

RURAL ECONOMY AND CONNECTIVITY COMMITTEE

INQUIRY INTO CONSTRUCTION AND PROCUREMENT OF FERRY VESSELS IN SCOTLAND

SUBMISSION FROM ROBERT TRYTHALL

Acronyms: SG Scottish Government /TS Transport Scotland / FP1 The 2013-2022 Ferry Plan /FP2 proposed new Ferry Plan due 2022/ /FMEL1 the Jim McColl entity /FMEL2 the nationalised FMEL1

Personal background- A lifetime career in shipping, starting as an engineer cadet in the MN, retiring running my own shipbroking company. My shipping career included investment appraisal, sale and purchase, new building contracting and subsequent modification(s) . I have taken expert witness, and marine arbitration appointments. I have lectured on shipping economics. I presented this paper, in 2017, to SG's Expert Ferry Group:



My WC Scotland ferry experience stretches from the late 1940's living on Arran , to the present. I have lived permanently on Tiree for the past 15 years. I have served on the Tiree Community Council and Tiree Transport Forum.

Summary:

SG-TS, with its continuum of its 1960's luddism re RoRO, remains a major constraint to the delivery of modern, apposite cost effective ferry design into CHFS ferry provision. The design of H801/802 affirms this continuum .

SG-TS, in 2014, unilaterally scrapped the Ferry Replacement Programme of the 2013 Ferry Plan.

SG's support of FMEL1, other than a small hybrid, has failed to deliver any additional meaningful ferry capacity since 2014.

H801/802 original delivery within 1Ha2018, is now delayed till 2022, at the earliest. The fleet age-profile of the existing 'big ferry' fleet is ,by any international shipping criteria ,deemed over-age. This will deteriorate a further 2 years.

SG-TS failed to initiate its Peer Review of FMEL1, pledged in Nov 2017 at the launch of H801 .

SG-TS' lack of due diligence , with regard to the tender, design, and construction of H801/802 to date, cannot be repeated if the recommendations of the Hair Report are to be successfully implemented

The tender's price- quality matrix failed. It needs to be re-assessed for future ferry procurement

The scrap and re-order option has not been fully assessed. SG-TS' political agenda may have blocked objectivity.

The FMEL2 rescue plan appears to have delivery of H801/801 as its sole objective . The caveats attached to achieve this objective do not give grounds for optimism. Lack of any long term vision for FMEL2, may self-fulfill a prophesy of failure.

The nationalisation of FMEL1 means that Scotland's main ferry network is now vertically nationalised, from ferry construction through to service provision. No other comparable ferry network in Europe embraces this model. This Scottish 'nationalised ferry' model has to be rigourously assessed if it is fit for purpose.

Submission

The remit of the Recc's inquiry is to:- **Identify and address current and future challenges and opportunities in the procurement of new vessels to support Scotland's ferries network.**

This submission will address the RECC remits in 3 sections:

1. Identify and address current challenges

2. Identify and address future challenges

3. Opportunities

(1) Identify and address current challenges

A forensic examination of all the documents, published by Scottish Government on the 18 th Dec 2019, and the RECC's correspondence with SG on this issue, is required to identify what went wrong at FMEL1.

It puts in perspective the enormity of the challenge ,and task ahead, for FMEL2 to have any prospect of success .If the challenge is to merely complete and deliver H801/802, then implementing Hair Report may achieve that objective.

Manifestly FMEL1/CBC proved unfit for purpose to (a) tender in 2014/2015 and (b) subsequently build H801/802 .

The document trail suggests SG-TS' political agenda created ,and sustained a myopia which was reluctant to identify, at the outset,that (a) FMEL1/CBC was not a credible tenderer , nor (b) capable of concluding as early as summer 2017 that FMEL/CBC was unlikely to deliver H801 /802 .

The political arena surrounding the formation of FMEL(1) was summer 2014's build up to IndyRef(1) . This may have influenced political and commercial judgment as to CBC being a suitable 'fit' for Fergusons. CBC's vision statement is:

“The Clyde Blowers Capital vision is to be the leading mid -market investor which invests in industrial businesses with defined characteristics servicing identified core sectors as detailed...”

CBC's core sectors never included shipbuilding. FMEL1 was never within CBC's expertise. It was a miss-fit.

