Public Audit Committee

16th Meeting, 2022 (Session 6), Thursday, 26 May 2022

New vessels for the Clyde and Hebrides

Introduction

1. At its meeting today, the Public Audit Committee will take oral evidence from the Scottish Government and Transport Scotland on the Auditor General for Scotland's (AGS) report, New vessels for the Clyde and Hebrides, which was published on 23 March 2022. A copy of the report can be found in the **Annexe**.

2. The Committee previously took evidence from the AGS on this report on 21 April and 28 April 2022.

3. The Committee will have the opportunity to consider any further action it may wish to take following the evidence session.

Clerks to the Committee

23 May 2022

Annexe

New vessels for the Clyde and Hebrides

Arrangements to deliver vessels 801 and 802

AUDITOR GENERAL

Prepared by Audit Scotland
March 2022

Contents

Key messages

1 The project to deliver two new dual-fuel ferries for the Clyde and Hebrides has been fraught with problems and delays for over six years. Vessels 801 and 802 were originally expected to be delivered in May and July 2018 respectively, and are now almost four years late. The total cost of the project is currently estimated to be at least £240 million, which is 2.5 times the original vessels' budget. In February 2022, Ferguson Marine (Port Glasgow) Limited (FMPG) informed the Scottish Parliament of further delays to the vessels. It expects to provide an update on timescales, and any impact on costs, at the end of March 2022. FMPG will need to address significant operational challenges to deliver the vessels within the new timescales.

2 In August 2015, Scottish ministers announced Ferguson Marine Engineering Limited (FMEL) as the preferred bidder for the £97 million fixed price **contract** to design and build the two vessels. In September 2015, FMEL confirmed that it was unable to provide Caledonian Maritime Assets Limited (CMAL) with a full refund guarantee, which was one of the mandatory requirements of the contract. Although CMAL subsequently negotiated a partial refund guarantee with FMEL, it remained concerned about the significant financial and procurement risks this created. CMAL had the option to reject FMEL's bid at this point and informed Transport Scotland that its preference was to re-start the procurement process. Transport Scotland alerted Scottish ministers to CMAL's concerns and the risks of awarding the contract to FMEL. There is insufficient documentary evidence to explain why Scottish ministers accepted the risks and were content to approve the contract award in October 2015.

Contract

CMAL awarded two separate contracts, one for vessel 801 and one for vessel 802. Each contract was for a fixed price of £48.5 million.

The two contracts were identical except for:

- the contractual delivery dates
- the milestone payment dates for the launch and delivery of the vessels.

For simplicity, and unless there is a need not to, we have referred to there being one contract throughout the report.

3 CMAL used an industry standard shipbuilding contract. This internationally recognised contract places full responsibility and risk for the design and build of the vessels with the shipbuilder and does not allow the buyer to intervene in the running of the project. The contract works effectively when backed with a full refund guarantee as it provides complete protection for the buyer. As a full refund guarantee was not in place for the 801/802 contract, some of the risk was transferred from FMEL to CMAL and meant that the contract was not effective when problems emerged. In addition, some of the milestones in the contract were not clearly defined and had no link to quality standards. CMAL was legally obliged to make those milestone payments despite its concerns about FMEL's performance.

4 There were weaknesses in project governance: the Programme Steering Group (PSG) had no clear role, and there were no formal escalation processes in place. CMAL reported issues with FMEL's project planning and vessel designs as early as December 2015. This was followed by several reports of problems and delays, which multiplied as the project progressed. Transport Scotland verbally updated Scottish ministers on the project and notified the Minister for Transport and the Islands in December 2016 that there was a risk that FMEL would not recover the vessel delays. In February 2017, Transport Scotland officially informed Scottish ministers that it was highly probable that the vessels would be late.

5 FMEL experienced cash flow problems from 2016 which it stated were due to problems with the contract. To help get the vessels delivered as quickly as possible, protect jobs, and secure the future of the shipyard, Scottish ministers approved a range of financial and non-financial support for FMEL. For example, CMAL accelerated £14.55 million of milestone payments to FMEL in May 2017 and allowed FMEL to extend the vessel delivery dates in June 2018. Separately, the Scottish Government provided FMEL with two loans, in September 2017 and June 2018, worth a total of £45 million. The terms of the £30 million loan in June 2018 required the Scottish Government to make payments to FMEL despite evidence of further delays. Although the interventions enabled FMEL to retain its workforce and suppliers, they had little impact on the progress of the vessels.

6 In July 2017, FMEL submitted a £17.5 million claim to CMAL for additional costs. CMAL disputed the validity of the claim. Over the next 18 months, the dispute, and the value of the claim, escalated. In March 2019, after seeking legal advice, CMAL refuted the claim in its entirety. FMEL chose not to pursue the claim in court and in May 2019 the Scottish Government commissioned an independent view. It concluded in June 2019 that there was no legal basis for CMAL to pay more than the £97 million fixed price for the contract. FMEL subsequently entered administration in August 2019. At this point, CMAL and the Scottish Government had paid FMEL a total of £128.25 million (that is, £83.25 million in contract payments and £45 million in loan payments), but the vessels were largely incomplete.

7 In December 2019, the Scottish Government brought the shipyard into public ownership. It created a new organisation (FMPG) and introduced new arrangements to complete the vessels. This has been a complex process. The Scottish Government-appointed Turnaround Director identified significant operational failures at the shipyard, which still need to be fully resolved, and the vessels have required extensive remedial work. This, along with the impact of Covid-19, has slowed progress with the vessels. The FMPG Board is aware of the need for improvements at the shipyard but its ability to effectively scrutinise has been limited by insufficient information.

8 FMPG is actively pursuing new business opportunities and the Scottish Government is exploring options, such as direct contract awards for new vessels. The Scottish Government is committed to supporting FMPG to a position where it can compete for contracts, as it considers this is the best way to secure a sustainable future for the shipyard.

Recommendations

Our recommendations are intended to:

- support the completion of vessels 801 and 802 as quickly and efficiently as possible
- improve future procurement, contract management, and delivery of new vessels
- help inform thinking about the future of FMPG
- increase the transparency of the Scottish Government's decisions and expected outcomes in relation to supporting private businesses.

In relation to completing vessels 801 and 802

FMPG should:

- after completing its re-baselining exercise for both vessels, and taking account of CMAL's advice:
  - closely monitor, and manage, the risks and challenges of delivering vessel 801 within the updated delivery timescales and continue to apply lessons learned from vessel 801 to vessel 802
  - develop detailed project plans, at the earliest appropriate date, which set out the work required to deliver vessel 802 within its updated delivery timescales
- work with the Scottish Government to finalise the business case to support the required improvements and investment identified in its short-term Development Plan
- accelerate the integration and improvement of its business systems to produce and report better management information. This will allow it to track progress and reduce inefficiencies, and allow the FMPG Board to scrutinise performance more effectively.

The Scottish Government should:

- in its role as contract owner and FMPG's sponsor, encourage effective communication between CMAL and FMPG. This includes facilitating open and constructive discussions about progress and challenges, and agreeing how the vessels can be completed to the required standard as quickly and efficiently as possible
- to improve scrutiny and transparency, ensure that all parties have access to available information on vessel progress
- work with FMPG and CMAL to consider how openness and transparency could be enhanced by more balanced public reporting of vessel progress.

In relation to new vessel provision and future new vessel contracts

Transport Scotland and CMAL should:

- undertake, on completion of vessels 801 and 802, and involving the Scottish Government and FMPG where appropriate, a formal review of what went wrong with the project with a view to learning lessons to help prevent future recurrence with other vessel procurements
- finalise the long-term plan and investment programme for ferries by the end of 2022. As part of this process, and considering the results of the Project Neptune governance review, Transport Scotland and CMAL should consider how best to implement the future new vessels programme and the most effective arrangements for managing new vessel projects.

Transport Scotland should:

- implement the planned improvements to its governance arrangements for new-build vessel projects. This includes establishing clear roles and responsibilities, setting out a clear escalation process, and ensuring that risks are routinely recorded and monitored.

CMAL should:

- in addition to insisting on a full refund guarantee, review its contract management arrangements and consider how to encourage shipbuilders to meet its expected quality standards over the duration of new vessel projects. This may include making a clearer link between quality standards and milestone payments.

In relation to the future of FMPG

FMPG should:

- as per the Framework Document, produce a business plan and a medium-to-long-term Strategic Plan as quickly as possible
- work with the Scottish Government to progress its longer-term Development Plan to help improve the shipyard's competitiveness and allow it to better demonstrate value for money.

The Scottish Government should:

- in the short term, continue to support FMPG's ambitions to be more competitive and sustainable. In the longer term, consider options for FMPG's future.

In relation to supporting transparency and accountability

The Scottish Government should:

- in line with its new framework for investing in private businesses, improve the transparency of its investment decisions
- be clear about the specific outcomes it expects to achieve from investing in private businesses and put appropriate measures in place to assess and report value for money. This includes setting clear conditions for its investment, ensuring that these are adhered to, and monitoring risks.

Background

Ferries are vital for supporting rural communities and economies

1. Ferries are an essential part of Scotland's transport network. They are vital for sustaining remote communities and developing local economies through, for example, providing access to goods and services, supporting tourism, and exporting island produce. Our 2017 report, Transport Scotland's ferry services, set out the complex arrangements for managing and operating ferries across Scotland, including services on the Clyde and Hebrides network. In summary:

- Transport Scotland is the Scottish Government's national transport agency. It provides loans and grants to Caledonian Maritime Assets Limited (CMAL) for vessels and harbours. It also appoints and subsidises the ferry operator on the network, currently CalMac Ferries Limited (CalMac).
- CMAL, which is wholly owned by Scottish ministers, owns around half of the harbours and 32 out of the 35 vessels that operate on the network.
- CalMac is a subsidiary of David MacBrayne Limited (DML), which is wholly owned by Scottish ministers. It is responsible for running the ferry services. This includes operating CMAL's harbours, leasing CMAL's vessels, and deciding on which routes they should be deployed.

Transport Scotland's ferry services
October 2017

2. CMAL's fleet of ferry vessels is ageing, increasingly prone to breakdowns and struggling to meet rising service demand on some of the main routes and at peak times. Transport Scotland has long recognised the need to renew and improve the vessel fleet to ensure it is fit for purpose. In 2014, Transport Scotland, supported by CMAL and CalMac, set out the case to procure two new **dual-fuel vessels** on the Clyde and Hebrides network.[1] One vessel was to be deployed between Ardrossan and Brodick, and the other between Uig, Tarbert and Lochmaddy.

Dual-fuel vessels

Vessels that can operate on liquefied natural gas (LNG) and marine gas oil (MGO). LNG is a cleaner fuel and helps reduce carbon emissions.

3. Procuring both vessels at the same time was intended to be the start of a standardised approach to building new vessels. Anticipated benefits of the new vessels included improved reliability, increased capacity, and reduced carbon emissions and fuel costs. The two new vessels, and subsequent additions and disposals, were expected to reduce the average age of CMAL's major vessel fleet from 21 years in 2017 to 12 years by 2025.

The new vessels project quickly encountered several problems and delays

4. In October 2015, CMAL awarded Ferguson Marine Engineering Limited **(FMEL)** the contract to design and build the new vessels, known as **Hull 801 and Hull 802**, at a combined fixed price of £97 million. Hull 801 was expected to be completed in May 2018 and Hull 802 in July 2018.

5. CMAL first reported problems with the delivery of the project to Transport Scotland in December 2015. This was followed by several notifications of delays and concerns about FMEL's finances. Despite CMAL agreeing to FMEL's requests to change the contract and the Scottish Government providing financial support, FMEL entered administration in August 2019. In December 2019, the Scottish Government brought the shipyard into public ownership and formed a new organisation – Ferguson Marine (Port Glasgow) Limited (FMPG) – to complete the vessels.[2] Exhibit 1 (page 11) sets out a timeline of the key events that occurred during the project.

6. In December 2020, the Scottish Parliament's former Rural Economy and Connectivity Committee (RECC) concluded its inquiry into the project.[3] It reported serious failures in vessel procurement, project planning, project management, and communication.

About the audit

7. Our audit looked at the initial and new arrangements to deliver the two vessels. We examined:

- whether CMAL and Transport Scotland put appropriate arrangements in place at the outset to ensure the project was delivered to time, cost, and quality (Part 1 of this report)
- the extent to which CMAL, Transport Scotland and the Scottish Government responded appropriately to resolve issues (Part 2)
- the new arrangements that the Scottish Government has put in place to complete the vessels (Part 3)
- whether FMPG is on track to deliver the vessels within the new budget and timescales (Part 4).

8. Our audit focused on events after Scottish ministers announced FMEL as the preferred bidder in August 2015. We did not audit any aspects of the procurement process before this point, but we have provided information about the arrangements for context. We did not review the adequacy of the vessel designs or look at CalMac's role in determining the vessels' type and requirements.

FMEL

Clyde Blowers Capital III LP (CBC) acquired the assets of Fergusons Shipbuilders in September 2014 via a new company – Ferguson Marine Engineering Ltd (FMEL). As part of this, CBC established Ferguson Marine Engineering (Holdings) Ltd as the parent company of FMEL. CBC is the parent company of Ferguson Marine Engineering (Holdings) Ltd.

For simplicity, our report refers to FMEL as meaning both FMEL and Ferguson Marine Engineering (Holdings) Ltd.

Hull 801 and Hull 802

In June 2017, Hull 801 was named MV Glen Sannox. Hull 802 has not been named.

For simplicity, throughout this report, we refer to the vessels as vessel 801 and vessel 802.

9. The RECC concluded that FMEL was partially responsible for the failure of the project. As FMEL was a private sector organisation, it is not within our remit to audit its capability to deliver the contract. However, to ensure that our audit considered all relevant sources, we spoke to a small number of former FMEL staff and reviewed FMEL's written evidence to the RECC inquiry.

10. Appendix 1 sets out the methodology we used to gather evidence. This included desk research, tours of the shipyard, and interviews with CMAL, Transport Scotland, the Scottish Government and FMPG. We also spoke with representatives from Lloyd's Register and the Maritime and Coastguard Agency (MCA), and to the Scottish Government's consultants used to advise on options for FMEL and to monitor the conditions of the financial support provided to FMEL.

Exhibit 1.
Timeline of key events

Date	Event
2015	
August	Scottish ministers announce FMEL as the preferred bidder for the contract to design and build two new vessels, at a combined fixed price of £97 million
September	FMEL confirms that it is unable to provide a full Builders Refund Guarantee (BRG), which was one of the mandatory requirements of the contract
September	CMAL advises Transport Scotland of the significant risks of awarding the contract to FMEL, and states its preference is to start the procurement process again
October	Transport Scotland advises CMAL that Scottish ministers are aware of the risks and are content for CMAL to award the contract to FMEL
October	CMAL awards the contract to FMEL. Expected vessel delivery dates are May 2018 (vessel 801) and July 2018 (vessel 802)
December	CMAL advises the Project Steering Group (PSG) that FMEL has failed to meet some of its contract deliverables
2016	
November	To aid FMEL's cash flow, CMAL agrees to replace the BRGs with **surety bonds**, issued by the insurance company HCC plc

Cont.

Surety bond

A legally binding contract between three parties: the surety (or guarantor), principal and oblige. The surety provides a financial guarantee, protecting the oblige (in this case CMAL) against losses should the principal (in this case FMEL) fail to fulfil an obligation.

