

New Vessels for the Clyde and Hebrides Further written submission from Euan Haig, by email 18 October 2022

Comments on CalMac's Technical Discussion Paper - 'Crewing on CalMac Vessels'

1. Robbie Drummond released this paper recently. It is freely available from CalMac and is included as an Annexe to my submission. It purports to justify CalMac's self-created policy of providing on-board accommodation and catering for the crew on all its larger vessels (14 in number). Superstructure is a major driver in ship size, complexity, build cost, and running cost. That makes it important to minimise its size. When examined, the paper reveals that CalMac finds it difficult to recruit crew on the scale that its manning policy demands. That difficulty is exacerbated by the need to recruit on a level that keeps vessels in service every day despite crew rotation. One crew member on the watch-bill requires about 2.5 people to cover for crew rotation and necessary absences.
2. The recent acquisition of MV LOCH FRISA, where the paper states CalMac was '....unable to recruit the numbers of crew with the requisite qualifications, experience, and skills....' That begs the question of why CalMac procured (or had to accept what CMAL was willing to procure) a vessel so demanding of crew, especially given the limitations of the vessel. If it is difficult to recruit enough suitable people - and the off-duty multiplier is significant here - then why doesn't CalMac have a policy of acquiring vessels designed for minimum crewing?
3. The scale of crewing dominates the design and the overall nature of CalMac ferries. A policy of designing for minimum crew would make CalMac ferries smaller (because of the reduced superstructure), cheaper for the same reason, less complex (and the systems in CalMac ferries are too complex - *vide* the 10,000 pipes and 9,400 cables in each of 801 and 802), with lower fuel consumption and better weatherliness. It is as if CalMac or CMAL or both do not understand how a ship can be designed for minimum crew, and cannot appreciate the benefits to vessel cost and service reliability for doing so.
4. Procurement should be led by a stage where the *Service Requirement* is better developed than was the case for 801/2 and New Islay Ferry. The procurement route created by CMAL leads to expensive designs for vessels, especially 801/2. There is no evidence in the *outcomes* of 801/2 of design for production, no sign of validation and value assessment of LNG dual fuel, no success in designing hull shape for low energy consumption whatever the source, and no attempt to design for good weatherliness and consequent freedom from service cancellation due to weather.
5. Concept Studies in the 'Service Requirement' stage should have been used to bring out the differences, penalties and benefits including performance, build and running costs between with/without over-manning, diesel/dual fuel, realistic PX capacity instead of an arbitrary 1,000 etc. Kevin Hobb's evidence to the Public Audit Committee on 30th June included a statement that such concept studies were carried out.

6. It is my view that statement is misleading - there have been no such concept studies. I used FOI legislation to ask CMAL '.....for the main hull data..... for the concept designs CMAL produced for 801/2.....' and was advised that CMAL did not conduct any concept studies. This is contrary to Kevin Hobb's assertion to the PAC. CMAL's response to my FOI request is that any concept design studies were by CalMac.

7. I referred the same question to CalMac (as a FOI Request). CalMac referred me to their Specification of Operational and Technical Requirements produced in 2014. It seems there was no investigation of alternatives to the initial concept that eventually became 801/2, not by CalMac, not by CMAL, nor by anyone. It is my view that it is disingenuous of CalMac to pass off the only concept ever produced for 801/2 as part of a set of concept designs.

8. CalMac's Discussion Paper goes on to emphasise difficulty in recruiting qualified, experienced crew whether local or otherwise. This reinforces the need to design and procure vessels that require minimum crew. Norwegian practice in the form of the new Lofoten ferry brings out the scale of the difference that can be achieved by a different approach to design. Design, Naval Architecture, and crewing are all easier if the crew is small as is the case for Norwegian vessels. Operation every day requires crew changes, and no-one should forget the multiplication factor (about 2.5) to be applied to the numbers on a vessel's watch-bill simply to sustain service every day. Reducing the watch-bill powerfully reduces the size of superstructure, hence reduces vessel and operating costs. And crewing and crew management becomes easier.

9. The Discussion Paper's section on Large Vessels speaks of 'a general principle' that leads to the provision of on-board accommodation for the entire watch-bill. But it is not a 'principle', merely a practice arbitrarily chosen by CalMac, who should perhaps choose a more pragmatic practice even if it requires a different approach to 'Requirements' and how they are formed.