SG-TS ' political agenda now dictates delivery of H801/802 from a nationalised FMEL1 ,and in doing so pre-empted assessing alternative options to deliver cost, and design effective, much needed new ferry capacity. Alternative options exist which could possibly deliver ferries, before H801/802 are eventually delivered from FMEL2

The continuum of SG-TS's political agenda was re-instated , yet again , as recently as SG's statement in the Financial Times (13th Jan 2020):-“Our efforts saved Ferguson Marine from closure, rescued more than 300 jobs, ensured that the two vessels under construction will be completed, and secured a future for the yard,” a government spokesman said.

SG-TS, in its background to FMEL1 being nationalised (publ 18 Dec 2019) is being economical with the actualité in offering

this reference;-The Scottish Ministers' Vessel Replacement and Deployment Plan established the need for two new major vessels for the Clyde and Hebrides network, and in 2014, CMAL, a company wholly owned by Scottish Ministers which owns and operates the vessels and ports on our network, began a competitive tendering process .

The VRDP referred to was the 1st VRDP .It was not published till Oct 2015 ie 12 months after the tender process for H801/802 was initiated .

The tender process, initiated in 4Q2014, was a major deviation from the ferry replacement programme stated in the Ferry Plan (FP) 2013-2022 (publ Dec 2012). Ie less than 2 yrs after the FP's publication TS-SG had rescinded, with no public consultation, the FP's Replacement Programme, which for the sake of order was:

<p>Medium-term</p> <ul style="list-style-type: none"> ▪ Replace MV Isle of Cumbrae ▪ Replace MV Hebridean Isles 	To 2016
<p>Long-term</p> <ul style="list-style-type: none"> ▪ Replace MV Isle of Arran ▪ Replace MV Loch Linnhe ▪ Replace MV Loch Riddon ▪ Replace Isle of Mull 	To 2019

To inform those members of the RECC whom may lack ferry detail, the FP Replacement Programme, as above, offered a new ferry to Islay by 2016 and new ferries to Arran and Mull by 2019.

The current ferry reality is delay of a new Arran ferry till 2022 (H801) , a cascaded ferry (MF Hebrides) to Mull ,delayed till 2022/2023 (ie delivery of H802 into the Uig Triangle routes), and a yet to be ordered new Islay ferry.

SG-TS' unilateral volte face in 2014 is put in context by CMAL's Corporate Plan 2014-2017 which was aligned to the original FP1's replacement programme. This was shredded, to be replaced 12 months later, by the CMAL Corporate Plan 2015-2018 aligned to the new ferry reality.

CMAL' s 10 Yr Strategic Plan 2014-2024, published shortly after the FP, was even more explicitly aligned with the FP .

It disappeared 12 months later ,never to be seen again.

Both CMAL Plans were approved and signed-off by SG-TS prior to their publication.

This sequence suggests a break down in ferry-replacement planning between CMAL and SG-TS.

The damaging consequences of SG-TS' unilateral volte face were exacerbated further, by SG-TS' :

(1) absence of due diligence in the tender process of H801/H802 and the subsequent contract award to FMEL1 ,

(2) reluctance, from summer 2017, to be commercially aware of FMEL1's likely collapse

Re (2), SG-TS's conduct was akin to a wee boy, on a beach, trying to prevent the inevitability of the in-coming tide washing away his sand castle.

The absence of due diligence in the tender process and subsequent contract award to FMEL cannot be repeated

Contract award and monitoring: SG-TS's docs state FMEL was successful in the tender exercise achieving the highest overall evaluation score in a process that scored price and quality equally.

Manifestly the tender exercise was flawed. FMEL1 was not a credible tenderer. How was the quality of FMEL1's tender measured ?

Was SG-TS aware that FMEL1 had sub-contracted its tender submission to consultants (Houlders)? . Post tender contract award , FMEL1 appointed Houlder as naval architects for further scopes involving more detailed design to be continued as the build of the vessel progressed. <https://www.houlderltd.com/case-study/first-uk-Ing-ferry/> FMEL1 subsequently subcontracted the detailed design work to Vera Nevis in Portugal (<https://veranavis.com/>). **FMEL1 failed to develop any design capacity.**

FMEL1's only other shipbuilding orders were two small aquaculture work-boats designed by Macduff Ship Design

Surely this should have sent warning signals to SG-TS/CMAL ?. Other tenderers ,specifically Remontowa, came to the tender with established international ferry design, and shipbuilding experience, of dual fuel ferries .