Date	Event
2017	
February	Transport Scotland officially informs Scottish ministers of delays
March	FMEL changes its build strategy to try and get the project back on track
May	FMEL requests that CMAL accelerates £14.55 million of milestone payments to aid its cash flow. Scottish ministers agree this change with FMEL. The CMAL Board approves it, subject to tight controls
July	FMEL submits a claim to CMAL for £17.5 million of additional payments. CMAL disputes the validity of the claim
September	The Scottish Government provides FMEL with a £15 million loan to aid its cash flow (CMAL is unaware of this due to commercial confidentiality)
2018	
February	The Scottish Government enters an intercreditor agreement with HCC plc to release £10.7 million of FMEL's cash from **escrow** to aid its cash flow
February	CMAL and FMEL abandon mediation attempts
April	FMEL advises CMAL that its claim has increased to £27.4 million
May	CMAL and Transport Scotland update Scottish ministers on problems with the project and advise them of contingency plans. The parties agree that cancelling the contract is the least preferred option as this would not achieve the main priorities of completing the vessels as quickly as possible and protecting jobs at the shipyard
May	The Scottish Government appoints a consultant to review the adequacy of FMEL's labour input to complete the vessels in line with its updated vessel delivery programme
June	The Scottish Government provides FMEL with a £30 million loan to aid its cash flow (CMAL is unaware of this due to commercial confidentiality)
June	CMAL agrees to FMEL's revised delivery dates of June 2019 for vessel 801 and March 2020 for vessel 802, on the condition that FMEL extends the surety bonds (which are due to expire at the end of 2018)
July	As part of the £30 million loan agreement, the Scottish Government appoints an independent operational expert to provide assurance that FMEL is making progress in line with its vessel delivery programme
December	FMEL submits a new claim to CMAL for £65.8 million

Cont.

Escrow

A legal arrangement in which a third party temporarily holds a sum of money, or property, until a particular condition has been met.

Date	Event
2019	
February	The Scottish Government and Transport Scotland initiate Project Kildonan to formally consider contingency plans for the vessels and the shipyard
March	CMAL refutes FMEL's revised claim
April	FMEL advises Scottish ministers that it will make significant redundancies
May	CMAL advises Scottish ministers of its intention to cancel the contract for vessel 801 on the grounds of late delivery. It also informs Scottish ministers that it will make a call on the surety bond (ie, it will request £12.125 million from HCC plc)
May	The Scottish Government commissions an independent view of FMEL's claim
June	The Scottish Government advises both parties that there is no legal basis for CMAL to pay more than the fixed price of the contract
August	The Scottish Government appoints a Turnaround Director to help stabilise the shipyard and put a programme in place to complete the vessels
August	FMEL enters administration
December	The Scottish Government completes a commercial transaction to bring the shipyard into public ownership and creates a new organisation, FMPG, to complete the vessels
December	The Turnaround Director provides an update on costs and timescales for the Scottish Government. The estimated delivery dates are October to December 2021 for vessel 801, and July to October 2022 for vessel 802. The estimated cost to complete both vessels is £110.3 million to £114.3 million
2020	
June	Scottish ministers appoint the FMPG Board
August	The Turnaround Director updates delivery timescales to account for Covid-19 disruption: April to June 2022 for vessel 801 and December 2022 to February 2023 for vessel 802. There is no change to the cost
2021	
June	The Turnaround Director updates delivery timescales to account for further Covid-19 disruptions and labour shortages: July to September 2022 for vessel 801 and April to July 2023 for vessel 802. There is no change to the cost
2022	
February	The Turnaround Director advises the Scottish Parliament of further vessel delays due to a serious cable problem on vessel 801
March	FMPG expects to provide the Scottish Parliament with an update on vessel timescales, and any impact on costs

Source: Audit Scotland

1. Initial arrangements to deliver the vessels

Key messages

1 In August 2015, Scottish ministers announced FMEL as the preferred bidder for the £97 million contract to design and build two new dual-fuel ferries. In September 2015, FMEL confirmed that it was unable to provide CMAL with a full Builders Refund Guarantee (BRG), which was a mandatory requirement of the contract. CMAL's preference was to reject FMEL's bid and start the procurement process again. Transport Scotland fully appraised Scottish ministers of the significant financial and procurement risks of awarding the contract to FMEL. There is insufficient documentary evidence to explain why Scottish ministers accepted these risks and were content to approve the contract award in October 2015.

2 Scottish ministers, Transport Scotland and CMAL put measures in place to mitigate the risks of awarding the contract to FMEL. This included CMAL negotiating a partial refund guarantee, taking ownership of the vessels while under construction, and withholding 25 per cent of the contract value until the vessels were delivered.

3 CMAL used an industry standard shipbuilding contract. This internationally recognised contract places full responsibility and risk for the design and build of the vessels with the shipbuilder and gives the buyer no authority to intervene in the running of the project. The contract works effectively when backed with a full refund guarantee as it provides complete protection for the buyer. As a full refund guarantee was not in place for the 801/802 contract, some of the risk was transferred from FMEL to CMAL. This meant that the contract was not effective when problems emerged and gave CMAL limited scope to address concerns about the standard of FMEL's work.

4 There were weaknesses in project governance. The Programme Steering Group (PSG), led by Transport Scotland, had no clear role, and there were no formal escalation processes in place. Although problems with the project were regularly discussed and documented in different forums, CMAL's initial project risk register was not updated, and the PSG did not routinely monitor specific risks.

Transport Scotland, CMAL and CalMac established a project team to plan for and deliver the new vessels

11. Transport Scotland's 2012 Ferries Plan included a proposal to replace two of the large vessels on the Clyde and Hebrides network. In 2013 and 2014, Transport Scotland, supported by CMAL and CalMac, started to consider a more detailed Vessel Replacement and Deployment Plan (VRDP).[4] This set out the case to procure two new dual-fuel ferries, which would become known as vessels 801 and 802.

12. Transport Scotland, along with CMAL and CalMac, established a project team to coordinate and oversee the programme of work required to deliver the vessels. The project included five separate workstreams which were each led by one of the three bodies. Exhibit 2 sets out their roles and responsibilities. The Network Strategy (Ferries and Ports) **Programme Steering Group** (the PSG), chaired by Transport Scotland, provided oversight of the project.

Programme Steering Group

Transport Scotland chaired the PSG. It also comprised representatives from CalMac and CMAL. It was responsible for overseeing all five project workstreams.

Exhibit 2.

Roles, responsibilities, and accountabilities of the public bodies initially involved in delivering vessels 801 and 802

CalMac	CMAL	Transport Scotland	Scottish ministers
Roles			
• Ferry operator	• Procures and owns 32 vessels on the network • Owns 26 ports and harbours, and other ferry infrastructure	• National transport agency • Sets policy on ferry services • CMAL's sponsor	• Responsible for ferry policy and delivery • Sets Transport Scotland's budget for subsidised ferry services • Awards contracts for ferry services • Approves contract awards for ferry assets
Workstream responsibility			
• LNG (ie, find a solution to supply, store, and bunker LNG fuel) • Operational readiness (eg, train staff for vessel operation)	• Vessel procurement (ie, appoint a contractor and oversee construction) • Port infrastructure (ie, prepare ports for vessel service)	• Communication (ie, report progress to internal and external stakeholders)	Not applicable

Cont.

<table>
<tr><th>CalMac</th><th>CMAL</th><th>Transport Scotland</th><th>Scottish ministers</th></tr>
<tr><td colspan="4">Responsibilities in relation to the vessel procurement workstream</td></tr>
<tr>
<td>• In line with the VRDP analysis, produced a detailed Statement of Requirements (SOR) for the vessels
• Advised CMAL on how well shortlisted bids matched the SOR</td>
<td>• Tested the feasibility of CalMac's SOR
• Developed the concept design
• Ran the procurement exercise (eg, produced and issued the Invitation to Tender, evaluated bids, and awarded the contract)
• Managed the contract (ie, oversaw FMEL's work and made payments)
• Reported progress to the CMAL Board and the PSG</td>
<td>• Funded vessel construction, through loans to CMAL
• Conduit between CMAL and Scottish ministers
• Provided CMAL with advice and guidance</td>
<td>• Approved the contract award by CMAL
• Approved Transport Scotland's spending decisions</td>
</tr>
<tr><td colspan="4">Accountable to:</td></tr>
<tr>
<td>• David MacBrayne Limited (DML) Board</td>
<td>• CMAL Board
• Scottish ministers</td>
<td>• Scottish ministers</td>
<td>• Scottish Parliament
• Scottish public</td>
</tr>
</table>

Note: Our audit considered the 'vessel procurement' workstream, which was led by CMAL. We did not review any of the other four workstreams.

Source: Audit Scotland

The vessels were initially estimated to cost a total of £72 million

13. Transport Scotland's financial business case outlined that the new vessels would cost £40 million each. CalMac estimated that procuring and building both vessels at the same time would save between eight and 15 per cent of the capital cost. The business case therefore assumed a ten per cent saving associated with dual construction, giving an overall estimated price for the two vessels of £72 million. Transport Scotland was to fund the vessels through a loan to CMAL.

CMAL used an industry standard shipbuilding contract and a standard procurement procedure for the project

14. CMAL advertised the **contract notice** for the detailed design, construction, and delivery of the two vessels in October 2014. It used a standard restricted procurement procedure. This required potential bidders to demonstrate that they could meet certain mandatory requirements, which included offering a Builder's Refund Guarantee (BRG) from an accredited bank for each vessel.

The contract notice specified that the vessels should:

- be 100 metres long
- have a carrying capacity of 1,000 passengers, 127 cars or 16 HGVs
- be fitted with twin LNG dual-fuelled engines
- have an optimal service speed of around 14.5 knots and should be capable of reaching 16.5 knots.

15. In December 2014, CMAL issued an Invitation to Tender (ITT) to a short-list of potential bidders, including FMEL. The ITT set out CMAL's requirements, including a 135-page technical specification for the vessels and the draft contract. CMAL used the standard BIMCO New Build Contract (NEWBUILDCON) which is used throughout the shipbuilding industry. This is a design and build contract in which the shipyard undertakes to design and build a vessel to meet the buyer's specification at a fixed price. The contract stipulates that the full risk for the design and build remains with the builder throughout the construction of vessels.

16. The BRG is an integral part of the BIMCO contract and is the main source of financial security for a ship buyer. Typically, it is an agreement between the shipbuilder (in this case FMEL) and a bank to refund 100 per cent of the payments to the buyer (in this case CMAL) if it cancels the contract (because, for example, the ship does not meet the specification, is late, or if the shipbuilder is deemed insolvent). With a 100 per cent refund guarantee in place, the full financial risk of the project rests with the shipbuilder.

17. All bidders were required to accept the terms of the draft contract or to provide comments or amendments to the draft. Some of the bidders provided comments. FMEL did not, thus implying that it accepted the contract terms.

The Scottish Government reviewed CMAL's procurement process in response to FMEL's complaints and found no major issues

18. In early 2017, 18 months after CMAL had awarded the contract, FMEL complained to CMAL and to Scottish ministers about the procurement process. This included the time it was given to prepare its bid, the level of detail in the specification, and responsibility for the detailed design of the vessels. In response, the Scottish Government's procurement directorate conducted an independent, high-level review of CMAL's procurement procedure. Although it did not examine the technical details in depth, the review found no material issues with the procurement:

- There was no evidence to suggest that the tender documentation was not understood by all bidders. Pre-contract documentation, including FMEL's bid, suggested that FMEL was aware of the risks it was accepting at the point of contract award.
- Neither the volume of clarification questions submitted by bidders, nor their content, suggested a fundamental lack of understanding of the requirements.

19. The review noted however that a different procurement procedure, namely the **Negotiated or Competitive Dialogue procedures**, may have given further scope for CMAL and FMEL to test and ensure a shared understanding of the requirements.

After being announced as the preferred bidder, FMEL confirmed that it was unable to meet one of the mandatory requirements of the contract

20. CMAL received seven bids for the contract from six shipbuilders, including FMEL. FMEL's bid was the most expensive at £100.5 million, but CMAL also assessed it as being the highest quality. Overall, it achieved the highest combined cost and quality score of the seven bids. CMAL and FMEL then entered negotiations and on 31 August 2015, Scottish ministers announced FMEL as the preferred bidder. The outcome of the negotiations included:

- the price for each vessel reducing from £50,247,500 to £48,500,000
- FMEL receiving 24.95 per cent of the contract value up front to allow it to order materials before the Brexit referendum
- FMEL and CMAL agreeing a milestone payment schedule that was not typical for the industry and involved 15 payment stages for each vessel.

21. During the negotiations, and contrary to what was included in its bid, FMEL stated that it was unable to offer CMAL the mandatory Builder's Refund Guarantees (BRGs) due to financing restrictions. CMAL had been aware that FMEL, as a newly established organisation, would potentially find it difficult to secure the BRGs. However, CMAL believed that Clyde Blowers Capital (CBC) would have met the guarantee requirements on FMEL's behalf. CBC reported however that it did not consider any involvement in providing a guarantee for FMEL.

Competitive procedure with negotiation

Allows buyers to clarify bids after bidders have submitted them. Can be used for complex purchases or for goods and services that require adaptation or design inputs.

Competitive Dialogue

Allows bidders to submit initial solutions after the pre-qualification stage and allows buyers to negotiate the proposed solutions. Can be used for complex, risky, and innovative projects.

22. After extensive negotiations between CMAL and FMEL, FMEL offered a refund guarantee that was worth 25 per cent of the contract price for each vessel. This was still far short of the mandatory requirement of a 100 per cent refund guarantee for each vessel. The absence of full refund guarantees meant that some of the risk of project failure transferred from FMEL to CMAL (paragraph 25). Appendix 2 provides more information on the BRGs, including the changes made to them throughout the project.

Scottish ministers approved the award of the contract to FMEL despite CMAL's concerns about the significant risks that this created

23. In September 2015, CMAL advised Transport Scotland of the financial, commercial, procurement, and technical risks of awarding the contract to FMEL without full BRGs in place. The advice noted that:

- the maximum financial risk to CMAL, without full BRGs in place, was 100 per cent of the contract price (ie, £48.5 million per vessel)
- the negotiated 25 per cent refund guarantees were materially different to the full refund guarantees offered in FMEL's bid
- the departure from the advertised contract terms raised a significant risk of a legal challenge from an unsuccessful bidder.

24. CMAL subsequently negotiated three contract amendments with FMEL to help minimise the financial risk:

- The final payment to FMEL for delivery of the vessels was increased from 15 per cent to 25 per cent of the contract price.
- CMAL would take ownership of all equipment, machinery, and materials as they arrived at the shipyard.
- FMEL would require all major suppliers to offer a full BRG, with CMAL as the payee.

25. With a 25 per cent refund guarantee in place for each vessel, and a final delivery payment worth 25 per cent of the contract price (£12.125 million) for each vessel, CMAL reduced its financial risk to 50 per cent of the contract value (ie, £24.25 million per vessel). This was still significantly different to the standard risk profile on a new-build project (ie, no financial risk to the buyer).

26. Despite having additional security in place, the CMAL Board considered that there were too many risks involved to award the contract. The chair made it clear in an email to Transport Scotland that the board's preference was to not award the contract to FMEL and to start the procurement process again.

27. On 8 October 2015, Transport Scotland advised Scottish ministers of CMAL's concerns about awarding the contract to FMEL. The next day, Transport Scotland informed CMAL that following due consideration, Scottish ministers were aware of the risks but were content to proceed to contract award.

28. It is not clear what discussions took place between Scottish ministers and Transport Scotland about the contract award. There is no documented evidence to confirm why Scottish ministers were willing to accept the risks of awarding the contract to FMEL, despite CMAL's concerns. We consider that there should have been a proper record of this important decision.

29. Transport Scotland advised CMAL that considering the known risks, it would amend its standard **vessel loan** agreement to provide additional assurances:

- CMAL would not have to repay the loan until the vessels were complete.
- If any of the identified risks arose and CMAL incurred additional costs, Scottish ministers would 'look favourably' at CMAL's requests for additional resources.
- Scottish ministers would provide funds as they are required for CMAL to meet its debts as they fall due and maintain the company as a going concern.

