

Network Strategy Programme Steering Group

Network Strategy Programme Steering Group is coordinated and Chaired by Transport Scotland.

In October 2013 Transport Scotland sponsored a project to seek advice from the Tripartite group (Transport Scotland, Caledonian Maritime Assets Ltd and CalMac Ferries Ltd) of what a programme of vessel retentions, acquisitions and disposals may look like in order that the delivery of the Ferries Plan could be fulfilled. The key project deliverable is the Vessel Replacement and Deployment Plan.

The remit of the Group is to determine and develop clear roles and responsibilities for the operator (CFL) and the asset owner (CMAL) in the retention, acquisition and disposal strategy of the Clyde and Hebrides Ferry Service (CHFS) fleet. In addition, port infrastructure maintenance and improvement strategy plans within the CHFS network are also discussed and developed within the Group.

This strategic approach is intended to enable optimal delivery of the Ferries Plan and to ensure that the on-going delivery of lifeline ferry services on the CHFS network will continue to be fit for purpose and benefit from investment decisions which are transparent and well informed.

Network Strategy / Programme Steering Group membership

The membership of the Group will consist of representatives from:

- Transport Scotland (TS)
- Caledonian Maritime Assets (CMAL)
- CalMac Ferries Ltd (CFL)

The following is an update from CMAL of 16/2/17 to the PSG on Vessels 801 and 802:

Fabrication

Shipyard are concentrating on the fabrication of Vessel 1.

There has been very little fabrication progress on Vessel 2 from the start of the new year.

Good progress has been made on steelwork surveys and re-work.

The plate cutting machine broke down on Wednesday 8th of February (week 6) and will not be back in action before the middle of week 7.

Milestones

Vessel 1:

On 09th December 2016, FMEL provided new milestones dates with a revised target date of 19th Feb 2017 for the next milestone (75% Fabrication) for Vessel 1. We estimate with current output; 75% fabrication milestone for Vessel 1 will not be achieved before mid April 2017 (4 months later than originally planned)

Actual fabrication as of 10th Feb 2017 was 58%. This shows that currently FMEL have planning challenges; not just long term, but also short term (over a 9 week period).

Vessel 2:

Next fabrication milestone for Vessel 2 is 75% fabrication with a revised target date of 05th May 2017 (5 months later than originally scheduled). We estimate with current output; 75% fabrication milestone for Vessel 2 will not be achieved before mid August 2017 (8 months later than originally planned).

Planning/Programme

Fifteen months in to the contract; FMEL have yet to issue a detailed plan for fabrication, equipment installation, outfitting and commissioning.

Service Speed and Propulsion Power

For the Ardrossan-Brodick route, CFL advise that an increase in the water line length to 104.8m, brought about by the addition of a ducktail is undesirable and would reduce operational limits. CFL preference is for the Ardrossan-Brodick vessel to remain at the previous design length of 102.4m.

CFL are reviewing the suitability of the suggested ducktail arrangements (proposed to decrease the propulsion power, fuel consumption and emissions) for the Vessel on the Uig-Lochmaddy and Uig-Tarbert routes.

Manoeuvring Simulator

Visit to the City of Glasgow College Manoeuvring Simulator to demonstrate the berthing capabilities of the new Vessel at Ardrossan and Tarbert (Harris) took place on the 23rd January 2017; with CMAL, CFL and FMEL in attendance. All were very impressed by the simulation which was very effective and provided a high quality representation of the ports at Ardrossan and Tarbert (Harris). Some comments/observations were made which will be fed into the next trial.

It is expected that the manoeuvring simulation for the new Vessel demonstrating manoeuvring at Troon will take place on the 20th February 2017.

Launch and Vessel Names

Vessel 1 – Launch date: 24th August 2017.

Vessel 2 – Launch date: Jan/Feb 2018 (3 to 4 months later than originally scheduled).

FMEL have still to advise where both vessels will be berthed after launch. Space at FMEL quayside is limited for 2 Vessels of this size.

Arrangements for Launch to discuss.

Ship names to discuss.