This is the image included in Remontowa's tender submission. It looks quite similar to the FMEL1-Houlder design!!

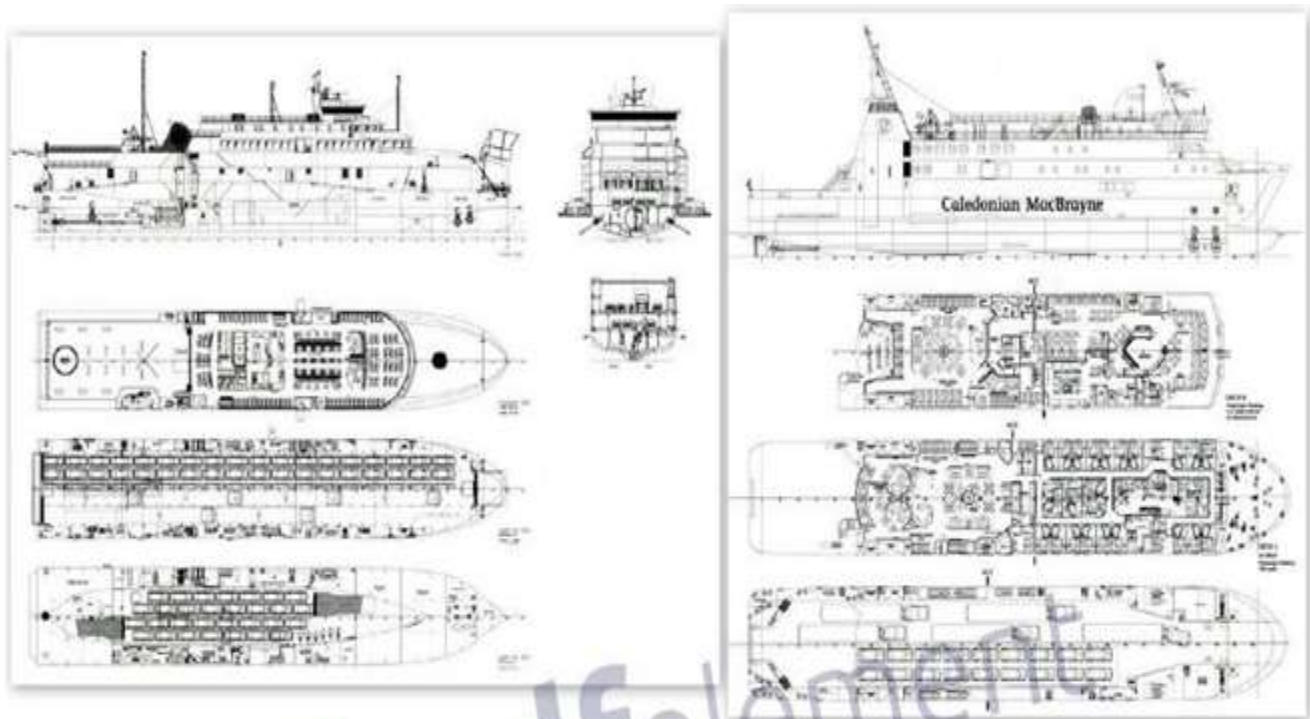


Remontowa had built 3 CalMac ferries incl the current Finlaggen. During the latter's construction Remontowa also delivered 4 of these dual- fuel ferries to Torghatten (Norway) for its Lofoten Island routes.



These were Islay suitable, with 40% more vehicle capacity than the Finlaggen. This was achieved by radical design, incorporating a 2nd vehicle deck, below the main vehicle deck . The Finlaggen had a standard mezzanine deck, which from operational records shows was rarely used, not for lack of demand, but through either technical failure, or bizarrely, operational expediency.

The contrast in design and layout is obvious



What cannot be readily identified is contrasts in manning levels;- Norway/9Scotland/34.
A detailed analysis was offered in my 'Norway Review ' paper presented to the EFG in 2017

Why didnt SG-TS pause the tender award? Had it interrogated the possibility that it was about to award a ferry construction tender to a company, with no recent design and construction experience of such a ferry , and which ,to be tender credible ,had sub-contracted its tender submission would the award have been any different ?