The CMAL Board accepted those assurances and, on 16 October 2015, awarded the contracts for vessels 801 and 802 to FMEL for a combined fixed price of £97 million.

FMEL stated that it could deliver the vessels in May and July 2018, but early milestones were unrealistic

30. FMEL stated that it could design, construct, and deliver vessel 801 by May 2018 and vessel 802 by July 2018. FMEL's build strategy was to construct both vessels concurrently, up until they were ready for launch. FMEL then planned to complete work on vessel 801 before turning its attention to vessel 802. During the contract negotiations, FMEL developed a Cardinal Dates Programme (CDP) and payment schedule based on when it expected to reach particular stages of vessel construction (known as milestone events).

31. The payment schedule in the standard NEWBUILDCON contract typically includes five equal payments worth 20 per cent of the contract price. But the payment schedules for vessels 801 and 802 included 15 milestone events and payments for each vessel (Exhibit 3, page 21). This was done at FMEL's request to aid its cash flow over the duration of the project.

Vessel loan

Transport Scotland provided CMAL with a loan worth £106 million, which included:

- £97 million for the two vessels
- £9 million for CMAL's project management costs, which included its own direct costs, CalMac's crew familiarisation costs, and any 801/802 contract variation costs.

In May 2018, Transport Scotland increased the loan to CMAL by £678,105 to cover additional project costs incurred by CalMac.

Exhibit 3.

Milestone events and dates in the contracts

CMAL agreed to a payment schedule of 15 payments for each vessel.

Milestone event (Applies to both vessels until launch)	Date	Amount (£m)	Percentage of total contract value
Receipt of 25 per cent refund guarantee	30 October 2015	**4.8**	**4.9%**
Procurement deposits (1)	12 November 2015	**24.2**	**24.9%**
Cutting of steel	15 December 2015	**2.8**	**2.9%**
Procurement deposits (2)	15 January 2016	**2.0**	**2.1%**
10 per cent fabrication	18 April 2016	**4.8**	**4.9%**
25 per cent fabrication	14 June 2016	**7.3**	**7.5%**
35 per cent fabrication	15 August 2016	**7.3**	**7.5%**
50 per cent fabrication	14 October 2016	**4.8**	**4.9%**
Installation of major equipment and lock-out items	14 November 2016	**2.75**	**2.8%**
75 per cent fabrication	15 December 2016	**2.4**	**2.5%**
100 per cent fabrication	16 January 2017	**2.4**	**2.5%**
Berth join-up	14 March 2017	**2.4**	**2.5%**
Hull inspection prior to paint	17 April 2017	**2.4**	**2.5%**
Launch (801)	14 August 2017	**1.2**	**1.2%**
Launch (802)	12 October 2017	**1.2**	**1.2%**
Delivery (801)	25 May 2018	**12.125**	**12.5%**
Delivery (802)	26 July 2018	**12.125**	**12.5%**
Total contract value		**£97.0 million**	

Source: Audit Scotland, using information provided by CMAL

The timetable included FMEL cutting steel two months after the contract was awarded

32. The agreed milestone schedule included CMAL paying FMEL £2.8 million to start cutting steel for both vessels on 15 December 2015. This was two months after the contract was awarded and one day after FMEL provided CMAL with a high-level project plan for the vessels. We are unclear why CMAL agreed to this date for cutting steel given that:

- FMEL's high-level project plan indicated that it would take three months to design the hull midship (the starting point for vessel construction)
- the contract stated that FMEL must provide CMAL with detailed drawings and plans for the vessels at least 30 days prior to starting construction.

By comparison, CMAL expects that steel cutting on the two new Islay vessels will start around six-to-seven months after contract award (which is expected to take place at the end of March 2022).

The contract clearly sets out CMAL and FMEL's responsibilities for managing the project, but some of the milestones were not clearly defined and were not linked to quality standards

33. The contract sets out CMAL's and FMEL's responsibilities for managing the project and delivering the vessels on time, within budget, and to the required standards (Appendix 3). The contract stated that the builder had sole responsibility for the design and build of the vessels, that it had to apply general quality standards, and that it was responsible for ensuring that the completed vessels:

- complied with relevant regulations, including those of the **Classification Society (Lloyd's Register)** and **Flag Authority (MCA)**
- had the required certificates to confirm they were safe to operate.

34. The contract did not stipulate what would happen in the event of the builder not applying general quality standards. Although it set out the limited circumstances in which both the buyer and the builder could cancel the contract, the standard NEWBUILDCON contract does not give the buyer any authority to intervene if it has concerns about the standard of the builder's work as the builder undertakes this work at its own risk.

35. A full BRG provides a shipbuilder with a significant incentive to build a quality product as the buyer can cancel the contract and claim a full refund of all payments if the ship does not meet its required specification. In the absence of a full refund guarantee for the 801/802 contract,

Classification Society (Lloyd's Register)

Contracted by the shipyard to ensure the vessel complies with its rules and regulations.

Approves vessel plans and inspects the vessel during construction to ensure it is structurally sound.

Flag Authority (MCA)

Inspects the vessels and produces certificates for issues including passenger safety and stability.

Provides the shipbuilder with a Plan Approval and Testing Matrix detailing which inspections are to be carried out by Class and Flag authorities.

this significant financial incentive for FMEL did not exist. This placed greater importance on the link between CMAL's milestone payments to FMEL and the quality of FMEL's work. However, some of the milestone payment events in the contract were not clearly defined and did not explicitly set out any expectation of quality. For example, the contract did not:

- specify what was meant by 'fabrication' for the six fabrication milestones. For example, whether this related to the fabrication of the hull, the superstructure, or the complete vessel
- state how fabrication was to be assessed
- stipulate, for instance, whether the fabricated parts should be erected onto the vessel for the milestone to be achieved.

36. There was also no link between the milestone events and quality checks by Lloyd's Register and the MCA. We heard different views on whether this was standard practice. We were advised that the lack of quality-related clauses is a weakness with the standard NEWBUILDCON contract more generally, rather than specific to this contract.

There were weaknesses in the project's governance arrangements

37. Good project governance includes establishing clear roles and responsibilities and putting effective and transparent processes in place to authorise informed decisions, manage risks, and report and scrutinise performance. Good governance arrangements do not guarantee the success of a project, but poor governance arrangements can make it more difficult to identify and resolve issues.

38. As part of the governance arrangements for the 801/802 project, Transport Scotland required CMAL to produce **progress reports** on the vessel procurement workstream, which included an update on vessel progress, expenditure, and risks. CMAL's initial risk register set out 25 risks, assessed according to likelihood and impact. The risks that it assessed as being unlikely to happen included insolvency of the shipbuilder, vessel modifications and changes, and substandard construction.

Progress reports

Transport Scotland's loan letter stated that CMAL must keep Scottish ministers updated on progress in the form of quarterly updates to Transport Scotland.

CMAL only produced two quarterly progress reports for Transport Scotland (in January and April 2016). After this, it was agreed that CMAL's monthly updates to the PSG were sufficient.

39. The Programme Steering Group (PSG) was initially responsible for the overall direction and management of the 801/802 project, which included preparation of the business case and other project documentation. After CMAL awarded the contract, the PSG played a reduced role. CMAL reported progress on the vessel procurement workstream directly to its board and provided the PSG with monthly updates. CMAL's updates to the PSG did not include details on expenditure or risk and appeared to be for information only. Any significant decisions on the vessels were made outside of the PSG.

40. As time progressed, Transport Scotland's oversight arrangements became less clear. In September 2015, it separated the PSG into Programme and Project Steering Groups. It consolidated these again into a single PSG in September 2016, along with establishing a separate Transport Scotland and CMAL liaison group (to discuss CMAL-only related matters). Ultimately though, there was no group or forum that was solely responsible for overseeing the 801/802 project, despite its significance.

41. As well as a lack of strategic oversight of the project, we found several other weaknesses with the project's governance:

- Although Terms of Reference were in place for the PSG and the subsequent Project Steering Group, these were generic and not tailored to the 801/802 project.
- Project documentation, including the Project Initiation Document, was not finalised.
- There were no escalation processes in place. For example, there was no information on when Scottish ministers should be informed of progress or problems, and they appeared to be updated on an ad-hoc basis.
- The vessel procurement and construction risk register was never updated, despite several of the identified risks becoming issues that CMAL needed to resolve. The CMAL Board's Audit and Risk Committee did, however, regularly review CMAL's corporate risk register, which included the risk of vessel delays and cost increases.

2. Response when the project encountered problems

Key messages

1 CMAL first reported problems with the project to the PSG in December 2015 and this was followed by several notifications of increasing problems and delays. Transport Scotland notified the Minister for Transport in December 2016 that there was a risk that FMEL would not recover the vessel delays. In February 2017, it officially informed Scottish ministers that it was highly probable that the vessels would be late.

2 FMEL began vessel construction before it had agreed the detailed design with CMAL. This led to a substantial rework and increased costs and delays. Some of the milestone events in the contract were not clearly defined and had no link to quality standards. CMAL was legally required to make these milestone payments.

3 FMEL experienced cash flow problems from 2016. To support FMEL, in mid-2017 CMAL agreed to accelerate £14.55 million of milestone payments, to be spent on specific vessel equipment, and allowed FMEL to extend the vessel delivery dates in June 2018, on the condition that FMEL extended the dates of the surety bonds. The Scottish Government also provided FMEL with two loans, in September 2017 and June 2018, worth a total of £45 million. Although the Scottish Government sought assurance on FMEL's labour resources prior to offering the second loan (worth £30 million), there was limited time to undertake a detailed assessment. The terms of the £30 million loan agreement required the Scottish Government to make payments to FMEL despite evidence of further delays.

4 CMAL, Transport Scotland and the Scottish Government had clear, well-documented objectives for supporting FMEL: to get the vessels delivered as quickly as possible, to protect jobs, and secure the future of the shipyard. Although the interventions enabled FMEL to retain its workforce and suppliers, they had little impact on the progress of the vessels.

5 In July 2017, FMEL submitted a £17.5 million claim to CMAL for costs incurred due to unforeseen complexities with the contract. Over the next 18 months, the dispute, and the value of the claim, escalated. In March 2019, after seeking legal advice, CMAL refuted the claim in its entirety. FMEL chose not to pursue the claim in court and in May 2019 the Scottish Government commissioned an independent view. It concluded, in June 2019, that there was no legal basis for CMAL to pay more than the £97 million fixed price for the contract. FMEL entered administration in August 2019. At that point, CMAL and the Scottish Government had paid FMEL a total of £128.25 million (ie, £83.25 million in contract payments and £45 million in loan payments), but the vessels were largely incomplete.

The project experienced several problems and delays, with differing views on the cause

42. Over its course, problems with the project multiplied, delays to the vessels increased, and the relationship between CMAL and FMEL deteriorated. The dispute between CMAL and FMEL centred on the level of concept design that was carried out on the vessels, changes to the design of the vessels after the contract was awarded, and whether the vessels were a prototype. Our audit did not consider the design of the vessels or the detail in CMAL's tender documents. CMAL and FMEL have very different views on what caused the problems:

- FMEL considers that the vessels were prototype and CMAL's conceptual design was inadequate. It reports that CMAL changed its requirements and interfered in the design process throughout the project, and that it delayed making decisions which hindered FMEL's progress and increased costs. It also considers that CMAL became hostile and was not willing to engage in discussions.
- CMAL contends that the vessels were not prototype, the tender documents were clear that the concept designs and drawings were to be fully developed as the project progressed, and the contract was clear that the detailed design was the sole responsibility of the builder. It reports that FMEL overstated the number of design changes and that it simply wanted FMEL to deliver to the specification. It disputes that it was hostile and considers that it supported FMEL on several occasions.

43. At various points over the course of the contract, CMAL and the Scottish Government took action to support FMEL to try and get the project back on track. Exhibit 1 (page 11) summarises the complex chain of events that occurred throughout the project and we examine these in more detail in this chapter. As many of the events happened concurrently, our narrative on these is not necessarily set out in a chronological order.

CMAL identified problems with the project from the outset but had no authority to intervene in FMEL's running of the project

44. In December 2015, two months after the contract was awarded, CMAL alerted the PSG that FMEL was failing on some of its contract deliverables, which included project meetings, project planning and vessel designs. CMAL's subsequent reports to the PSG repeatedly raised concerns and expressed serious doubts that the vessels would be delivered on time. Some of the problems that it reported, which FMEL disputed, included:

- Planning: At no point did FMEL issue CMAL with a detailed plan for vessel fabrication, equipment installation, **outfitting** and **commissioning**. CMAL considered FMEL's failure to install major

Outfitting

This stage of shipbuilding refers to the installation of pipes, electrical wires, equipment, systems, and furnishings.

The finishing of interior spaces marks the end of the outfitting stage.

Outfitting can take place after launch, but it is more efficient to commence it simultaneously with the construction of the hull structure.

Commissioning

The stage of shipbuilding where power is turned on, pipes are flushed, and equipment is tested to ensure it is fully functioning. Any problems are identified and corrected by the shipbuilder.

equipment early and undertake advance outfitting as a significant risk to achieving the contract delivery date.

- Workforce capacity: CMAL reported that FMEL had failed to assign the correct resources to deliver the vessels in the contractual timescales. It identified resourcing issues across various departments. At points, CMAL reported that there were no subcontractors working on the vessels and that FMEL's productivity was extremely low.
- Quality: CMAL initially reported that the quality of FMEL's work was good. However, in October 2017, CMAL highlighted that quality issues were becoming apparent in production, design, and procurement. By February 2019, CMAL reported that considerable rework was required on the vessels.
- Lack of space at the shipyard: CBC invested around £25 million in the redevelopment of the shipyard, which included a new fabrication hall and new machinery. During the redevelopment, CMAL reported that there was a reduction in the available space for vessel construction. This meant that FMEL could work on only one vessel at a time, rather than on both as set out in the milestone schedule. In FMEL's view, it was unable to build the vessels concurrently due to CMAL's delays.

45. Although CMAL consistently reported problems to its board, Transport Scotland and the PSG, the contract did not allow CMAL to intervene in FMEL's running of the project, even when it became apparent to CMAL that FMEL was not making sufficient progress on the vessels. CMAL could only cancel the contract in specific circumstances (Appendix 3), for example if FMEL failed to deliver the vessels in accordance with the contract timescales. Neither the PSG nor Transport Scotland were contracting parties. This meant that they had no scope to intervene, and no action was taken in response to CMAL's project updates.

46. Transport Scotland provided Scottish ministers with verbal updates on the project. In December 2016, Transport Scotland prepared a briefing for the Minister for Transport and the Islands in advance of their visit to the shipyard. This stated that there was a risk that FMEL would not recover the vessel delays. It officially informed Scottish ministers of delays in February 2017, when it reported that it was highly probable that the vessels would be late.

CMAL could not prevent FMEL starting construction of the vessels prior to finalising the designs

47. The contract required FMEL to submit individual sets of **vessel drawings** to CMAL for approval at least 30 days prior to starting construction. Certain drawings also required approval from Lloyd's Register and the MCA.

Vessel drawings

Detailed vessels drawings, along with an accurate and detailed project plan, are a crucial component of efficient shipbuilding. Failure to promptly prepare drawings can lead to the workforce standing idle. Failure to obtain approval for drawings can lead to the contractor building at risk, and potentially having to re-do work if the designs are not agreed.

48. In early 2016, CMAL reported to the PSG that FMEL was making slow progress with issuing the vessel drawings and that FMEL had begun vessel construction without obtaining approval of the structural drawings from Lloyd's Register. CMAL considers that delays to the issuing and approval of drawings, and FMEL proceeding with vessel construction without approval, were significant issues throughout the project.