Vessel 1 - Production milestones - Actual progress compared with schedule

YARD NO. 801					
Milestone	Original Scheduled Date See Note 1	Revised Scheduled Date See Note 2	Revised Scheduled Date See Note 3	Actual Date	Comments
Cutting of Steel	15 Dec 2015	15 Dec 2015	-	15 Dec 2015	Achieved on original scheduled date Rev 01
10% Fabrication	18 Apr 2016	13 Jun 2016	-	10 Jun 2016	Achieved 2 months later than original schedule Rev 01 Achieved in line with revised schedule Rev 03
25% Fabrication	14 Jun 2016	26 Jul 2016	-	04 Aug 2016	Achieved 2 months later than original schedule Rev 01 Achieved in line with revised schedule date rev 03
35% Fabrication	15 Aug 2016	12 Sep 2016	-	06 Oct 2016	Achieved 8 weeks later than original schedule Rev 01 Achieved 4 weeks later than revised schedule Rev 03
50% Fabrication	14 Oct 2016	14 Oct 2016	-	09 Dec 2016	Achieved 2 months later than original and revised schedules
Major Equipment and Lock Out Items Installations	14 Nov 2016	13 Mar 2017 to 18 Jan 2018	-		Delivery dates of all major equipment are awaited from FMEL. "Installation" of all the "Major Equipment" has not been commenced on the 14 th November 2016 as per original plan. Major items of Main Propulsion were delivered (not installed) on the 19 th December 2016; these are the Main Engines, Auxiliary Engines and Shaft Alternators. The original plan from FMEL was to install the major equipment early and advance outfit. This has not happened and is the biggest risk to achieving the contract delivery date.
75% Fabrication	15 Dec 2016	15 Dec 2016	10 Feb 2017		Rescheduled on 09th Dec 2016. Revised date 10th Feb 2017 was not achieved. Actual 58% at 10 Feb 2017, target was 75%
100% Fabrication	16 Jan 2017	16 Jan 2017	16 June 2017		Now scheduled 5 months later than original plan
Berth Join Up	14 Mar 2017	28 Apr 2017	14 Jul 2017		Now scheduled 4 months later than original plan
Hull Inspection Prior to Paint	17 Apr 2017	26 May 2017	21 Apr 2017		Latest target date given by FMEL is back in line with original programme.
Launch	14 Aug 2017	24 Aug 2017	24 Aug 2017		We expect that the vessel will be ready to launch by this date. However the status of the drawings, outfitting and installation will be several months behind schedule.
Delivery	25 May 2018	29 Jun 2018	25 May 2018		Latest target date given by FMEL is back in line with original programme.

Note 1: From Cardinal Programme Rev 01 dated 14 Dec 2015
 Note 2: From Cardinal Programme Rev 03 dated 16 May 2016
 Note 3: Email from FMEL 09 Dec 2016

Vessel 2 - Production milestones - Actual progress compared with schedule

YARD NO. 802					
Milestone	Original Scheduled Date See Note 1	Revised Scheduled Date See Note 2	Revised Scheduled Date See Note 3	Actual Date	Comments
Cutting of Steel	15 Dec 2015	15 Dec 2015	-	15 Dec 2015	Achieved on original scheduled date Rev 01
10% Fabrication	18 Apr 2016	13 Jun 2016	-	10 Jun 2016	Achieved 2 months later than original schedule Rev 01 Achieved in line with revised schedule Rev 03
25% Fabrication	14 Jun 2016	02 Aug 2016	-	04 Aug 2016	Achieved 2 months later than original schedule Rev 01 Achieved in line with revised schedule date rev 03
35% Fabrication	15 Aug 2016	26 Sep 2016	-	06 Oct 2016	Achieved 8 weeks later than original schedule Rev 01 Achieved 2 weeks later than revised schedule Rev 03
50% Fabrication	14 Oct 2016	18 Nov 2016	20 Jan 2017	13 Jan 2017	Achieved 3 months later than original schedule Rev 01
Major Equipment and Lock Out Items Installations	14 Nov 2016		TBA		Delivery dates of all major equipment are awaited from FMEL. "Installation" of all the "Major Equipment" has not been commenced on the 14 th November 2016 as per original plan. Major items of Main Propulsion were delivered (not installed) on the 19 th December 2016; these are the Main Engines, Auxiliary Engines and Shaft Alternators. The original plan from FMEL was to install the major equipment early and advance outfit. This has not happened and is the biggest risk to achieving the contract delivery date. That and the gap between delivery dates between Vessels 1 and 2.
75% Fabrication	15 Dec 2016	19 Jan 2017	05 May 2017		Now scheduled 5 months later than original plan
100% Fabrication	16 Jan 2017	20 Feb 2017	20 Oct 2017		Now scheduled 9 months later than original plan
Berth Join Up	14 Mar 2017	05 Jan 2018	14 Dec 2017		Now scheduled 9 months later than original plan
Hull Inspection Prior to Paint	17 Apr 2017	02 Feb 2018	24 Nov 2017		Now scheduled 7 months later than original plan
Launch	12 Oct 2017	20 Mar 2018	12 Jan 2018		No space to have 2 vessels at outfit berth at the same time. Outfitting and installation will be several months behind schedule.
Delivery	26 Jul 2018	29 Aug 2018	26 Jul; 2018		Date given by FMEL is back in line with original programme.