SG state that 'FMEL was successful in the tender exercise achieving the highest overall evaluation score in a process that scored price and quality equally'. It is my understanding that Remontowa made a very competitive tender bid. But what quality professional skills were FMEL1 bringing to the party:

- **FMEL1 had no experience of dual -fuel engine ferry design and build .**
- **FMEL1's design consultants (Houlder) also had no experience of dual -fuel engine ferry design**
- **Remontowa in contrast had a successful track record of dual-fuel ferry design and build in the international shipbuilding market .**

CBC on taking Fergusons out of administration, took on a company bereft of ferry design capability/capacity with no orderbook. Past design and production, since 2010 had been limited to two CalMac hybrid ferries

CBC very shortly after its takeover of FMEL1 was awarded a contact for a repeat 3rd hybrid ferry order, with the promise of a 4th (<https://news.gov.scot/news/third-hybrid-ferry-to-be-built>

Therefore as of Sept 2014 CBC ,with a 4 th hybrid ferry FMEL1 could simply relax with a 2/3yr repeat ferry forward construction programme , of which they had possession of all the intellectual property embracing design, construction, production planning, certification protocols etc etc. This 2/3 year period offered CBC a pseudo sabbatical period to plan FMEL1's shipbuilding future

Two weeks later this 2/3yr 'sabbatical' was frustrated with SG-TS commencing the procurement process for a tender award by that Spring 2015 for what was to become H801/802.)

Manifestly the 4th hybrid had become a Marie Celeste, and CBC had no option but to enter the tender process, as FMEL1 would have vacant build space 12 months hence ie from 3Q 2015.

FMEL appointed a naval architect in Jan 2015 ie 3 months into the tender process,hence Houlder's appointment. FMEL1 only appointed a Head of Production in 2017 . This was more than 18 months after the tender award, and more than 12 cutting, of H801 . This co-incident with slippage of delivery dates becoming an undisputed reality(Jan 2017) .

CBC miss-managed the H801/802 project from the outset

SG-TS, prior to announcing FMEL1's preferred bidder status , appear to have not rigorously assessed FMEL design and production capability of H801/802 . It was this lack of objective scrutiny/due diligence which initiated the subsequent disastrous series of events.

SG-TS' lack of objective scrutiny /due diligence is evidenced by :-

- Oct 2015 £1m Scottish Enterprise funding to FMEL1 to make it fit for purpose
- July 2017 unsecured £15m loan to aid FMEL1's cash flow coinciding with significant push-backs on launch dates and inevitable delivery delay.
- TS attending all CMAL Board meetings and consistently ignoring obvious warning signs of a pending FMEL1 crisis

The most serious failure of SG-TS' objective scrutiny was its failure to initiate the Peer Review announced by Humza Yousaf, then Minister of Transport, at the delayed launch of H801(Nov 2017). Delivery had been put back 12 months from the original contracted delivery date. The Peer Review was to “ ..explore whether any time can be recovered and seek more specific delivery dates for the two vessels' <https://www.pressreader.com/uk/the-arran-banner/20171118/281500751544309>

Had SG-TS' **Peer Review** taken place in 1Q2018 then the findings of **Tim Hair's Report** (Dec 2019) may have been initiated 2 years before the current farrago namely:

- Lack of project management
- Absence of project planning and control systems
- Engineering processes and controls were weak... resulting in an incomplete design..

Effective remedial action at FMEL1 could have been initiated prior to June 2018.

This would have dictated a forensic analysis of the subsequent spurious June £30m loan *'to fund FMEL to assist with cash flow and assist diversification of the business'*

Hence SG, 12 months after the £15m July 2017 loan , was forced to inject a further £30m with no substantive assessment of its commercial wisdom or possible FMEL default .Simultaneously SG-TS also assisted FMEL1 by accelerating stage payments via CMAL .

The latter may have compromised the cancellation clause in the original shipbuilding contract.

CBC commitment to provide substantial sums of CBC funding to FMEL1 proved a mirage. SG, by not taking up its equity conversion options only signaled to CBC not to throw good money after bad. SG never learnt the same lesson.

The rest is history, but this comparable Norwegian experience has shown a more relevant commercial solution.