49. In its submission to the RECC inquiry, FMEL reported that:

- the requirement for CMAL to sign off every vessel drawing slowed down its design process significantly
- it could take several months for it to process CMAL's comments on individual drawings and that it had to prioritise constructing the vessels to meet the milestone dates
- it had to engage in out-of-sequence working to try and keep the project moving.

50. CMAL reports that this approach led to extensive re-work, and this contributed to vessel delays and additional costs. However, the contract stipulated that FMEL was responsible for the detailed design and construction of the vessels and CMAL could only advise, but not instruct, FMEL on its approach.

CMAL's onsite team identified several problems during vessel construction but could not direct FMEL to respond

51. As part of the quality control arrangements, CMAL had an onsite team at the shipyard to monitor progress with the vessels, provide advice on the build and undertake formal inspections. CMAL and FMEL's workforce representatives told us that this process worked well, and relationships were positive. CMAL communicated its concerns and recommendations to FMEL through owner observation reports (OORs). The use of OORs is an industry norm. CMAL produced an OOR when it identified:

- a technical issue where the specification had not been met
- a potential safety concern or quality issue where work was not carried out to a satisfactory standard
- that vessel parts were fitted prior to a survey taking place or being checked against an approved drawing.

52. CMAL raised a variety of issues through the OOR process, some of which could be rectified quickly with simple remedial works. Other OORs were more difficult or timely for FMEL to resolve and some required a change request or variation order (paragraph 78). Up to 16 August 2019, the date at which FMEL entered administration, CMAL had issued 346 OORs to FMEL. Of these, FMEL had resolved 180 (52 per cent) and 166 (48 per cent) were outstanding.

53. The contract stated that FMEL had to comply with CMAL's reasonable demands but did not define what these were. FMEL senior management reported that it rejected several of CMAL's OORs as they considered them unnecessary and would increase costs and delays. CMAL reports that failure to address OORs is poor shipbuilding practice.

Initial milestone dates were missed, and the delays got worse as the project progressed

54. In early 2016, CMAL advised Transport Scotland that FMEL was late in achieving the initial milestone events in the CDP and that vessel fabrication was delayed due to problems with the preparation and approval of vessel designs. CMAL considered it was unlikely that the time lost could be recovered and expected further delays.

55. By the time Transport Scotland formally advised Scottish ministers in February 2017 of the probable delays to the vessels, FMEL had missed the target dates for several of the milestone events and indicated that it expected to achieve most of the remaining milestone events (excluding vessel delivery) between two and nine months late. FMEL revised the milestone dates seven times over the course of the project. Exhibit 4 shows the delays between the milestone dates, as set out in the contracts, and when FMEL achieved those milestones.

Exhibit 4.

Delays for vessels 801 and 802

FMEL missed every milestone date in the contracts, except for the date on which the cutting of steel first took place.

Milestone event (Applies to both vessels until launch)	Contractual date (Applies to both vessels until launch)	Actual date / Delay (days)	
		Vessel 801	Vessel 802
Receipt of 25 per cent refund guarantee	30 October 2015	13 November 2015 **14**	
Procurement deposits (1)	12 November 2015	18 January 2016 **67**	
Cutting of steel	15 December 2015	15 December 2015 **0**	
Procurement deposits (2)	15 January 2016	14 March 2016 **59**	

Cont.

Milestone event (Applies to both vessels until launch)	Contractual date (Applies to both vessels until launch)	Actual date Delay (days)	
		Vessel 801	**Vessel 802**
10 per cent fabrication	18 April 2016	13 June 2016 **56**	
25 per cent fabrication	14 June 2016	15 August 2016 **62**	
35 per cent fabrication	15 August 2016	7 October 2016 **53**	
50 per cent fabrication	14 October 2016	16 December 2017 **63**	27 January 2017 **105**
Installation of major equipment and lock-out items	14 November 2016	31 March 2017 **137**	
75 per cent fabrication	15 December 2016	24 March 2017 **99**	27 March 2017 **102**
100 per cent fabrication	16 January 2017	23 March 2018 **431**	N/A
Berth join-up	14 March 2017	22 November 2017 **253**	N/A
Hull inspection prior to paint	17 April 2017	24 August 2017 **129**	N/A
Launch (801)	14 August 2017	22 November 2017 **100**	N/A
Launch (802)	12 October 2017	N/A	N/A
Delivery (801)	25 May 2018	N/A	N/A
Delivery (802)	26 July 2018	N/A	N/A

Note: N/A – This date is not applicable because this milestone has not been met.

Source: Audit Scotland

CMAL amended the contract and provided other support for FMEL, but this had little impact on progress

CMAL agreed two main contract changes to release funding for FMEL

56. FMEL made several requests to CMAL and Scottish ministers to change the contract terms to aid its cash flow and support vessel delivery. In particular, it requested changes to the refund guarantees and the milestone payment schedule to release £48.5 million in what it referred to as **'trapped cash'**. After seeking legal advice, due consideration of the risks, and discussions with Transport Scotland and the Scottish Government, CMAL agreed to two contract changes in November 2016 and May 2017 which released around £23.55 million to FMEL (Exhibit 5).

Trapped cash

FMEL requested that CMAL allow it to replace the refund guarantee with a surety bond that did not require any cash collateral (thus freeing up £24.25m from escrow).

FMEL also requested that CMAL accelerate the final payment of £24.25m (which it was withholding until vessel delivery).

Exhibit 5.

Contract changes

CMAL agreed to contract changes which released funding for FMEL and reduced its security on the vessels.

	Addendum 1	Addendum 2
Date of contract change	**November 2016**	**May 2017**
Change made	The Builder's Refund Guarantees, which were issued by Investec, were replaced with surety bonds, issued by HCC plc.	The final delivery payment for each of the vessels was reduced from 25 per cent to ten per cent of the value of each contract.
Implications	Released just under £9 million of FMEL's cash that Investec had held in escrow. HCC plc retained £15.4 million in escrow for the surety bonds.	CMAL restructured the milestone schedule, which accelerated £14.55 million of payments to FMEL.
Risks	No change to the risk or security for CMAL.	The financial incentive for FMEL to deliver the vessels was reduced. The financial risk to CMAL increased.

Source: CMAL

57. Scottish ministers agreed to accelerate £14.55 million of payments to FMEL in May 2017, after meeting with an FMEL director, but prior to its formal consideration and approval by the CMAL Board. The CMAL Board twice refused to agree the contract change as it considered the financial risk was too high. The CMAL Board only approved the change after insisting on tight controls which would ensure that FMEL spent the accelerated payments entirely on equipment for the vessels. This included CMAL reviewing invoices from FMEL's suppliers prior to releasing funds, FMEL providing evidence that it used those funds to pay suppliers, and CMAL taking title of the equipment purchased (as was agreed when the contract was signed).

58. CMAL made other allowances to support FMEL. This included allowing FMEL to extend the vessel delivery dates to June 2019 for vessel 801 and March 2020 for vessel 802, on the condition that FMEL extended the surety bond dates. As part of this negotiation, CMAL agreed to not cancel the contracts in advance of the extended delivery dates. CMAL also agreed to reductions in the technical specification of the vessels, including reducing their carrying capacity (known as deadweight) by 77 tons each.

CMAL tried to support FMEL to get the project back on track

59. CMAL and FMEL met monthly to discuss vessel progress and any issues. The meeting minutes, prepared by FMEL, between December 2015 and August 2019 show that:

- CMAL regularly expressed concerns about FMEL's quality controls and requested that FMEL provide missing details and plans
- CMAL tried to support FMEL by, for example, offering to assist with the commissioning programme, and undertaking vessel surveys seven days a week
- FMEL's chief executive attended only a few meetings, which CMAL stated hindered decision-making and resolving issues.

FMEL disputes that there were quality issues and point to CMAL's 2016 and 2017 audits of FMEL which rated FMEL's quality as excellent. However, CMAL contends that these were not full audits of the shipyard or FMEL's systems.

FMEL attempted to address issues but these had little impact on progress

60. In March 2017, CMAL reported to Transport Scotland that FMEL was trying to get the project back on track: it had set up a dedicated **'war room'** to make its plans more visible; and adopted a new strategy to complete the vessels, which involved constructing part of vessel 802 at a different shipyard. While CMAL's report was positive about FMEL's renewed energy and commitment, it considered that FMEL's new strategy would be very costly.

War room

A project management concept where a room dedicated to a project is set up as a space for exchanging ideas and sharing plans and information.

61. In April 2017, Transport Scotland updated Scottish ministers on these and other steps that FMEL had put in place to address delays. These included:

- the appointment of a new project manager to help assess every aspect of the project to date and put plans in place to achieve delivery dates
- the introduction of revised processes to monitor daily output of the shipyard, which aimed to address delays and improve performance.

62. In June 2017, CMAL advised the PSG that while it had seen improvements in FMEL's project planning and management, there had been minimal progress on vessel 801 and no progress on vessel 802. Its subsequent updates to the PSG stated that:

- the quality of fabrication was not acceptable as the shipyard was rushing work to recover lost time
- vessel parts were not being built to the correct specification or standards.

While FMEL disputed this, it accepted CMAL's assessment that it was unlikely to meet the vessel delivery dates. It attributed this to CMAL's alleged design changes.

CMAL considered contingency plans to complete the vessels

63. In May 2018, CMAL and Transport Scotland updated Scottish ministers on problems with the project and advised them of contingency plans. These included allowing FMEL to complete the vessels or towing the vessels to another shipyard. Each of the options presented challenges.

64. CMAL had the option to cancel the contract (for example, if FMEL failed to deliver the vessels within the contractual timescales), and it advised Scottish ministers that this had been fully explored. It is clear however that cancellation, at that time, was CMAL's, Transport Scotland's and the Scottish Government's least preferred option as this would not achieve their main priorities of completing the vessels as quickly as possible and protecting jobs at the shipyard. The preferred option was to complete the vessels at FMEL. It was recognised that this could be achieved by nationalising the shipyard, although no decision was taken on public ownership at this point.

The Scottish Government provided FMEL with two loans worth a total of £45 million, but their impact on vessel progress is unclear

The Scottish Government carried out due diligence prior to awarding the loans to FMEL, but the existence of the £15 million loan was not transparent

65. After CMAL had exhausted available options, FMEL continued to face **financial pressures** which it states were due to problems with the contract. Separate to this, the Scottish Government commissioned PricewaterhouseCoopers (PwC) in August 2017 to consider options for public-sector financial support for FMEL. In September 2017, the Scottish Government provided FMEL with a £15 million unsecured commercial loan. In November 2017, the Scottish Government started to consider contingency plans for the shipyard, which concluded with it awarding FMEL a £30 million secured commercial loan in June 2018. The purpose of this loan was to support the long-term viability and enhanced capabilities of FMEL; however, the loan conditions were tied to vessel progress (paragraphs 70 and 71). FMEL later reported that it did not want the loans, and only accepted them as an interim solution to its claim for additional payment from CMAL (paragraphs 77–83).

66. The Scottish Government's options analysis, due diligence, and decision-making in relation to offering both loans are clearly documented. However, due to commercial confidentiality, the details of the £15 million loan were not transparent. The former Cabinet Secretary for Finance and the Constitution was not obligated to inform the Scottish Parliament when the Scottish Government awarded the loan, as it was made on a commercial basis. CMAL, along with FMEL's other customers and suppliers, became aware of the loan in April 2018 (ie, seven months after it was awarded) when the Cabinet Secretary informed the Scottish Parliament of its existence. The details were not made public until June 2018, when the Cabinet Secretary informed Parliament of the second (£30 million) loan.

The Scottish Government sought assurance on FMEL's labour input prior to awarding the £30 million loan but there was limited time to make a detailed assessment

67. In May 2018, as part of its considerations for a proposed funding package for FMEL, the Scottish Government appointed a consultant to review whether FMEL's resources (ie, labour input) were adequate to complete the vessels in line with its updated Cardinal Dates Programme (CDP). The consultant had three days to conduct a review of FMEL's planning system, its infrastructure, and the vessels' status. The consultant's report stated that:

- the shipyard was impressive for a small commercial shipyard, with improved infrastructure that allowed the shipyard to adopt a

FMEL's financial pressures

In July 2017, Scottish Enterprise, which had been working with FMEL since mid-2016, identified that FMEL had an immediate funding shortage of £4.3 million, which would rise to £27 million by May 2018.

Scottish Enterprise reported that FMEL's funding shortage was largely due to it not having sufficient funds to cover the increased costs of building the vessels. This was partially due to the amount of money held in escrow for the Surety Bonds and CMAL retaining some of the funding until the vessels were completed.

new approach to shipbuilding, reducing the time and labour input required

- FMEL had applied lessons learned from vessel 801 to the design and build of vessel 802
- FMEL's resourcing plan was adequate to complete the CMAL contract.

68. These conclusions contradict CMAL's assessment of FMEL's capabilities at that time. It is not clear to what extent the Scottish Government attempted to reconcile these different points of view or how much weight it placed on the consultant's findings when it decided to offer FMEL the £30 million loan. Given the scale of the challenges at the shipyard, we do not consider that the Scottish Government could have obtained appropriate assurance on FMEL's resources following a three-day review.

The terms of the £30 million loan agreement allowed FMEL to drawdown payments despite evidence of vessel delays

69. The Scottish Government drew on external commercial and legal advice to determine the conditions and requirements for both loans. These included the requirement for FMEL to provide the Scottish Government with an update on the progress of the vessels, and information on its finances, business plans, and senior staff changes. The Scottish Government commissioned PwC to monitor and report FMEL's delivery against these conditions.

70. The Scottish Government strengthened its **security** and included additional conditions and requirements for the £30 million loan. This included FMEL allowing an independent operational expert to review progress at the shipyard and Scottish ministers receiving satisfactory assurance that the vessels were progressing in accordance with FMEL's updated CDP.

71. The Scottish Government appointed the independent operational expert in July 2018, with a remit to provide the Scottish Government with a brief assurance report each time FMEL requested to drawn down part of the loan. The initial drawdown reports were positive about vessel progress and FMEL's ability to meet the delivery dates. Subsequent drawdown reports highlighted increasing delays and problems, which the expert determined were due to the poor relationship between FMEL and CMAL and outwith FMEL's control. The expert also considered that FMEL had the managerial and technical capability to deliver both vessels. Each of the expert's reports included a recommendation for loan drawdown although none of the reports provided specific assurance that FMEL was progressing the vessels in accordance with its CDP.

72. The Scottish Government allowed FMEL to drawdown the full £30 million loan despite evidence of vessel delays. This is because the loan agreement stated that satisfactory progress with the vessels must

Security for the £30 million loan included:

- committing CBC to inject £8.5 million of new funding into FMEL. £5.5 million of this was subject to approval by CBC's Investment Committee
- securing the right to acquire all of CBC's shares in the issued share capital of FME Holdings Ltd if it failed to do so
- obtaining second ranking standard security over the shipyard for all sums due to the Scottish Government under both loan agreements.

take into account factors that were outside FMEL's control. The terms of the loan required CBC to invest £8.5 million in FMEL in two tranches. CBC invested the first tranche, worth £3 million. It did not invest the second tranche, which was subject to approval by its Investment Committee, due to a disagreement with the Scottish Government over the funding structure of the loan. The Scottish Government prevented FMEL from accessing the loan while the disagreement was resolved. FMEL claimed that this hindered progress with the vessels. Legally, the Scottish Government had to accept this was a factor outside of FMEL's control and continue to make loan payments.

The impact of the £45 million loans on vessel progress is not known

73. It is not clear what impact the £45 million loans had on progress with the vessels' construction. This is partly because the Scottish Government did not put requirements in place which would allow it to monitor the intended purpose of each of the loans:

- The £15 million loan was for the construction of the two vessels, but there were no specific requirements in relation to vessel progress.
- The £30 million loan was to support the long-term viability and enhanced capabilities of FMEL. There was no specific way to track this, although PwC reports did provide some commentary on FMEL's reported pipeline of work.