10 It is perfectly practicable to design a fleet of ferries of different sizes to suit different routes, but with similar operator interfaces and handling characteristics so that crews may remain with their routes whilst able to operating different vessels. This points towards designing vessels with simple systems, *vide* earlier comments on the systems' complexity of 801/802. It might also enable more people to remain closer to their homes for longer, and that might make crewing Scottish ferries a more attractive line of employment. WHY NOT?

10. The Paper does not discriminate between watch-bill positions where technical or maritime knowledge is required, and those where it is not. Catering staff do not require expertise in either. There is no reason why catering staff, if required at all, cannot be attached to the route rather than the ferry. Such an approach would reduce the demand for on-board accommodation and create the opportunity to franchise catering.

11. Catering facilities for passengers drives up ship size disproportionately because it enlarges superstructure. The penalty on ship design and ship size needs to be evaluated before any decision on scale of catering and what staff, if at any. That can be done only by comparing sketch design or concept studies that bring out the

impact of differences on ship size and cost. But neither CalMac nor CMAL have such a practice before embarking on detail development of design.

12. The Paper begins and ends with claims of high expertise in CalMac's marine and asset management teams. That might or might not be so, and my requests for information on the qualifications of CMAL's staff by FOI have met with flat refusal. (The Secretary of the Royal Institution of Naval Architects was helpful within proper limits). Whatever the levels of actual expertise in marine and asset management, the teams' results as expressed by 801/2 are as poor as any ship procurement in modern times.



Crewing on CalMac Vessels

A technical discussion paper

Robbie Drummond, Managing Director leads a senior team at CalMac which is deeply professional and leads the maritime industry in being gender balanced. Our senior marine and asset management teams have extensive experience across many international ferry, ship technical and crew management and technical maritime businesses.