Kleven Verft (KV) a shipyard on the NW Norwegian coast faced financial difficulties in 2017. This was caused by the 2015 default on high value multipurpose supply vessel . Ulsteinvik is more geographically isolated than Port Glasgow and KV is of greater socio- economic importance to its local community than FMEL will ever be to Inverclyde . In 2017 Norway 's coastal voyage company Hurtigruten AS, and the investors behind it, recapitalised KV, providing NOK 300 million in fresh capital. Hurtigruten had two ultra-modern Arctic -Antarctic hybrid cruise vessels on order at the yard. Neither Hurtigruten nor its owners wanted to risk any delivery delays or additional costs. There were subsequent delays caused by design issues , which resulted in Hurtigruten forced to cancel a season of already booked cruises . Hurtigruten in June 2018 took the yard over injecting NOK 600m and imposing its own executives at senior level.

Hurtigruten announced this week (20 Jan 2020) that KV was being sold to Croatia's DIV Group which owns the Brodosplit shipyard in Split Croatia. The deal is expected to be executed in the next few weeks.

KV and FMEL1 are similar shipbuilding crises . Hurtigruten and SG-TS were the major clients of the respective shipyards. Their intervention was always an option, but the similarities end there . KV has a global shipbuilding presence offering a , portfolio of ship designs offering commercial continuity,(it has a varied order book through to 2021) . Fergusons and FMEL1 lacked/lacks all these features . KV's work-out solution has been devoid of State intervention.

SG-TS by nationalising FMEL1, and excluding other options ,has kicked a shipbuilding crises down the track.

In the absence of a business plan, comparable to the KV/Hurtigruten work-out , the nationalisation of Scottish ferry building to secure delivery of H801/802 will exacerbate TS' vices identified in Audit Scotland's report Transport Scotland's Ferry Services (Oct 2017) ie:

- (1) *'.. the full extent of TS' future spending requirements on services and assets is not known'*
- (2) TS does not routinely measure the contribution that ferry services make to social and economic outcomes at a network level, which makes it difficult to determine whether its spending is value for money.

Identify and address future challenges

The primary challenge is to play catch-up on the Fleet Replacement Programme not only by delivering H801 /802 but to order further ferries to deliver fit for purpose ferry provision .

Delivery of H801/802 will require speedy implementation of the **Hair Report's** recommendations.

SG-TS did not rigorously assess the quality of FMEL1's original tender bid. It is repeating the same error by not rigorously assessing the many caveats in the **Hair Report /Updated Cost and Programme** to achieve delivery of H801/802 (9 Dec 2019). The Hair Report identifies and addresses current challenges. There is no evidence that SG is addressing them.

Hair Report:SG has not rigorously assessed further cash flow injections which may be required to deliver H801/802. Whilst the report offers a route map to deliver H801/802, it is not a route-map to secure FMEL2's future. In the absence of same ,it is difficult to see how FMEL2 can attract the quality of senior executives it urgently requires.

New Ferry Plan (FP2) is not due till late 2022. H801/802 may be in service by 2022-2023 and a new Islay ferry may be ordered and in service ca 2023 .|Therefore it would appear that SG-TS has no intention to order further additional ferry capacity prior to 2024/25 . The evidence of all VRDPs to date, shows the crisis of un-met summer demand can only deteriorate further. The implications for the economies of the Western Isles is self-evident.

FP2 has to be prioritized to report by 1Q 2021 , and its ferry investment recommendations implemented promptly. The current time -scale indicates there will be no further ferry orders,other than Islay's new ferry ,placed before 2024/25 .This has obvious consequences if SG proposes that FMEL2 merely becomes the conveyor belt for ferry replacement, as there will be a dislocation in ferry delivery requiring FMEL2 possibly to be mothballed .

One has to be dumb not to conclude that the replacement ferry programme has to be supplemented by a significant nett increase in ferry capacity into the CHFS network

Is there a speedy alternative or interim solution which could lead to a final solution ? Most certainly **YES**

The scrap H801/802 option and re-order elsewhere may have lacked detailed assessment

Havyard is a major Norwegian ferry shipbuilder . Its main ferry client is **Fjord1** the biggest Norwegian Ferry company

Fjord1is listed on the Oslo Bors (stock exchange) and operates 74 ferries . In 2018 Fjord1 carried 21.6million passengers and 10.7 million vehicles . Cf Calmac's 31ferries/5.3m pass /1.4m veh respectively. Fjord1's biggest shareholder is the Havila Group who in turn own Havyard . Fjord 1 is completing a major ferry re-investment programme to meet Norway 's zero-emission standards (something which Scotland must consider) .Since 2016 and by 2020 Fjord1 will have taken delivery of 27 new ferries offering ca 2350 additional vehicle capacity . In the same period SG -TS will have delivered none. <https://www.havyard.com/brands--solutions/havyard-design--solutions/>

Havyard's past production and [current order book](#) shows that there are potential delivery slots for these standard Havyard ferries in 2021/2022.