74. The Scottish Government confirmed that the £45 million loans allowed FMEL to pay its workforce and invoices, which helped to prevent job losses and potential legal action from suppliers. But it is not able to state what impact the loans had on vessel progress.

75. Although FMEL went into administration before it made any loan repayments, the Scottish Government did not lose the full £45 million. It received a return of £6.5 million from the administration process and it was also able to offset the £7.5 million purchase cost for FMEL's assets against the outstanding loan.

76. The Auditor General for Scotland has previously reported on the Scottish Government's loans to FMEL and its investments in private businesses more widely.[5] [6] [7] [8] These reports emphasise the importance of the Scottish Government being more transparent about its investment decisions and its expected outcomes. The Scottish Government is now developing a framework for its investment in private businesses.

CMAL and FMEL disputed for two years over vessel design and costs

77. In July 2017, as the Scottish Government started to consider the case for public-sector financial support for FMEL, FMEL submitted a £17.5 million claim to CMAL for contract price increases. In FMEL's view, problems with the project were a result of CMAL's inadequate concept design and interference in the design process after contract award. In August 2017, CMAL issued a technical rebuttal of the claim, stating that the contract was clear that FMEL was responsible for the detailed vessel designs.

78. The contract contained clauses and provisions which allowed CMAL (and FMEL) to request changes to the vessel design, and FMEL to recover any **additional costs** and time incurred as a result. FMEL's claim for additional costs made no reference to these clauses.

For various reasons, CMAL and FMEL did not use the dispute resolution mechanisms in the contract

79. The contract included a three-stage contract **dispute resolution mechanism**: Mediation, Expert Determination, and the Court of Session in Edinburgh. In August 2017, FMEL requested that CMAL and FMEL enter mediation. Over the next few months, CMAL and FMEL agreed the draft terms of mediation and identified a preferred mediator. But, in February 2018, both parties abandoned the mediation attempts after failing to agree the terms of reference.

80. In April 2018, Transport Scotland asked CMAL and FMEL to consider Expert Determination, but a shipping law firm advised CMAL that this was not suitable as the fundamental disagreement was not a technical matter. In FMEL's view however, the fundamental disagreement was a technical matter. The Scottish Government and CMAL requested on several occasions that FMEL pursue its claim in court. FMEL stated it was not practical to do so as this would have stopped work on the vessels and led to substantial redundancies.

The value of FMEL's claim increased and both parties verified their stance with independent reports

81. In March 2018, FMEL presented CMAL with an independent report which stated that CMAL had not fully developed the concept design when it issued the ITT, and that it was not unusual for construction costs in these circumstances to significantly increase. One month later, FMEL advised CMAL that the value of its claim had increased to £27.4 million. In May 2018, CMAL commissioned a naval architect to provide an independent opinion. This concluded that the ITT was sufficiently detailed and that FMEL should have foreseen that the vessels would require multiple design iterations. FMEL, however, disputed that it was

Additional contract costs

Over the course of the contract, CMAL and FMEL agreed 81 contract changes (35 requested by CMAL and 46 by FMEL). The changes were worth an additional £1.55 million. Of this, CMAL paid FMEL £0.75 million. The remainder was to be paid on vessel delivery (and will now be paid to FMPG).

Dispute resolution mechanism

Mediation: An assisted negotiation whereby a neutral party (ie, a mediator) is appointed to help parties reach a compromise.

Expert Determination: An independent expert (or experts) is appointed by the parties to resolve the matter.

Court of Session: A specialist judge with experience in dealing with commercial cases is appointed by the court service to hear and rule on the dispute.

an independent process as it was not consulted on the appointment of the architect.

82. Over the next few months, progress with the vessels and resolving the dispute stalled. FMEL reports that throughout the dispute, the Scottish Government encouraged it to continue working on the vessels, despite its increasing costs. In December 2018, FMEL issued CMAL with a new claim for £65.8 million, which CMAL rebutted in March 2019. By May 2019, the relationship between CMAL and FMEL had broken down completely. FMEL had indicated it would make significant redundancies and CMAL notified Scottish ministers of its intention to cancel the contract for vessel 801 and make a call on the surety bond (ie, it would request £12.125 million from the insurance company HCC plc).

83. With no resolution in sight, the Scottish Government commissioned an independent view of FMEL's claim. Both parties agreed to accept the outcome. In June 2019, after considering the independent view, the Scottish Government concluded that there was no legal basis for CMAL to pay more than the fixed price for the contract. FMEL criticised the Scottish Government for not seeking independent technical advice to help determine the outcome of its claim. FMEL subsequently entered administration in August 2019.

CMAL paid FMEL 85 per cent of the contract value despite significant outstanding work on the vessels

84. Shortly before FMEL went into administration, CMAL reported to the Programme Steering Group (PSG) that:

- both vessels were years away from being delivered and were showing signs of deterioration
- equipment had been damaged
- no more than six people were working on vessel 801 and no more than two people were working on vessel 802 at any one time
- in the previous 12 months, FMEL had completed none of its planned commissioning activities, and very little of its planned engineering activities, on vessel 801.

85. Although FMEL disputes the above, its update to the Scottish Government in June 2019 set out the extensive work that was outstanding on both vessels (Exhibit 6, page 39). There were no milestone events in the contracts to pay for these outstanding works.

86. Despite the significant lack of progress on the vessels, CMAL paid FMEL a total of £83.25 million:

- £82.5 million in milestone payments, which was 85 per cent of the contract value

- £0.75 million in variation to contract payments. This was paid out of CMAL's project management costs budget (Vessel loan information box, page 20).

Appendix 4 sets out details of CMAL's planned and actual milestone payments to FMEL.

Exhibit 6.

Outstanding work and amount paid for each vessel, as at June 2019

Both vessels required a significant amount of work despite FMEL achieving several milestones.

	Vessel 801	Vesesl 802
Amount paid	£43.65 million (90% of the contract value)	£38.85 million (80% of the contract value)
Milestones achieved	17 out of 18 Only the 'delivery' milestone was outstanding	12 out of 18 Up to the '75 per cent fabrication' milestone
Outstanding work	**Number of weeks required to complete outstanding work**	
Fabrication/erection	26 weeks	54 weeks
Engineering work	50 weeks	80 weeks
Equipment installation	32 weeks	45 weeks
Painting	26 weeks	70 weeks
Accommodation outfitting	24 weeks	24 weeks
Total length of time to complete all outstanding works	60 weeks	86 weeks
Anticipated delivery date	**29 June 2020**	**23 December 2020**

Note: Some of the outstanding vessel works were due to take place concurrently. The total length of time required to complete the vessels is therefore less than the sum of the number of weeks required to complete individual elements.

Source: FMEL's updated Cardinal Dates Programme, June 2019

87. The total milestone payments include £14.55 million in accelerated payments that CMAL had agreed in May 2017 (Exhibit 5, page 31) and £28.95 million for **equipment and materials**. The major items of equipment have been installed on the vessels since 2017 and some of these items no longer have a warranty, because of the delays. Other equipment and materials, in particular for vessel 802, were purchased several years in advance and in some cases have deteriorated. As per the contract, CMAL took ownership of all vessel parts that FMEL purchased.

88. CMAL also paid a total of £34.2 million for vessel construction and fabrication milestones. According to the milestone schedule, FMEL had achieved 100 per cent fabrication for vessel 801 and 75 per cent fabrication for 802. But per FMEL's June 2019 update, a further six months of fabrication work was required on vessel 801 and over a year of fabrication work was required on vessel 802.

89. FMEL and CMAL told us that stringent checks were in place prior to CMAL signing milestone certificates and making milestone payments. However, as we set out in Part 1, some of the milestone events in the contract were not clearly defined and had no link to quality. For example:

- FMEL was able to claim fabrication milestones for vessel parts that were not erected onto the vessel, that had not been surveyed and, in some cases, had been left unused in the shipyard for several years.
- FMEL was able to claim the 'launch' payment for vessel 801 as the vessel was technically ready to be launched. However, due to project delays, most of the outfitting that is typically done prior to a vessel going into the water, such as the installation of machinery and pipes, was outstanding.

90. CMAL sought legal advice and was informed that it was legally required to make the milestones payments to FMEL, despite the amount of outstanding work and there being known issues, such as vessels' designs not being signed off and hundreds of outstanding OORs. In FMEL's view, the amount of outstanding work was due to the changes made to the original vessel specification.

Costs of equipment and materials

- There were four milestone events in the payment schedule related to equipment and materials. The total value of these, for both vessels, was £28.95 million.
- This does not necessarily equal the amount that FMEL spent on equipment and materials, as it will have used other milestone payments to pay for these. We do not have details of FMEL's spending.
- CMAL estimates that approximately £64 million of the £97 million total contract cost would have been spent on materials and equipment.

3. New arrangements to complete the vessels

Key messages

1 In February 2019, the Scottish Government and Transport Scotland launched a project to formally consider contingency plans to complete the vessels, protect jobs, and support the development of a sustainable shipyard. This was a challenging project, involving complex decisions and short timescales, and there were tensions between the Scottish Government and FMEL. Although the Scottish Government conducted some due diligence, it was unable to obtain a full understanding of the challenges and costs prior to making its decision to nationalise the shipyard.

2 The Scottish Government has now fundamentally changed the arrangements to complete the vessels, which includes creating a new public-sector body (FMPG), a new contract and new funding arrangements. This has been a complex process. In December 2019, the Scottish Government-appointed Turnaround Director at FMPG reported significant problems with the vessels and considerable operational failures at the shipyard. His report estimated that it would cost an additional £110.3 million to £114.3 million to complete the vessels. Vessel 801 was expected to be delivered between October and December 2021, and vessel 802 between July and October 2022.

3 Scottish ministers appointed the FMPG Board in June 2020, and there is evidence of it demonstrating awareness of required improvements. But its ability to effectively scrutinise has been limited due to insufficient management information and not being fully sighted on CMAL's concerns about progress.

4 Relationships between FMPG and CMAL have been good, but they have had different perspectives on vessel progress, which is understandable to an extent, and tensions have emerged at points. FMPG appointed a new chief executive in February 2022. This provides an opportunity for FMPG and CMAL to work more collaboratively to support vessel progress. There is also scope for the Scottish Government and the two bodies to consider how more balanced public reporting of progress to the Scottish Parliament could enhance openness and transparency.

The Scottish Government considered several options before deciding to nationalise the shipyard

91. In February 2019, the Scottish Government and Transport Scotland initiated Project Kildonan to formally consider contingency plans for the vessels and the shipyard. This was 17 months after the Scottish Government provided FMEL with the initial loan, and nine months after the original expected delivery date for vessel 801. As part of this project, Transport Scotland appointed PwC to consider potential options and provide commercial advice. PwC initially assessed 29 options from which the Scottish Government shortlisted three for detailed appraisal:

- Retendering the contract.
- Allowing FMEL to enter administration.
- Nationalisation.

92. PwC's subsequent report in April 2019 considered the three options in more detail, plus an intermediary option, suggested by FMEL, which involved CMAL being replaced by an independent body to oversee the project. The report concluded that doing nothing would likely result in the insolvency of FMEL. It identified that nationalisation or the appointment of administrators created risks for the Scottish Government but could help ensure delivery of both vessels. PwC considered that retendering was not practical, and the intermediary option did not overcome funding issues and had procurement and state aid issues.

93. In June 2019, the Scottish Government separately assessed a proposal from CBC. This included restructuring FMEL's debt, and CBC and the Scottish Government sharing the costs to complete the vessels. CBC proposed that the Scottish Government invest £50 million for a 95 per cent equity stake in FMEL but did not propose to inject any new funding itself. The Scottish Government rejected the proposal because of numerous legal and financial risks.

94. Based on PwC's initial reports and its own considerations, the Scottish Government sought approval from Scottish ministers in July 2019 to continue to work toward taking FMEL into public ownership. PwC's final report on Project Kildonan in July 2019 considered two options for nationalisation: either purchasing FMEL for £1 through the provisions set out in the £30 million loan agreement, or through a pre-pack administration involving the controlled acquisition of certain FMEL assets during the insolvency process. The Scottish Government favoured a controlled acquisition due to CBC's reluctance to adhere to the £30 million loan conditions and the risk that CBC could disrupt the shipyard's ability to trade in the future.

95. To support nationalisation through insolvency, the Scottish Government and CMAL engaged in private negotiations with HCC plc, which held the surety bonds for the vessels. An outline agreement with HCC plc, made on 5 August 2019, meant that CMAL would receive a reduced amount from the surety bonds (£4.85 million instead of £24.25 million). In return, HCC plc would release security over the shipyard, giving the Scottish Government more control if FMEL entered administration.

96. FMEL filed an intention to appoint administrators on 9 August 2019. This allowed HCC plc, as first-ranking creditor, to appoint Deloitte as independent administrators on 16 August 2019. To protect jobs and prevent further delays with the vessels, the Scottish Government funded the £6 million running **costs** of the shipyard during administration.

97. Deloitte commercially marketed FMEL and received three bids from prospective purchasers, in addition to the Scottish Government's bid. Deloitte assessed the Scottish Government's bid as representing the best return for creditors.

The Scottish Government conducted some diligence, but it did not have a full understanding of the scale of the challenges at the shipyard when it made the decision to nationalise FMEL

98. The Scottish Government carried out financial and legal diligence before FMEL entered administration. Its decision to nationalise FMEL was well documented and based on numerous discussions and detailed consideration of the risks. It was also influenced and complicated by other factors, such as the ongoing dispute between CMAL and FMEL (paragraphs 77–83).

99. However, over the course of Project Kildonan, relationships between the Scottish Government and FMEL deteriorated, and the Scottish Government had difficulties accessing information from FMEL. The project was made further challenging by the complexity of the issues to be considered and the short timescales involved. In addition, the Scottish Government could not undertake technical diligence on the vessels until after FMEL entered administration. This meant that the Scottish Government made the decision to nationalise the shipyard without a full and detailed understanding of the amount of work required to complete the vessels, the likely costs, or the significant operational challenges at the shipyard.

Costs of acquisition and during administration

- purchase of assets: £7.5 million (off-set against the loans owed by FMEL)
- Land and building transaction tax: £245,000
- Crown rent and registration: £7,400
- running costs during administration: £6 million.

The Scottish Government-appointed Turnaround Director had limited time to assess the vessels, and there is no evidence that the updated vessel costs and timescales were challenged

The Turnaround Director identified serious problems with the vessels and significant operational challenges at the shipyard

100. On 14 August 2019, two days before FMEL entered administration, the Scottish Government appointed a **Turnaround Director** to help stabilise the shipyard and put a programme in place to complete the vessels. The Turnaround Director, along with a small team, had 11 weeks to carry out an initial assessment of:

- what work had, and had not, been completed on the vessels to date
- the status of the vessels' design
- the shipyard's capability to support delivery of the vessels, in particular the suitability of its management and control systems for engineering and production.

101. The Turnaround Director's report (the Turnaround report) to the Scottish Government set out the main issues with the build, including incomplete designs and the need for significant construction and remedial work on the vessels to meet the technical specification.[9] It also detailed considerable operational issues at the shipyard, including:

- lack of project management and project planning, resulting in insufficient management information
- weak design processes and controls
- poor inventory management, with no bill of materials and materials stored incorrectly leading to significant deterioration
- no comprehensive defect management system.

102. The Turnaround report indicated that it would cost between £110.3 million and £114.3 million to complete the vessels, on top of the £83.25 million CMAL had already paid to FMEL. Vessel 801 was expected to be delivered between October and December 2021, with vessel 802 being delivered between July and October 2022. The Turnaround Director has subsequently provided three reports to the Scottish Parliament which further revise the timescales for the project (paragraphs 135–136 and Exhibit 9, page 55).