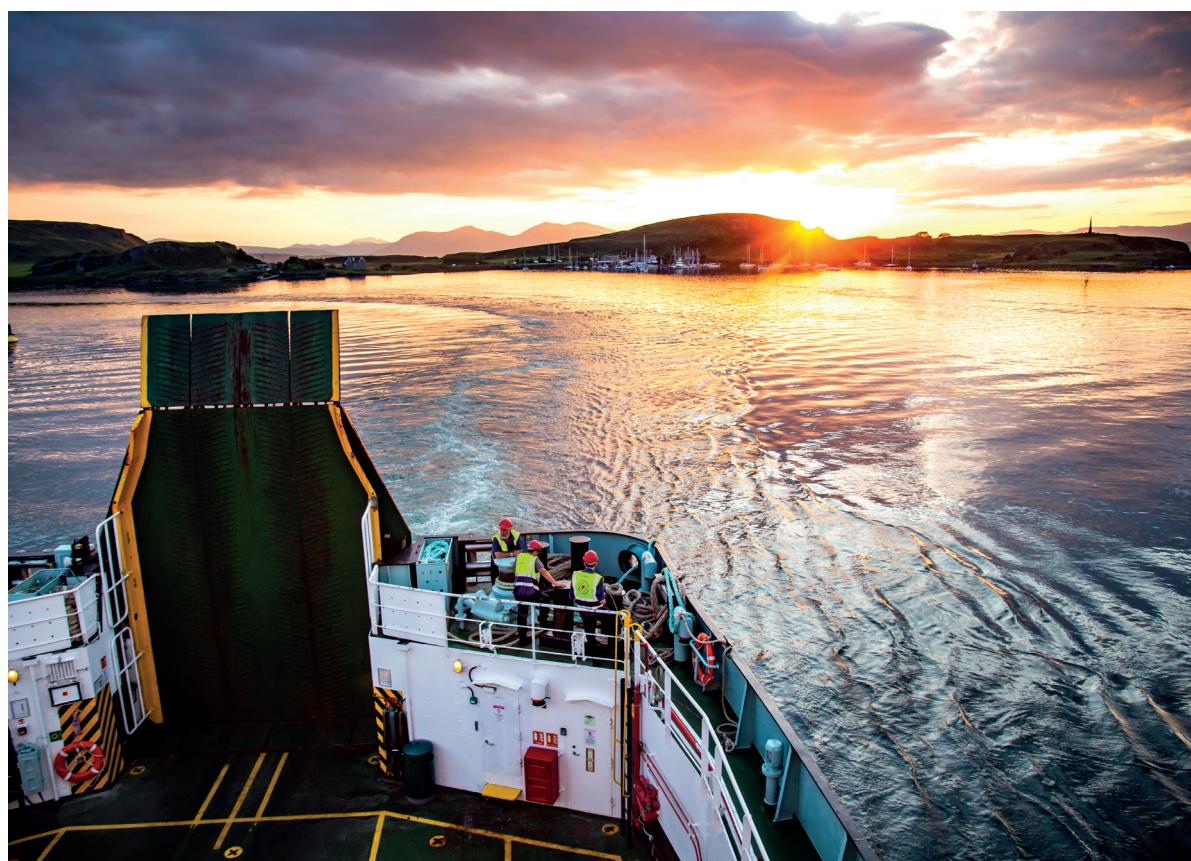




Background

The Clyde and Hebrides ferry service is geographically and operationally diverse and our crewing policy reflects this. Operating within the challenging waters of the West Coast of Scotland, we optimise deployment of our 34 vessels to meet the needs of the network as a whole and deliver a quality lifeline ferry service to our vital island communities.

This paper has been prepared to consider the issues around crewing on board major vessels as part of the dialogue on future replacement strategy and vessel design.





Small Vessels

Our 20 smaller vessels operate with crew members that live within the communities they serve, usually on islands rather than in mainland locations. Crew members commute from home, to and from the vessel on a daily basis. Small vessel crew are rostered/allocated to a route. When small vessels are cascaded to provide relief across the network, the crew are retained on the route while the vessel is deployed elsewhere. This is manageable due to the lower crew numbers involved, ability to swap crew across small vessels, and lower induction requirements.

When recruiting small vessel crew in remote Islands, we experience significant challenges. On some occasions we have been unable to recruit the numbers of crew required with the requisite qualifications, experience, and skills to meet the needs of the service. This was the case during the recent crew recruitment exercise for MV Loch Frisa.



CalMac commenced recruitment for MV Loch Frisa in December 2021, advertising on the web and through local sources. Unfortunately, there were insufficient applicants who met both the minimum criteria of being able to commute to Craignure on a daily basis as well as holding the required certifications and sea time experience. Several of the applicants who were able to commute to Craignure lived further afield, meaning their commute had

to be considered as part of their working day, reducing the hours they could work on the ferry. This resulted in an increase in the number of crew needed to deliver the timetable in order that legal Hours of Rest requirements could be met.

Due to insufficient numbers of suitable crew, we were forced to remove the requirement to be able to commute to Craignure and had to re-advertise the positions further afield. Although this was an essential measure to ensure operation of the vessel, this will mean over half the crew will not reside in Mull and alternative accommodation will need to be provided, substantially increasing the costs to operate the service. Additionally, finding accommodation will be a significant challenge, particularly in the busy summer season.

Whilst crew recruitment has presented a significant challenge for the introduction into service of MV Loch Frisa, this has reinforced that availability of local, qualified, and experienced crew is low. Even with local crew being available, commuting distances can adversely affect working hours and in turn the number of crew required to operate the service and/or the timetable that can be offered.



Large Vessels

As a general principle, the crew on our 14 major vessels live aboard. Crew are allocated to a designated vessel and travel with the vessel should it be cascaded across the network. This is because the crew possesses enhanced knowledge of how to operate the vessel which cannot be easily replicated by other crew members. Although crew are usually inducted to provide relief on more than one vessel, due to a lack of standardisation in equipment and infrastructure, the number of vessels and ports that crew are permitted to operate to is limited.

As the operator of the CHFS network, our primary objective - which is reflected in our crewing model - is to provide ferry services for Clyde and Hebrides areas, rather than specific routes. Accommodating crew aboard enables us to meet this objective more effectively as we can cascade vessels anywhere within the West of Scotland (subject to certification and infrastructure constraints), without being constrained by crew considerations. This means during periods of technical



disruption, the overhaul season, or any other removal of a vessel from service, services are maintained using multiple vessel cascades, rather than being stopped. On average, each year cascading vessels allows us to deliver around 550 sailings that would have otherwise been cancelled and provide 150,000 car spaces.

Onboard accommodation also provides enhanced resilience as the vessel can berth overnight at any location (subject to

berth availability and suitability). As the crew can sleep onboard, the vessel does not need to get back to the home port to allow crew to rest. This is particularly beneficial if adverse weather, or any other conditions that may prevent the vessel from returning to the home port, are experienced, as the vessel can continue to operate and berth at an alternative location if needed. With crew being accommodated ashore, confidence is needed that the vessel will be able to return to the home port to allow crew to sleep - if this is at risk then sailings may be cancelled earlier than would otherwise be the case to ensure the vessel is able to return home.