Havyard ferry designs are comparable to the current main N. European/N American standard ferry design.

Havyard is delivering a series of all electric ferries, and in the fore front of hydrogen fuel ferry research and development

These ferries show some similarity to CalMac's Coruisk (Blt 2003)



Havyard could deliver to SG-TS' comprehensive CHFS big ferry fleet replacement programme long before FMEL2 will deliver H802.

The alternative would be FMEL2 entering a licensing arrangement to build Havyard standard ferries for CMAL .

Fjord1 has been a consistent seller of older ferry units. SG-TS should approach Fjord1 to establish possib re-sales

Both approaches offer tangible solutions to the pending CHFS ferry crisis

FP2 has to re-evaluate FP1's two inviolate constraints:

- **UnBundling of the network**
- **Standardisation**

These constraints hinder/block targeting ferry subsidy to where it is needed most .

Unbundling:

- There is a very strong case for the Arran ,Mull ,Islay ,and possibly the Lewis-Uig triangle routes to be unbundled. This may attract alternative ferry operators into more competitive tenders ,and in turn minimise the subsidy requirement. (this would replicate the Norwegian ferry subsidy model)
- This will allow the subsidy to be more targeted ie to Coll/Tiree /Barra /Colonsay (this would copy SG's Air PSO's)

Identify if any routes could become franchises (as per the Norwegian ferry model).

Standardisation . FP1 makes the case for standard ferry design for the CHFS Big Fleet Ferry **but has never applied it** . If a standard CHFS Big Fleet Ferry was fundamental to CHFS ferry provision then the CHFS Big Fleet Fleet would comprise solely of **Islay Maxes**. Such descriptions are standard in shipping ie SuezMax ie max dimensions to transit the Suez canal /Panamax for the Panama Canal. Islay's length restriction is a primary parameter of CHFS BIG Ferry design . Islay is one of the busiest CHFS routes, also with the most significant freight requirement . Islay's length restriction remains virgo intacta.The current Islay ferry design tender acknowledges that reality. As CHFS design criteria assume a 30 yr operation,there is a prime facie case that all future CHFS ferries should be Islay Maxes . Such standardisation has obvious cost benefits for build and operating costs.

Any ferry design has to reflect traffic. Lack of passenger capacity is rarely an issue. Lack of vehicle capacity is a constant issue, particularly in the summer season

This dictates evaluating a basic ferry design parameter:-**Passenger to Vehicle Ratio (PVR)** .

My paper to the EFG in 2017 clearly identified that the PVR of Scottish Ferry Provision was aberrant(APP A)

Norway was ca 3 with a trend on its major routes to come below 3. By comparison Scotland's ferry routes range from 5 to 9 plus . The most glaring example being Arran with a demand PVR of 4 but ,in H801 a ferry designed with a PVR of 7. Only on rare days would its full passenger capacity be utilised . A case for fast passenger-only ferries?

Alternatively my 2017 paper highlighted that significant latent capacity existed within the existing CHFS fleet ,and it could be released by better resource management . Surprise ,surprise, 3 yrs later CalMac seem to be making some progress . Some of Norway's main ferry routes operate 24hrs/day, even in winter !! <https://www.bbc.co.uk/news/uk -scotland-highlands-islands-51221481> In my opinion, **CHFS ferry design has been systemically flawed** .Possibly there is light at the end of the tunnel as the new Islay ferry PVR is ca 5 and if an overnight freight-only ferry was run the PVR would be reduced closer to 3 (norwegian standard)

<https://www.havyard.com/brands--solutions/havyard-design--solutions/>

I am aware that detailed submissions on alternative ferry design are being made to the RECC. I will not add to these other than to offer a cautionary local (Tiree) caveat. Catamarans, and lock-on link-spans may not be a practical proposition for Tiree and Coll, due to their very exposed terminals, not only to strong winds but also swell.

A major design feature to be incorporated in any future CHFS Big Ferry must be access to a 'permanent ' mezzanine car deck, simultaneously with access to the main vehicle deck . This is now standard design feature on major Norwegian ferries. CalMac's equivalent is a time consuming hoist-able mezzanine deck. More recent modern ferry design has a lower vehicle deck for cars-only ie a two vehicle decks accessed simultaneously.