103. The Scottish Government established a Programme Review Board (PRB) to support the Turnaround Director. Transport Scotland chaired the PRB, and its membership included FMPG, CMAL, DML and Marine Scotland. The Scottish Government also attended. The PRB met six times between August and December 2019 to discuss the challenges

Turnaround Director (TD)

PwC identified six potential candidates for the TD post. Two senior civil servants interviewed three candidates by telephone and identified a preferred candidate.

The Scottish Government originally employed the TD on a short-term contract (two to three months with an option to roll it forward monthly).

In August 2020, the FMPG Board took on responsibility for the TD's contract, which it extended until February 2022.

for the build and offer technical advice to support the Turnaround Director's survey of the vessels. Due to time constraints, the PRB did not have the opportunity to scrutinise the updated vessel costs, which were significantly higher than the £70 million that CMAL estimated it would cost to complete the vessels. There is also no evidence that the Scottish Government or Transport Scotland scrutinised the updated costs, or that the new timescales for the vessels were challenged.

The Scottish Government has fundamentally changed the arrangements to complete the vessels

104. The Scottish Government established the Ferguson Marine Response Division in September 2019 to coordinate its interests in the shipyard and to explore options for the future for the business.[10] On 2 December 2019, the Scottish Government completed a commercial transaction to bring the shipyard into public ownership and created a new organisation, FMPG, to complete the vessels.[11] From then until March 2021, the Scottish Government worked to establish appropriate arrangements for the vessels and FMPG. This included liaising with Transport Scotland and CMAL, conducting due diligence, and taking legal advice, to develop a new funding model and governance arrangements.

105. After FMPG was established, CMAL transferred the existing vessel contract from FMEL to FMPG. The contract only allowed CMAL to make a further £15.5 million of milestone payments, far short of the £110.3 million to £114.3 million required to complete the vessels. After consideration of different funding options, in March 2021 the Scottish Government finalised the arrangements to fund and manage the vessels (Exhibit 7, page 46). This included replacing the existing fixed-price contract between CMAL and FMPG with a new contract (for each vessel) between itself and FMPG. The Scottish Government is committed to paying the additional vessel costs, regardless of the final price. To minimise the risk of further cost overruns, it is important that FMPG and the Scottish Government continue to closely monitor the vessels' budget.

106. Under the new funding arrangements, the Scottish Government has set a budget of £46.3 million to deliver vessel 801 and £64 million for vessel 802. Unlike the original contract between CMAL and FMEL, Scottish Government payments to FMPG are not linked to the achievement of milestones. Financial penalties for weight, fuel consumption and speed still apply and there are clauses in the contract intended to encourage FMPG to deliver the vessels within the updated timescales and budgets. This includes FMPG receiving up to an additional three per cent of the contract value of each vessel if it is delivered on or under budget and no later than three months after the contractual delivery date.

Exhibit 7.

Key features of the new arrangements to deliver the vessels

Contract

- The existing fixed-price contract between CMAL and FMPG was terminated
- The Scottish Government awarded FMPG a new contract to deliver the vessels
- There is no change to the technical specification of the vessels
- Contractual delivery dates, as at August 2020: 14 April 2022 (vessel 801) and 8 December 2022 (vessel 802)

Ownership of vessels

- CMAL transferred ownership of the vessels to the Scottish Government at market value. In effect, this reduced Transport Scotland's lending to CMAL associated with the vessels by their market value
- After completion, the Scottish Government will transfer the vessels to Transport Scotland. CMAL will then purchase the vessels at market value, as determined by an independent shipbroker, from Transport Scotland

Funding

- The Scottish Government directly funds FMPG
- Transport Scotland's outstanding loan to CMAL was transferred to the Scottish Government
- The Scottish Government subsequently wrote-off the difference between the market value of the vessels and the value of the outstanding lending which Transport Scotland had previously provided to CMAL
- CMAL will fund its purchase of the vessels through a new loan provided by Transport Scotland

Source: Audit Scotland, using information provided by the Scottish Government

107. The new funding arrangements required changes to the governance arrangements (Exhibit 8, page 47). In addition to establishing FMPG, the Scottish Government took over responsibility as contract owner and is FMPG's sponsor. The roles and responsibilities of the Scottish Government and FMPG are set out in a Framework Document, which was agreed in February 2022.

108. The Scottish Government also appointed CMAL as its technical consultant. It relies on CMAL's knowledge of shipbuilding to help it manage the contract and understand whether sufficient progress is being made. CMAL's role is set out in a Consultancy Agreement. As per the previous contract, CMAL continues to have an onsite team at the shipyard to offer FMPG advice, raise concerns and evaluate progress with the build. Transport Scotland is kept informed of progress, but it no longer has a role in the project.

Exhibit 8.

A summary of the new governance arrangements

CMAL has a new role as the Scottish Government's technical consultant.

Scottish Government	FMPG Board	FMPG	CMAL
Role			
• Shareholder • Sponsor • Contract owner	• Strategic leadership • Financial stewardship • Holds the FMPG senior management team to account	• Delivery of vessels • Sustainability of shipyard	• Technical consultant • The Scottish Government's representative at the shipyard
Responsibility			
• Fund FMPG • Manage the 801/802 contract • Oversee FMPG's activities and update Scottish ministers on progress • Consider the future of FMPG	• Support FMPG, provide advice and challenge • Ensure the effective governance and financial management of FMPG • Set performance objectives for the Turnaround Director (and the CEO since February 2022)	• Complete vessels 801 and 802 • Improve the shipyard's systems and processes • Day-to-day of the shipyard. • Report progress • Secure new work	• Monitor vessel progress at the shipyard and provides advice to FMPG • Advise the Scottish Government on vessel progress and FMPG's monthly costs
Accountable to			
• Scottish ministers	• Scottish ministers • Scottish Parliament	• FMPG Board • Scottish Parliament • Scottish ministers	• CMAL Board • Scottish ministers

Source: Audit Scotland, from the Scottish Government Framework Document and the Consultancy Agreement

109. The Scottish Government appointed the **FMPG Board** in June 2020. The board is aware of required improvements at the shipyard and is providing constructive challenge. It has, for example, requested better management information from the shipyard to enable it to assess progress with the build more accurately. Although FMPG has yet to produce a business plan or strategic plan, as per the Framework Document's requirements, the Scottish Government is confident in the board's ability to steer and lead the organisation.

FMPG Board

Includes six non-executive directors and two executive members. The non-executive directors' experience includes the oil and gas industry, maritime operations, the design and build of ships, HR, and audit.

The Scottish Government attends as an observer.

The trades union representatives attend part of each board meeting and senior management attend on request.

110. CMAL and workforce representatives from FMPG suggested to us that it would be beneficial if FMPG's Board and senior management had more commercial shipbuilding experience. A recruitment exercise to appoint FMPG Board members with legal and shipbuilding expertise is currently under way (paragraph 145). FMPG reports that as there is only one commercial shipbuilder in the UK, it is difficult to recruit people with this specific experience.

Working relationships between FMPG and CMAL have been good, although some frustrations have emerged

111. When FMEL was nationalised, most of the senior management team left the organisation and the Turnaround Director subsequently recruited new senior staff. Initial working relationships between CMAL and FMPG were very productive, and both agree that there is a good working relationship between senior staff. There is also a good working relationship between CMAL's onsite team and FMPG management, with weekly meetings taking place to discuss CMAL's OORs.

112. While FMPG and CMAL share a common goal to deliver the vessels and regular discussions about progress are taking place, there have been times when some frustrations have emerged between the bodies. These mainly centre on CMAL being the Scottish Government's representative at the shipyard, which involves it inspecting and reporting on FMPG's activities and progress.

113. In June 2021, FMPG developed a draft Terms of Reference to help clarify roles between FMPG and CMAL. CMAL did not agree to these terms as it considers its role as the Scottish Government's representative is already set out in the contract. The two parties have fundamentally disagreed on certain aspects of the build (paragraph 134) which has meant that communication between the two is not always productive and has not supported progress on the vessels.

114. FMPG's workforce representatives advised us that the workforce values CMAL's opinions but the shipyard could do more to draw on its expertise. The extent to which FMPG is acting on CMAL's advice and implementing changes is unclear. Since August 2021, the Scottish Government has facilitated meetings between CMAL and FMPG to support greater information sharing at the strategic level. A board-to-board meeting took place in February 2022 to discuss how the two bodies could work better together. We understand that this was a positive meeting and the two boards agreed that the organisations will work collaboratively to support vessel progress. The boards have further agreed to meet at least twice a year going forward. The appointment of the new FMPG chief executive provides further opportunities for closer working (paragraph 145).

The FMPG Board does not receive the information it needs to effectively scrutinise progress

FMPG has not had the systems in place to produce sufficient management information

115. Several **reporting arrangements** are in place for FMPG to update the Scottish Government, CMAL and other stakeholders on vessel progress. Since February 2020, FMPG has prepared a monthly review pack for CMAL and the Scottish Government which includes information on design and production issues and the impact on progress, and a traffic light report on the status of the projects. FMPG also shares a summarised version of the monthly review pack with the FMPG Board.

116. FMPG has acknowledged it has not had the systems in place to produce detailed performance information, although it is making improvements. Deficiencies with its performance reporting included:

- actual versus planned production metrics have not been reported, which is the industry standard way of identifying programme slippage
- progress against programme plans was not provided between January 2021 and May 2021 when timescales were being revised
- progress against detailed plans was absent because detailed plans for the vessels did not exist. This meant the impact of delays on programme timescales was not reported
- project risk management was identified as requiring review and improvement between January and October 2021, and significant risks such as the difficulties with integrating systems (paragraphs 126 and 141) are not reported.

117. Based on the September/October 2021 survey of vessel 801 (paragraph 132), FMPG has started to provide more details of performance including metrics for steelwork completed and pipes installed. Despite its poor systems, FMPG is also starting to develop more performance information, such as key performance indicators, to help it to better track build progress. However, in January 2022, CMAL reported that FMPG's vessel plans were still not detailed enough and that FMPG was not producing the detail usually provided in industry standard progress reports.

Reporting arrangements include:

- monthly progress meetings between CMAL and FMPG to discuss review packs. These commenced in January 2020 and the Scottish Government has also attended since April 2021
- monthly progress meetings between CMAL and the Scottish Government (since May 2021)
- ad hoc strategic meetings between FMPG and CMAL facilitated by the Scottish Government since August 2021
- weekly and fortnightly meetings between the Scottish Government and the FMPG Turnaround Director and FMPG chair respectively
- frequent meetings between CMAL's onsite team and FMPG management.

The Scottish Government does not share full details of CMAL's concerns about progress with the FMPG Board

118. CMAL provides monthly progress reports to the Scottish Government, as required under their Consultancy Agreement. The reports set out the results of CMAL's onsite inspections, its assessment of progress, and consistently raise several concerns (paragraphs 129, 137 and 141).

119. FMPG does not have sight of these reports, although the Scottish Government provides some feedback during its fortnightly meetings with the board's chair. Without sufficient management information and comprehensive details on CMAL's concerns, the FMPG Board's ability to scrutinise progress and fulfil its role effectively is limited.

Regular reporting of progress is being made to the Scottish Parliament and Scottish ministers

120. In line with the RECC's recommendations, FMPG provides quarterly updates of progress on the vessels to the Scottish Parliament. Separately, the Scottish Government also provides Scottish ministers with a monthly update on progress, which clearly set out CMAL's concerns with the build. The updates provided to the Scottish Parliament tend to provide a more positive view of progress than those provided to Scottish ministers.

121. To some extent, the different views of progress expressed in the respective updates is understandable. The Scottish Government, as the customer for the vessels, is focused on risks to delivery, the potential for delay and the impact of this on users of ferry services. CMAL, as the Scottish Government's advisers, therefore emphasise the problems and risks and the work being done to mitigate these. As the eventual owners of vessels 801 and 802, CMAL's focus is on ensuring that the vessels will be fit for purpose throughout the anticipated 30-year lifespan. Conversely, FMPG as vessel supplier is focused on action taken to achieve or improve delivery. However, there is an opportunity to consider how all parties could contribute to greater openness and transparency through more balanced public reporting on progress and problems with the project. The Scottish Government, as FMPG's sponsors, has an important role in ensuring that the Scottish Parliament receives a full account of progress on the vessels and the associated challenges.

4. Progress since nationalisation

Key messages

1 The turnaround of FMPG is extremely challenging. FMPG has implemented some of the significant operational improvements that were required at the shipyard but work on the vessels has taken longer than expected, and the Covid-19 pandemic has delayed progress. FMPG extended the vessel delivery dates twice to reflect Covid-19 delays and, until early 2022, expected to deliver vessel 801 between July and September 2022 and vessel 802 between April and July 2023. In February 2022, FMPG informed the Scottish Parliament that due to a serious problem with cables on vessel 801, neither vessel would be delivered within the extended timescales.

2 A substantial amount of work is required to complete the vessels and there are significant challenges that need to be addressed. FMPG is developing a new programme for the vessels, with input from CMAL, and plans to update the Scottish Parliament with expected delivery dates at the end of March 2022. This update is also expected to confirm whether there is any change to FMPG's budget for the vessels, which currently stands at £110.3 million to £114.3 million.

3 FMPG is actively pursuing new business opportunities and the Scottish Government is also exploring options, such as direct contract awards for new vessels. The Scottish Government is committed to supporting FMPG to a position where it can compete for contracts, as it considers this is the best way to secure a sustainable future for the shipyard.

The turnaround of FMPG is extremely challenging and is taking longer than expected

Covid-19 and ongoing remedial work has slowed progress with the vessels

122. The 2019 Turnaround report set out a high-level programme plan to get the vessels delivered within the updated timescales. Initial progress with the vessels was delayed as FMPG focused its efforts on completing three smaller vessels that were then under construction at the shipyard and making operational changes to support the build of vessels 801 and 802.

123. Around four months after the shipyard was nationalised, the Covid-19 pandemic caused significant disruption to the turnaround of the business and to vessel progress:

- Production activity stopped for 11 weeks during the initial lockdown and the shipyard reopened with less than ten per cent of its workforce on-site. Physical distancing requirements reduced production workforce capacity for five months, and work on the vessels was suspended for four weeks in January 2021 to implement new physical distancing measures.
- Although office-based employees were able to work from home, the turnaround of an industrial business benefits most from people being on-site, working together to generate ideas and solve problems.
- Considerable design work was also required on the vessels, including the development and approval of structural drawings, prior to progressing construction. Although Covid-19 interruptions afforded FMPG an opportunity to progress designs, it also restricted engineers' access to the vessels to evaluate design issues.

Covid-19-related absence is an ongoing risk to the shipyard. FMPG monitors the impact on its workforce during weekly Covid-19 control meetings.

124. The programme plan in the 2019 Turnaround report included a seven-month remedial phase that involved fixing problems on the vessels to ensure they meet technical specifications and the required quality and safety standards. Two years later, significant remedial work is still ongoing, especially on vessel 801, and continues to be uncovered as the build progresses. FMPG workforce representatives are concerned that some of the rework on the vessels is unnecessary and is increasing costs and delays.

Considerable work was required to address operational failures at the shipyard and FMPG has started to implement changes

125. The 2019 Turnaround report confirmed that significant work was required to update the shipyard's systems, design processes and quality controls to support vessel delivery (paragraph 101). In particular, FMPG told us that the shipyard's systems, processes, policies, and procedures were either absent or broken.

126. FMPG inherited seven separate management systems relating to design, procurement, planning, and production. FMPG has made efforts to establish, improve and integrate the systems, but some are still not fit for purpose and their integration has been challenging and time consuming. FMPG anticipates that the successful integration will help accelerate the build of vessel 802.