Note 1: From Cardinal Programme Rev 01 dated 14 Dec 2015
 Note 2: From Cardinal Programme Rev 03 dated 16 May 2016
 Note 3: Email from FMEL 09 Dec 2016

Workstream RAG Status: AMBER

LNG Update

CMAL now lead the LNG workstream whilst CFL are responsible for procuring the supply of LNG.

CFL are developing a tender for the following services:

- LNG fuel supply and delivery
- Work with 3rd party to develop the LNG bunkering system
- Provision of training and assistance to develop operational practices

The development of the tender spec is dependent on:

- CMAL providing key quality indicators for scoring mechanism

Workstream RAG Status: **AMBER**

- It was decided in 2014 the 2 new major vessels (Hull 801 and 802) would be Dual Fuel, namely a combination of Marine Diesel and LNG.

LNG Update

- The lead organisation in regard to bunkering activity was CFL as it is their responsibility to carry out a procurement exercise in regard to the preferred supplier of LNG for these 2 vessels. CMAL accepted that we would lead the LNG Project although interaction with CFL is required .

CMAL Approach

- Formed a team comprising CMAL personnel with responsibility for Vessels, Harbours, Engineering & Environment
- Invite representative from CalMac, such as a Ship Master
- Maintain contact with Flogas (company considering investing in bulk container at Rosyth. There is no commercial relationship and that services for supply must be procured by CalMac

Bunker Supply Options

- In the short to medium term the options for supply are from Isle of Grain (SE England) or Rotterdam (Netherlands) – this would be by truck in LNG Cryogenic Trailers at circa 37.5m³ per load.
- The ultimate solution is to effectively have a LNG Bunker Barge delivering LNG to vessels throughout Scotland and the UK on a “milk round basis”. It would also be foreseen that there was a shore based LNG Facility in Scotland which is most likely on the Forth as opposed to the Clyde.

Supply

- There are significant logistics challenges in the initial supply of LNG as there are no facilities in Scotland currently
- Flogas have identified a site at Rosyth. This location has been chosen due to infrastructure but more importantly it relates to seaborne deliver from Isle of Grain and/or Rotterdam; there are no plans for West Coast Facilities
- Distances and times by road are as follows
 - Grain to Ardrossan = 466 miles at 9 hours
 - Rosyth to Ardrossan = 72 miles at 2 hours
 - Grain to Uig = 660 miles at 14 hours
 - Rosyth to Uig = 236 miles at 6 hours
- As can be seen the logistics from Isle of Grain are significant which in turn will affect the overall cost of the product; this will be significant.

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Workstream RAG Status: **AMBER**

Options

- Bunkering on-board the vessel
- Bunkering from the shore alongside the vessel
- Bunkering from the link span or from the Bank Seat
- Bunkering from Shore (land) utilising a fixed piping system
- Connecting to the vessel via a fixed piping system
- Utilising a bespoke bunker barge for ship to ship transfer

Actions Required

- CFL commence the procurement process to identify the preferred supplier.
- It is highly likely that the bunkering process will be out with operational hours and an assessment of cost of this is required from CFL.
- CFL to nominate a C/E or Master to join the CMAL Project Team
- CMAL to engage with HSE and Class/MCA to identify the risks – already underway
- Project Team to identify the optimal solution for bunkering with LNG (Shore to Vessel)

LNG Supply Feasibility

We need to seek the views from the tri-partite working group (CFL/CMAL/TS) as to whether we believe that supply of LNG is at all feasible from Isle of Grain/Rotterdam or whether we target supply of LNG once there is a small scale storage facility in Scotland (Rosyth Range)