Fast Passanger -only Ferries : Must be considered in the ferry mix for Arran /and Mull (incl Iona). It applies in Orkney. Again this would conform to the Norwegian ferry-mix . Lofoten(Moskenes) is a 4 hr ferry trip from the mainland (Bodo) but the capital Svolvær is a further 2 hrs north by car . An alternative, but equally slow ferry-bridge route exist from the north. A fast passenger -only ferry runs between Svolvær and Bodo twice daily. It takes 3 hrs and successfully competes against numerous daily flights (30 mins)

All these ferry options and design features should not be beyond FMEL2's design/construction capability, nor CMAL's - CalMac's ferry ideal ferry-mix. However the bastion of negativity from SG-TS' genuflection to the RMT, may be a barrier to embracing such innovative design features, and alternative ferry provision.

Opportunities

BREXIT represents an opportunity . The CMAL-CalMac artificial construct can be scrapped, merged and be replaced with an organisation comparable to any other ferry owning- service company . DML can retain its holding company status with CMAL's Terminal Division spun out of CMAL to be an autonomous DML subsidiary.

SG-TS would no longer waste time and resources on the Teckal exemption.

SG-TS would no longer be bound by EU state aid rules. SG-TS could no longer blame the EU for constricting long term ferry investment . This may assist eg a 10yr long term ferry investment programme to benefit our island economies

FMEL2

SG-TS must not succour FMEL2, for succour's sake. FMEL2 cannot become the exclusive builder of Scotland's ferries . That is a recipe for technical and commercial lethargy, apathy, leading to terminal incompetence and in all probability FMEL2 failure.

SG has no tangible work-out plan for FMEL2 so the above may prove its ultimate demise . The job conservation argument is negative. **The Hair Report** alludes to significant competition for the same local labour pool(P17)

Recruitment of 1st division naval architects and shipbuilding expertise is an imperative, but to design and build what ? A FMEL2 restricted to building Scottish Island ferries will not sustain the required shipbuilding talent

But here comes Catch 22, unless SG offers or underwrites shipbuilding refund guarantees on deliveries from FMEL2, to any client other than CMAL, then FMEL2 will have no future in the shipbuilding market, other than to build SG's ferries.

A more practical alternative is FMEL2 to enter into a joint venture with Havyard or similar but note the current N.European shipbuilding model is tending to have hull construction in a cheaper labour location eg Turkey with design and fitting-out retained at home.

A ship is no more than a box with an engine. It is the complexity of that box that offers FMEL2 opportunity

SG has to identify a credible work-out plan for FMEL2, to avoid the inevitable stop-start of government capital investment .

The following are my responses to the issues the Committee hopes to explore:

- **the proposals and timetable for the completion of two new hybrid ferries to serve the Clyde and Hebrides ferries network and the associated costs.**

Too optimistic .Subject to recovery of the standard refund guarantees in shipbuilding contracts , then in my opinion both ferries should have been scrapped /re- designed and re-ordered at a competent yard with a track record of success in delivering such ferries eg FSG /Remontowa both of whom have built for CMAI-CalMac .

Global shipbuilding indicates :-

- (1) the contract price from such yards will be comparable to the additional costs being incurred to complete these ferries at FMEL(2)
- (2) in service delivery of two such re-designed ferries more appropriate to CHFS requirement could be within 2023

It is my view that meaningful in-service delivery of H801/802 from FMEL(2) will not be achieved before 2023

The new time table for delivery of H801/802 as per the Dec 2019 Report is:

Vessel 801 delivery range – October to December 2021

Vessel 802 delivery range – July to October 2022

Basis 2-4 months work-up prior to in –service delivery to CalMac then in-service delivery is now estimated to be :-H801 Spring 2022 and H803 Winter 2022/2023 But the caveats to the Report's estimated deliver are:

In summary, the work has shown that the vessels can be delivered within the time and cost shown above but is not without significant challenges to improve the organisation and its processes in order to ensure the issues around rework and control do not occur. In particular the challenges are:

- The re-energising of a demoralised workforce and the improvement of productivity.
- The ability to attract the right talent to achieve the resource profiles with sufficiently competent people.
- The ability to put in place and operate the new processes required
- The impact of future as yet unidentified rework to the project
- The control and management of the design subcontractor

Therefore it is reasonable to assume further delay ie H801 possibly to Autumn 2022 ie misses peak season summer demand and H802 late summer 2023.