127. FMPG has made some further changes, including:

- employing a new design subcontractor, with more capacity
- implementing an internal defect management system to uncover and resolve problems
- implementing dimensional control to accurately measure production work
- streamlining the process for inspections and approvals by Lloyd's Register, the MCA and CMAL.

128. FMPG has also applied some lessons learned from the construction of vessel 801 to inform its approach to building vessel 802. For example:

- Lloyd's Register and CMAL signed off the construction of the bulbous bow without any requirement for rework. The bulbous bow was a significant problem for vessel 801 under the previous contract with FMEL
- FMPG reports that it expects vessel 802 to be approximately 50 per cent heavier on launch than vessel 801, as a consequence of undertaking more internal outfitting prior to launch, which is more cost efficient.

129. CMAL's reports to the Scottish Government acknowledge that there has been some improvement in the build of vessel 802, and especially increased quality control on steelwork. But it has also consistently reported concerns about slippage in completing vessel 802's hull and superstructure.

The FMPG Board has identified that further significant improvements are required

130. In late 2020, a year after the shipyard was nationalised, the FMPG Board commissioned an independent benchmarking exercise to examine whether FMPG's internal processes and systems were fit for purpose. This found significant need for improvement because of long-term underinvestment in the shipyard. In particular it found that the shipyard would benefit from the implementation of basic shipbuilding good practice.

131. In response, the board submitted an initial Development Plan to the Scottish Government in February 2021. This set out a three-phased approach and focuses on short-term plans to upgrade the shipyard at an indicative cost of around £10 million. The board considers that this investment is necessary to make the shipyard competitive, more likely to win contracts, and hence better able to demonstrate value for money. The Scottish Government is supporting FMPG to develop a business case for the required investment.

A significant amount of work is required to complete the vessels

132. In September/October 2021, FMPG conducted a survey of vessel 801 to obtain a more detailed understanding of the work required to complete the build. The survey uncovered that a significant amount of work is required:

- Steelwork has not been completed and is behind schedule. FMPG has redirected its subcontractor from vessel 802 to vessel 801 and employed additional agency workers to accelerate steelwork.
- Pipework installation has been delayed.
- The shipyard had yet to establish the number of electrical cables laid on vessel 801, or progress made on installing the air-conditioning, both of which are crucial to enabling the powering-up of the vessels and to start testing equipment.

FMPG has since conducted a survey of electrical cables. The results are set out in paragraph 138.

133. CMAL continues to maintain a list of OORs which identifies the modifications required to ensure the vessels meet the technical specification and required regulations. Since December 2021, FMPG has integrated the OORs with its new defect management system and includes them in its monthly progress reports. As at the end of January 2022, there were 175 outstanding OORs.

134. FMPG will have to fully rectify the OORs that relate to Lloyd's Register and the MCA's regulations to ensure the vessels are safe and are issued with the required certificates before they enter service. However, FMPG is concerned that it will be difficult to find solutions for certain technical OORs. For example, FMPG advised us that remedying inaccessible equipment in vessel 801's engine room would further delay the build and has suggested an alternative solution to CMAL. CMAL did not agree with this alternative solution. Both CMAL's and FMPG's January 2022 progress reports highlight continuing issues with OORs:

- CMAL reported that it has had to issue FMPG with repetitive OORs as they are not being addressed.
- FMPG reported there was a risk that it has underestimated the amount of work required to resolve the outstanding OORs. It also reported that if the OORs are not resolved, there is a risk that CMAL will not accept the completed vessels.

In February 2022, CMAL and FMPG had further discussions to resolve the OORs and are working together to find solutions.

FMPG announced in February 2022 that both vessels will miss their expected delivery dates

The vessel delivery dates have been extended twice since nationalisation due to Covid-19

135. FMPG initially estimated that vessel 801 would be delivered between October and December 2021 and vessel 802 between July and October 2022. It has since provided the Scottish Parliament with two re-baselining reports, each with revised vessel delivery dates, which reflect delays caused by Covid-19 (Exhibit 9). Its second re-baselining report to the Scottish Parliament in June 2021 stated that it expected vessel 801 to be delivered between July and September 2022, and vessel 802 between April and July 2023. This is between four and five years later than the original timescales for the vessels.

Exhibit 9.

Changes to the vessel delivery dates

The Covid-19 pandemic created a nine-month delay to vessel delivery.

	Original contract	FMPG report December 2019	FMPG report August 2020	FMPG report June 2021
Vessel 801 delivery date	25 May 2018	October – December 2021	April – June 2022	July – September 2022
Vessel 802 delivery date	26 July 2018	July – October 2022	December 2022 – February 2023	April – July 2023

Source: Audit Scotland, using information provided by CMAL and FMPG

136. Although FMPG undertook vessel surveys to estimate the delivery timescales in the December 2019 Turnaround report, the quality of information available to FMPG at that time was poor. The revised timescales in the August 2020 and June 2021 re-baselining reports reflect FMPG's improved knowledge of the shipyard's capacity. However, the re-baselining reports were not based on detailed inspections to understand the full extent of work already completed on the vessels and work still outstanding.

137. CMAL has consistently expressed a lack of confidence that FMPG would be able to deliver either vessel within the timescales set out in the June 2021 update. For example, it previously reported that FMPG's failure to meet any of the planned deadlines in its June 2021 re-baselined programme would lead to future bottlenecks and that FMPG had no recovery strategy in place.

Serious problems with cable installation on vessel 801 will further delay the delivery of both vessels

138. In December 2021, FMPG began the process of completing cable installation on vessel 801. This process identified that some of the 1,400 cables that FMEL had installed at the end of 2018 were too short to reach required equipment. Following a detailed survey of the cables, FMPG's Turnaround Director notified the Scottish Parliament in February 2022 that most of them will have to be removed and replaced. This additional unexpected work will result in delays to the installation of the remaining 8,400 cables on vessel 801 and the commissioning process. It will also have an impact on the programme for vessel 802. Crucially, it means that FMPG will not meet its previously reported delivery dates for either vessel (Exhibit 9, page 55).

FMPG is developing new programme plans for the vessels

139. FMPG is currently developing a new programme for both vessels to take account of the additional work and delays created by the cable problem. It is taking the opportunity to consider the timescales for all outstanding work on both vessels and building this into the new programme. For example, the previous programme included a six-month commissioning process, but FMPG considers that, realistically this process might take longer. As part of this re-baselining exercise, FMPG is considering whether there will be any impact on the vessels' budget.

140. CMAL is working with FMPG to develop the new programme to help ensure it is resilient and pragmatic. CMAL has previously raised concerns about FMPG's programme planning, and its ability to apply the correct amount of time to activities. This is therefore a positive step and should give CMAL more confidence that the programme is achievable. FMPG expects to update the Scottish Parliament on timescales, and any impact on costs, at the end of March 2022.

There are significant challenges that need to be addressed if the vessels are to be delivered in the new timescales

141. FMPG and CMAL have both identified that there are significant challenges that need to be addressed if the vessels are to be delivered. In December 2021, FMPG requested that CMAL advise it of its main points of concern. These included FMPG's ability to resolve the OORs (paragraph 133), poor-quality pipework, and incomplete structural works. CMAL also informed FMPG that unless it provided safe access to valves, pumps, and auxiliary equipment on vessel 801 for operation and maintenance, there was a risk that it might not obtain its passenger safety certificate. There are further challenges and risks to the vessels programme:

- Effective project planning and resource management continues to be an issue. A lack of robust work packaging means that it is difficult to issue the correct instructions and materials to the workforce at the right time. FMPG workforce representatives told us that the absence of effective planning and project management has led to inefficient working and wastage, with staff standing idle and usable materials being scrapped.
- CMAL reports that FMPG's risk and change management remains inconsistent with normal shipbuilding practice. It also reports that FMPG continues with out-of-sequence working, building without approval, and that improvements to its processes have not yet filtered down fully to the shop floor, slowing progress.
- The commissioning stage of the project is a risk to costs and timescales. Because engines and equipment were purchased several years in advance, warranties have expired, and any repairs required before vessel 801 enters service could be expensive and time-consuming. CMAL reports it is likely that electrical equipment has already been damaged and that considerable modification work to switchboards and consoles is required before commissioning can start.
- Recruiting sufficiently skilled production staff has been challenging, and staff shortages have slowed production work. FMPG has reported lower direct labour hours spent on construction than planned since the new contract was agreed and critical resourcing issues remain. CMAL also considers that there is a lack of supervision on the vessels to ensure adherence to production standards and designs. In January 2022, it reported that this lack of supervision is resulting in a high number of incomplete tasks on the vessels.
- Production activity is a concern. In January 2022, CMAL advised the Scottish Government that FMPG had failed to achieve a single programme completion date in the last 20 months. It further reported that although FMPG had made progress on vessel 801,

its production activity is not focused on critical areas, is not in line with its programme, and is being driven by the availability of materials. FMPG recognises that to support efficient production and accelerate the build of vessel 802, in particular, further work is necessary to integrate the shipyard's systems.

The workforce has expressed concerns about the shipyard

142. The 2019 Turnaround report identified poor internal communication and staff motivation as problematic. Low staff morale remains a concern for FMPG workforce representatives and CMAL. While trades union representatives are invited to discussions with FMPG's Board, Covid-19 has limited the opportunities for workforce meetings. After the initial lockdown in March 2020, the Turnaround Director issued weekly newsletters and in May 2021, he hosted small-group discussions with over 400 staff. The Turnaround Director recognised that communication between senior management and the workforce could have been better.

143. Although the Turnaround Director brought in a new management team to identify and implement improvements to deliver the vessels, the workforce representatives have expressed a lack of confidence in their ability to turn the shipyard around. FMPG workforce representatives are also concerned that high overheads due to the increased number of senior managers since nationalisation will impact the shipyard's competitiveness and its ability to win future contracts.

FMPG is making changes to help address some of the challenges

144. To achieve the new delivery timescales, it is vitally important that FMPG addresses the significant challenges that remain. There is some evidence that it has started to do this:

- It recognises there is a real risk that the vessel programme will suffer without buy-in from the workforce. Its monthly reports include a list of actions to mitigate this risk, including a series of employee engagement sessions which were due to start in January 2022.
- It has recruited a new project manager for each vessel and a Head of Planning. It has also recruited 80 agency workers from abroad to fill the gap in the production workforce and to progress steelwork on both vessels.

Changes to the FMPG Board creates both opportunities and risks

145. In December 2021, the FMPG Board appointed a new Chief Executive Officer (CEO), who has been in post since 1 February 2022. In January 2022, the chair of the FMPG Board and another non-executive board member, announced that they would be stepping down in April 2022. A recruitment exercise for their replacements, as well as an additional non-executive director, is due to conclude at the end of March 2022.

146. The FMPG Board and the Scottish Government consider that replacing the Turnaround Director with a permanent CEO will help enhance the stability of the shipyard. The new CEO has stated that FMPG and CMAL will work more collaboratively in future. The board recruitment exercise also aims to strengthen the board's shipbuilding and legal expertise. While these developments can be considered as a positive for the shipyard, there is a risk that significant changes to its leadership results in a loss of knowledge and may create a period of uncertainty amongst the workforce. This, alongside the recent announcement of further problems with the vessels, creates additional risks to vessel delivery which FMPG will have to manage.

The total cost of the vessels project is currently estimated to be at least £240 million, which is more than double the original contract value

147. Assuming there is no further increase in costs arising from the latest delays and that the vessels are delivered within the revised budget, the total cost of the project will be around £240 million. This comprises:

- £83.25 million – paid by CMAL to FMEL under the original contract (£82.5 million in milestone payments and £0.75 million for agreed contract variations)
- £45 million – in Scottish Government loans
- £110.3 million to £114.3 million – costs to complete the vessels under FMPG.

148. Other project costs included:

- the Scottish Government's £6 million cost of running the shipyard during administration (paragraph 96). This was offset by the £6.5 million that it received from the administration process
- the Scottish Government's £7.5 million cost of purchasing FMEL's assets. This was offset against FMEL's outstanding loan (paragraph 75)
- FMPG's £4.3 million costs related to Covid-19. This was treated as an exceptional item
- CMAL's project management costs, which total £1.49 million (between October 2015 and February 2022).

149. The total cost of the project is more than three times the estimated budget in Transport Scotland's business case (£72 million) and around 2.5 times the original contract value (£97 million) (paragraph 4).

FMPG has spent significantly less on the vessels than planned since nationalisation

150. FMPG spent less than intended on labour and materials since nationalisation. The 2019 Turnaround report predicted that in 2019/20 and 2020/21, FMPG would spend a total of £61.8 million on the two vessels. The slow progress on vessels 801 and 802 since nationalisation and Covid-19 disruption has meant that over these two years, it only spent £27.3 million In total, up to the end of January 2022, FMPG had spent £68 million on the vessels (compared to a budget of £103.5 million for the years 2019/20 to 2021/22).

The Scottish Government has partially achieved its objectives following its nationalising of the shipyard, but it has not yet made any decisions on FMPG's future

151. Through nationalisation, the Scottish Government sought to complete the vessels as quickly as possible, protect jobs, and support the development of a sustainable shipyard. While nationalisation has supported employment at the shipyard in the last two-and-a-half years, the vessels are not complete, and further work is required to improve the long-term sustainability of the shipyard.

152. Prior to nationalisation, PwC advised the Scottish Government that it should consider its exit strategy from the shipyard. The Scottish Government advised Scottish ministers that it was not appropriate to do so at that time, that the immediate priority was delivering the vessels, and that the future of the shipyard would be considered at a later stage.

153. FMPG is actively pursuing new opportunities and bidding for new contracts, and its board has plans which would allow the shipyard to be more efficient and competitive in a commercial environment. The new FMPG CEO will be expected to play an important role in developing FMPG's future strategy and supporting the sustainability of the shipyard.

154. The Scottish Government is fully committed to the delivery of the two vessels, protecting jobs, and delivering a sustainable future for the shipyard. It will support FMPG to a position where it can compete for contracts, as it considers this is the best way to secure its future. It is also exploring the possibility of it awarding contracts directly to FMPG without the need to go through an open procurement exercise. The Scottish Government reports that it has not made any strategic decisions on the long-term future of the shipyard, including whether it should be publicly or privately owned, as this will depend on many factors, including FMPG's future pipeline of work.

It is crucial that lessons are learned for future new vessel projects

155. Vessels 801 and 802 should have been delivered almost four years ago, bringing numerous social, economic, and environmental benefits. The delays and cost overruns have had a negative impact on island communities and weakened resilience across the Clyde and Hebrides network.

156. Transport Scotland will replace its 2012 Ferries Plan with an Islands Connectivity Plan (ICP). It plans to do this by the end of 2022, although this is dependent on available resources. This will include a long-term plan and investment programme for ferries, which will replace its current **Vessel Replacement and Deployment Plan (VRDP)**. Although work on plans has been interrupted due to Covid-19, Scottish ministers have committed to investing £580 million in vessel and harbour infrastructure over the next five years to improve capacity and reliability of ferry services.[12] This includes approximately £281 million for CMAL to procure new vessels for both the Clyde and Hebrides and Northern Isles ferry networks.

VRDP

Transport Scotland, supported by CMAL and CalMac, updated the VRDP in 2019 and 2020, and announced details to Ferry Stakeholder Groups in June 2021. The current VRDP sets out a high-level programme of investment in vessels and harbours over a 10-year period to 2031.

157. To help inform new vessel projects, which are either under way or will be included in the ICP, it is crucial that the Scottish Government, CMAL and Transport Scotland fully reflect on what went wrong with the 801/802 project and put measures in place to minimise the risk of this happening again.

