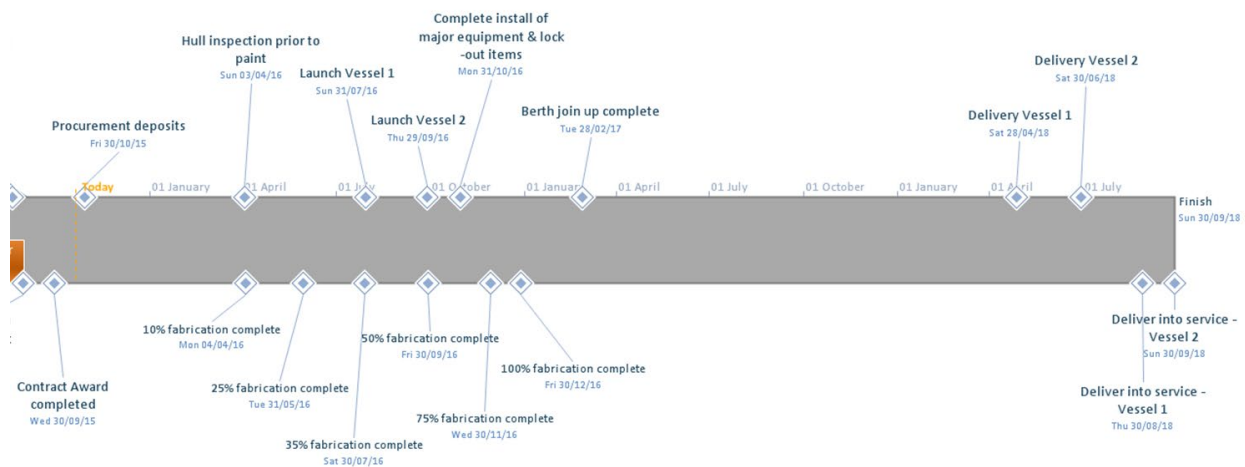
Milestone Description	Target Completion Date
Pre-Qualifying Questionnaire	15.10.14

⁶ Whole life costs, on-going costs, support costs, etc.

Milestone Description	Target Completion Date
Invitation To Tender Open	08.12.15
Tender Clarifications, Evaluation & Selection	01.04.15
Contract Award	30.09.15

7.4 Project Plan

(Below is extract / illustration / draft only; incomplete)



7.5 Contract Management

The procurement contract for the new vessels will be owned and managed by the asset owner, CMAL.

Reference to on-going maintenance contracts

7.6 Risk Management Strategy

CMAL shall maintain a “Vessel Procurement and Construction Risk Register” to set out and rate the risks and the mitigation strategy. The Register will be shared Transport Scotland on a quarterly basis along with the budget monitoring and project management reports.

7.7 Benefits Realisation Plan

Benefits will be tracked by Transport Scotland, using this Final Business Case as the baseline against which to measure performance.

7.8 Contingency Plan

Summarise outline arrangements for contingency management such as fallback plans if service implementation is delayed.- CFL?

8 APPENDICES

8.1 Appendix A

VESSEL DEPLOYMENT AND REPLACEMENT PLAN

FERRIES PLAN – EXTRACT FROM APPENDIX 2

Vessel Replacement Programme

REDACTED

Note: In addition 2 further vessels are identified under Routes and Services proposals.

8.2 Appendix B

8.2.1 Voted Loan I draw-down profile for the two new vessels.

REDACTED

8.2.2 Milestone Tracker

REDACTED

Example

9 DOCUMENT CONTROL

9.1.1 About this document

Document Author:	REDACTED		
Document Owner:	REDACTED		
Date:		Version No.	
Changes since last version:			
Date:		Version No.	
Changes since last version:			
Date:		Version No.	
Changes since last version:			

9.1.2 Approvers

Name	Department	Comment

9.1.3 References and associated documents

ID	Reference

ⁱ Not a specific Prince 2 role, but often used to mean the major driving force of a project.