Over 70% of our staff live and work in the communities they serve and around 25% of our seafarers live on the Islands. Our primary recruitment method is to recruit locally wherever possible as that is not only beneficial for our staff, but also operationally more efficient, and benefits local communities through supporting economic sustainability. However, seafaring is, by definition, a mobile profession meaning seafarers can choose to live anywhere in the world.

Seafaring is also a highly qualified and specialised industry. Major vessels must be



Large Vessels

operated by seafarers with internationally recognised qualifications (as opposed to small vessels which use nationally recognised qualifications). Such qualifications are issued under the auspices of the International Convention on Standards of Training, Certification and Watchkeeping for Seafarers, also known as the STCW Code. Such qualifications are transferable to worldwide trading ships.

For our larger vessel crews to live locally, we would need large numbers of qualified, skilled, and experienced seafarers to choose to move to remote areas of Scotland. In addition, as most seafarers have families, they would also need to be convinced to move, and be confident they could find suitable, well-paid employment within their line of work.

As such there are several factors which would need to align to ensure the availability of qualified, skilled, and experienced seafarers within the islands, which are unlikely to be resolved in the short to medium term future.



Given the lack of suitably qualified, locally based crew, we are often forced to recruit seafarers from further afield (although typically from within Scotland). If accommodation was not available onboard, these crew would have to be accommodated in hotels.

Notwithstanding the significant additional cost impact, sourcing accommodation locally is very challenging, especially in

summer months where availability is extremely limited.

In situations where we have deployed additional crew as short-term relief, there are instances of crew being housed some 20 miles from the home port which also impacts on Hours of Rest and reduces the available operating hours for the service or requires more crew to meet timetable requirements.

There are already some instances where we have major vessel crew members being accommodated ashore. Due to the expansion of timetables in recent years and the relative increase in crewing numbers, there are a few instances across the network where we have more crew on shift than we have onboard accommodation available. In these circumstances a small number of crew are housed ashore either in small temporary 'cabins' situated within the port, or in hotels.

Despite the numbers affected being relatively low, we are already experiencing the issues outlined above and our operational flexibility and resilience is constrained as a result. If we were to move to a shore-based accommodation model the service would be severely constrained.



Conclusion

It is common throughout the ferry industry to operate larger ro-pax vessels with live aboard crews. In fact, in many instances some ferry companies are moving away from a previous live ashore model to a live aboard model, due to many of the difficulties described. Our preference will remain to recruit locally, and we actively target our modern apprentice and cadet programmes in our Islands, advertising locally and working directly with high schools across our network.

Since 2013, we have supported 121 Modern Apprentices into our Maritime Programme with specialisms in Deck, Engine, Retail/Hospitality and Port & Harbours. We are delighted to conclude our latest recruitment campaign with an additional 20 apprentices joining our programme in September 2022. In addition, we have broadened out our apprentice opportunities in Head Office with 1 Graduate Apprentice and 2 Modern Apprentices/Project Management. A further 2 apprentices are in the final stages of recruitment.

For the 20 modern apprentice positions available for the 2022 intake in deck, engine and retail we received 208 applications. 86 were from our West Coast Islands with the remainder living in mainland coastal communities close to our network. That 70% of our staff are resident in the communities that we serve is testament to our determination to provide good local employment opportunities and the best service to our customers.

We actively encourage applicants from the communities we serve and in our most recent intake of Modern Apprentices, 100% of the successful applicants reside within the communities we serve with over 60% living in our island communities.

We have seen excellent completion rates, with 92% of our new start apprentices finishing their programme and being offered permanent job roles. Our retention rates in this programme are impressive with 68% still employed with CalMac.

Our training delivery partner is City of Glasgow College who we collaborated with to create the first maritime hospitality apprentice programme in the UK and have been recognised by the Merchant Navy Training Board as the leading provider of maritime apprenticeships in the UK.

Transport Scotland are preparing the Island's Connectivity Plan due out later this year, which will set out the long-term strategy for vessels and ports. While we are agnostic and open on vessel design, the strategic replacement plan must be based on Island economic needs and standard classes of vessels and standard port infrastructure. We will continue to work with Transport Scotland and CMAL as this plan evolves.