The Scottish Government, Transport Scotland and CMAL did not conduct a formal project review, but they have made some improvements for future new vessel projects

158. There is no evidence that the Scottish Government, Transport Scotland or CMAL conducted a formal project review exercise after the original contract failed. They have, however, reflected on the 801/802 project and made some improvements, for example:

- CMAL has:
  - re-designed its tender process to carry out additional risk assessments on all bidders and undertake enhanced financial diligence on the preferred bidder. This will include financial monitoring by an independent accountancy firm before and after contract award
  - stated that, as per its previous practice, it will ensure that only shipbuilders who agree to provide a full refund guarantee can qualify as a preferred bidder. In addition, if a preferred bidder subsequently retracts the offer of a full refund guarantee, CMAL states that it will not award it the contract, regardless of the views of Scottish ministers

  - commissioned a new independent naval architect to support concept designs and conduct technical assessments during the vessel procurement process
  - stated it will consider the scheduling and frequency of milestone payments as part of future vessel tendering exercises
  - confirmed it will instruct independent gateway reviews during procurement and throughout new shipbuilding projects.

- Transport Scotland reports that it:
  - has committed resources to help better understand the decisions that were made throughout the 801/802 project. This includes sharing lessons learned around risk
  - has begun the process of strengthening its project governance. This has included clarifying roles and responsibilities, ensuring that it adheres to project management principles, embedding more rigid project documentation, assessing its internal review processes, and embedding gateway reviews at key stages of major ferry infrastructure projects
  - will take steps to enhance how it resources ferry capital projects.

159. In March 2021, Transport Scotland commissioned consultants to conduct a review of the governance arrangements for ferries (ie, the roles of Transport Scotland, CMAL, and CalMac) to assess whether they are fit for purpose. The consultant's initial reports on the review (known as Project Neptune), prepared in November 2021, identify several areas for improvement, including insufficient clarity on responsibilities, and a lack of oversight, and present several options for structural reform. Transport Scotland reports that it is beginning to make improvements in relation to transparency and accountability but recognises that further work is required. In February 2022, Scottish ministers received the final Project Neptune reports for consideration.

Endnotes

1 Vessel Replacement and Deployment Plan, Annual report 2014, Transport Scotland, October 2015.

2 Scottish ministers brought the shipyard into public ownership via a new entity, Ferguson Marine (Port Glasgow) Holdings Limited. Ferguson Marine (Port Glasgow) Limited (FMPG) is one of its three subsidiaries. It is responsible for considering the shipyard's future and reporting progress on the vessels. The other subsidiaries are Ferguson Marine (801–802), which is responsible for the construction of vessels 801 and 802; and Ferguson Marine (803–805), which was responsible for building three small vessels under separate commercial contract. For simplicity, our report refers to FMPG as undertaking all these responsibilities.

3 Construction and procurement of ferry vessels in Scotland, Rural Economy and Connectivity Committee, December 2020.

4 Vessel Replacement and Deployment Plan, Annual report 2014, Transport Scotland, October 2015.

5 The 2017/18 audit of the Scottish Government Consolidated Accounts, Audit Scotland, September 2018.

6 The 2018/19 audit of the Scottish Government Consolidated Accounts, Audit Scotland, September 2019.

7 The 2019/20 audit of the Scottish Government Consolidated Accounts, Audit Scotland, December 2020.

8 The 2020/21 audit of the Scottish Government Consolidated Accounts, Audit Scotland, December 2021.

9 Report on updated cost and programme for vessels 801 and 802, FMPG, December 2019.

10 The Scottish Government division responsible for FMPG has evolved since it was established and is now known as the Strategic Commercial Interventions Division.

11 On 9 August 2019, the Scottish Government created a new private limited company – Macrocom (1067) Limited – to act as the Managing Agent during the period of FMEL's administration. On 2 December 2019, Macrocom (1067) Limited purchased FMEL's assets by means of a Sale and Purchase Agreement. On 3 December 2019, the Scottish Government renamed the company as Ferguson Marine (Port Glasgow) Limited (FMPG). For simplicity, we have stated that the two events (ie, the Scottish Government bringing the shipyard into public ownership, and creating FMPG) occurred at the same time.

12 A National Mission with Local Impact: Infrastructure Investment Plan for Scotland 2021–22 to 2025–26, Scottish Government, February 2021.

Appendix 1

Audit methodology

Our objective

To assess the initial and new arrangements to deliver vessels 801 and 802.

Our methodology

Evidence for our audit was based on three main components:

1. Desk research and analysis

We reviewed and analysed publicly available documentation as well as unpublished information provided by the Scottish Government, Transport Scotland and CMAL, including:

- the BIMCO NEWBUILDCON contract
- correspondence between CMAL and Transport Scotland, and CMAL and FMEL
- briefings to Scottish ministers
- initial payment schedules for the vessels and subsequent updates based on information provided to Transport Scotland
- FMEL/CMAL project meeting papers and minutes
- CMAL's updates for the Programme Steering Group, together with corresponding agendas and notes and actions
- information related to the Scottish Parliament's former Rural Economy and Connectivity Committee inquiry into the project, for example, submissions from CMAL, FMEL and FMPG, and transcripts from evidence sessions.

We reviewed further documentation specific to the new arrangements to deliver the vessels. This included:

- reports by the Scottish Government-appointed Turnaround Director, for example, the re-baseline reports and further update reports to the Net Zero, Energy and Transport Committee
- FMPG/CMAL project meeting papers and minutes
- various board minutes, for example, for the Ferguson Marine Programme Review Board and the FMPG Board.

2. Interviews

We met with a range of individuals involved in the delivery of vessels 801 and 802, including those from:

- the Scottish Government's Strategic Commercial Interventions Division and its Manufacturing and Industries Division
- Transport Scotland
- CMAL – senior management, employees who are onsite at the shipyard, and board members
- FMPG – senior management, board members, and trades union representatives
- FMEL – former senior management and previous employees (some of whom now work for FMPG)
- representatives from Lloyd's Register and the Maritime and Coastguard Agency (MCA)
- Scottish Government consultants.

3. Tours of the shipyard

We visited the shipyard twice. During the first visit, hosted by FMPG in September 2021, we visited the fabrication hall, were given a tour onboard vessel 801 and were updated on the work on vessel 802 at the berth. In November 2021, CMAL facilitated a more extensive tour of vessel 801, which involved us accessing additional areas and compartments of the vessel, including the engine room.

Appendix 2

Builder's Refund Guarantee: changes over the course of the project

Purpose

- A Builder's Refund Guarantee (BRG) is an integral part of shipbuilding contract and is the main source of financial security for a ship buyer (in this case CMAL). Typically, it is an agreement between the shipbuilder (in this case FMEL) and a bank to refund 100 per cent of the payments to the buyer if the buyer cancels the contract (because, for example, the ship does not meet the specification, is late, or if the shipbuilder is deemed insolvent).
- The call on the guarantee is at the buyer's discretion (in line with the terms set out in the contract). It cannot be blocked by the shipbuilder.

BRG for the 801/802 contract

- FMEL was unable to provide a full refund guarantee as stipulated in the contract. Instead, FMEL offered CMAL a BRG for each vessel worth £12.125 million, or 25 per cent of the contract value. The expiry date was 31 December 2018 and could be renewed if the vessels were not delivered by then. The BRGs were issued by two accredited banks: Investec Bank plc and Investec Limited (Investec).
- As FMEL was a new company and did not have a guarantor, Investec required FMEL to provide it with the full value of the BRGs (£24.25 million in total). This money would be held in escrow and paid to CMAL if it made a call on the guarantee or refunded to FMEL if the vessels were delivered as per the contract.

Change from BRG to surety bonds

- In November 2016, CMAL agreed to FMEL's request to replace the BRGs with surety bonds issued by the insurance company Tokio Marine HCC (HCC plc).
- HCC plc required a smaller amount to be held in escrow (£15.4 million). The remaining £8.85 million was released to FMEL. In return, HCC plc charged FMEL a higher premium and held security over the shipyard.
- This arrangement meant that if FMEL failed to meet its contractual obligations, HCC plc would pay CMAL the full value of the surety bonds (£24.25 million) and take ownership of the shipyard.

Intercreditor agreement

- In February 2018, after the Scottish Government had provided the initial £15 million loan to FMEL, and while it was considering further public sector financial support, CBC requested that HCC plc release some of its funds held in escrow to aid FMEL's cash flow.
- HCC plc agreed to weaken its security position by releasing £10.7 million of CBC's cash collateral in return for: (i) a higher premium (paid by FMEL); and (ii) an intercreditor agreement with the Scottish Government.

- The intercreditor agreement meant that HCC plc's debt ranked in priority to the Scottish Government's debt and blocked any of the £15 million loan repayments to the Scottish Government until any liability to HCC plc was discharged in full.
- In June 2018, as part of the £30 million loan arrangement, the Scottish Government negotiated second ranking standard security (after HCC plc) over the shipyard for all sums due under both the £15 million and £30 million loan agreements.
- In June 2018, CMAL agreed to FMEL's new anticipated delivery dates – 21 June 2019 (vessel 801) and 10 March 2020 (vessel 802). FMEL then agreed to renew the surety bonds, which were due to expire at the end of 2018, to 31 July 2019 (vessel 801) and 30 April 2020 (vessel 802).

Scottish Government negotiations with HCC plc prior to FMEL entering administration

- In June 2019, the Scottish Government started negotiating with HCC plc. If FMEL entered administration, HCC plc would take control of the shipyard and there was a risk that it could stop the build of vessels 801 and 802.
- FMEL, at the request of the Scottish Government, negotiated a one-month extension for the vessel 801 surety bond to 31 August 2019. This allowed the Scottish Government more time to engage in negotiations with HCC plc. Private negotiations between the two parties started at the end of June 2019 and included CMAL from July/August 2019.
- In August 2019, HCC plc agreed to pay CMAL a reduced amount (£4.85 million instead of £24.25 million) and to release its security over the shipyard, in return for CMAL agreeing not to call the surety bonds. This repositioned Scottish ministers as first ranking creditor, allowing them more control over the business during administration.
- The Scottish Government engaged in discussions with the HCC plc-appointed administrator, Deloitte, prior to FMEL entering administration and was subsequently appointed Managing Agent. This meant the Scottish Government funded the shipyard during administration and could immediately appoint a Turnaround Director.
- HCC plc has since raised court proceedings against Scottish ministers. The Scottish Court of Session concluded in May 2021 that, under the terms of the intercreditor agreement, HCC plc should be reimbursed for the monies paid to CMAL, together with costs and expenses, to the sum of £5 million.
- Scottish ministers, through CMAL, sought to rectify the deed of settlement with HCC plc in the High Court of Justice of England and Wales. In January 2022, the Judge refused this and granted a summary judgment in favour of HCC plc.

Appendix 3

An example of CMAL's and FMEL's responsibilities in the contract

Timescales

- The contract sets out details of the expected delivery dates, permissible days (which could extend the delivery dates) and penalties for late delivery of the vessels.
- Within 21 days of signing the contract, FMEL had to provide CMAL with a detailed building and testing schedule. CMAL had 14 days to respond.
- Within 30 days of signing the contract, FMEL had to provide CMAL with a master construction programme outlining approximately 40 activities and dates for vessels 801 and 802.
- At least 30 days before construction commenced, FMEL had to provide CMAL with a full set of plans and drawings. CMAL had 14 days to respond.
- If FMEL failed to complete any work on the vessels for 14 days, CMAL had the right to the cancel contract.
- If the vessels were delivered more than 120 days late (excluding any additional permissible days), CMAL had the right to cancel the contract.

Budget

- The contract sets out the chronology of milestone events, the value of the payments and the process for FMEL to claim payments:
  - On completion of a milestone event in respect of achieving fabrication and other targets, FMEL was required to prepare a certificate confirming achievement and provide this to CMAL for countersignature. Upon countersignature, FMEL was required to issue CMAL with an invoice for the relevant amount.
  - On completion of a milestone event in respect of purchasing equipment and materials, FMEL was required to provide CMAL with purchase orders for materials to be ordered. FMEL was also required to obtain refund guarantees from the suppliers of major equipment, with CMAL as the payee.
- CMAL had to pay FMEL the payments owed within 21 days or it would be in breach of contract.
- The contract includes mechanisms for both CMAL and FMEL to request changes to the design, and for FMEL to recover (or refund) additional costs and time. Any additional payments, or refunds, were to be applied to the final payment.
- The contract sets out the financial penalties that would be applied if the completed vessels did not meet speed, deadweight, and fuel consumption requirements. If these penalties exceeded a specified amount, CMAL had the right to cancel the contract.
- CMAL could cancel the contract if FMEL was deemed insolvent.

Required Standards

- FMEL was responsible for ensuring the vessels complied with the contract specification, which included the Classification Society (Lloyd's Register) rules and regulations and the Flag Authority's (MCA's) requirements.
- FMEL had sole responsibility for the design, construction, and the quality of workmanship.
- FMEL were to apply general quality standards throughout the design, construction, material selection and workmanship, in accordance with good shipbuilding standards.
- CMAL could have a representative at the shipyard to inspect the vessels and communicate its opinions to FMEL.
- CMAL had the right to test the materials and to communicate its opinions to FMEL.
- CMAL also had the right to liaise directly with Lloyd's Register about the build.
- FMEL had to comply with CMAL's reasonable demands.

Appendix 4

Planned versus actual payments for vessels 801 and 802

	Milestone payment schedule in the contracts (dates/payments are identical for both vessels until launch)		Actual payment schedule for vessel 801		Actual payment schedule for vessel 802	
Milestone	**Date**	**Amount (£m)**	**Date**	**Amount (£m)**	**Date**	**Amount (£m)**
Receipt of 25 per cent refund guarantee	30 October 2015	2.4	13 November 2015	2.4	13 November 2015	2.4
Procurement deposits (1)	12 November 2015	12.1	18 January 2016	12.1	18 January 2016	12.1
Cutting of steel	15 December 2015	1.4	15 December 2015	1.4	15 December 2015	1.4
Procurement deposits (2)	15 January 2016	1.0	14 March 2016	1.0	14 March 2016	1.0
10 per cent fabrication	18 April 2016	2.4	13 June 2016	2.4	13 June 2016	2.4
25 per cent fabrication	14 June 2016	3.65	15 August 2016	3.65	15 August 2016	3.65
35 per cent fabrication	15 August 2016	3.65	7 October 2016	3.65	7 October 2016	3.65
50 per cent fabrication	14 October 2016	2.4	16 December 2016	2.4	27 January 2017	2.4
Major equipment and lock-out items installations	14 November 2016	1.375	31 March 2017	0.75	31 March 2017	0.75

	Milestone payment schedule in the contracts (dates/payments are identical for both vessels until launch)		Actual payment schedule for vessel 801		Actual payment schedule for vessel 802	
Milestone	**Date**	**Amount (£m)**	**Date**	**Amount (£m)**	**Date**	**Amount (£m)**
75 per cent fabrication	15 December 2016	1.2	24 March 2017	1.2	27 March 2017	1.2
New milestone	-	-	19 May 2017	3.5	19 May 2017	3.5
New milestone	-	-	13 June 2017	3.775	14 June 2017	3.775
New milestone: Part 2 of major equipment and lock-out items installations		-	26 June 2017	0.625	26 June 2017	0.625
100 per cent fabrication	16 January 2017	1.2	23 March 2018	1.2		
Berth join-up	14 March 2017	1.2	22 November 2017	1.2		
Hull inspection prior to paint	17 April 2017	1.2	24 August 2018	1.2		
Launch (801)	14 August 2017	1.2	22 November 2017	1.2	-	-
Launch (802)	12 October 2017	1.2	-	-		
Delivery (801)	25 May 2018	12.125			-	-
Delivery (802)	26 July 2018	12.125	-	-		
Total Paid				**43.65**		**38.85**

New vessels for the Clyde and Hebrides

Arrangements to deliver vessels 801 and 802

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