As Oct through to March is the CHFS DD period with reduced schedules and demand, then in my opinion no meaningful in- service delivery into the CHFS fleet from either of these units can be anticipated till the Summer 2023 schedule

Other submissions to the RECC offer intensive details and evidence that the current design of H801 /H801 is totally inappropriate to CHFS ferry requirements, and in turn submit better ferry design alternatives. I endorse most of these alternatives

- **the related issue of the Scottish Government's proposal to assume public ownership of Ferguson Marine Engineering Ltd;**

In my opinion, there is no commercial merit to this proposal. The current yard is unfit for purpose .It lacks essential ship design skills also has very poor shipbuilding production and planning skills. This is self-evident in the applied construction methodology and planning of H801/H02 . This was ,and still is, 1970's methodology and planning. It is not 2020 shipbuilding methodology and planning of a modern shipyard competing in the global market shipbuilding market .

Shipbuilding skills have diminished the UK with the national demise of UK shipping and shipbuilding. The latter is now reduced to mainly warship production which does not have to perform tonormal commercial criteria.

The 09 Dec 2019 ' Report on Updated Cost and Programme for Vessels 801 &802 ' makes considerable references to these weaknesses ,and the action required to have any expectation of the successful delivery of H801/802

- **potential implications of this activity for future procurement of maritime vessels to meet the continuing needs of the Clyde and Hebrides ferries network;**

SG will probably drop any competitive tender requirement . This will add disproportionate costs, delay, and inertia into CHFS ferry procurement . There is no comparable nationalised ferry' model in Europe.

- **the potential implications of matters related to this particular procurement process for the ongoing development and updating of the Scottish Government's Ferries Plan and Vessel Replacement & Deployment Programme.**

SG's Ferries Plan and Vessel Replacement & Deployment Programme only have integrity to deliver their outcomes /recommendations if they are not linked to an additional commitment to procure ferries from a specific shipbuilder . But as SG rescinded the 2013FP's replacement programme, and the VRDP's, to date have had no tangible influence on SG's ferry investment planning there can be no potential implications .

These are my responses to the specific question the Committee wished to hear view upon:

1. What are your views on the conclusions and recommendations of the programme review board with respect to delivering the most effective delivery programme for the completion of the two vessels, MV Glen Sannox (vessel 801) and vessel 802?

Lack of confidence in implementation and scrutiny. The delivery programme may be too optimistic which in turn makes case for scrap/ redesign and order elsewhere. (see above)
New ferry orders for more complex / larger ferries are currently being placed in Europe and the Far East to deliver in 2022 and 2023 eg Finnlines
<https://www.themeditelegraph.com/en/shipping/cruise-and-ferries/2020/01/08/news/finnlines-orders-new-ropax-ships-in-china-1.38303266>

2. What has been the impact of the repeated delays to completion of the contract to construct two hybrid ferries on the specific routes and island communities awaiting delivery and entry into service of these two vessels ?

Silly Q . A continuum of unmet demand,an increase of network failure with ever diminishing fleet resilience can only have a negative impact on economic development . It compromises the implementation of SG's Proposed Island Plan

3. What actions can be taken, in particular with respect to improved contract management processes, to ensure future contracts of this type are delivered a) on time; and b) on budget?

It is a matter of urgency, and an imperative, to recruit the appropriate management and labour skill-sets

4. What key challenges need to be addressed in procuring new vessels to support Scotland's ferry network and how might these be overcome?

Bringing TS' ferry division kicking and screaming into the 21stC '. TS' involvement should be limited to the VRDP with CMAI-CalMac recommending investment requirements and priorities . Ferry procurement should be left to experts, not a generalist transport civil service. If not,than clear out the existing 'TS team ' and recruit shipping-ferry expertise into it.

Reconsider unbundling of routes and open same to competitive tendering similar to the Norwegian ferry model.

Scotland's ferry provision has a success story in the unbundled routes in the Pentland Firth.



Pentland Ferries latest new ferry Alfred

Orkney's Pentland Firth routes are unbundled as per the Norwegian ferry model. Audit Scotland's Report(p22), stated that Pentland Ferries(PF) service ex Gills Bay had reduced SG's ferry subsidy to NorthLink's ex Scrabster due to a competitive alternative(unbundled) service.

There is also a summer passenger -only ferry, from John O'Groats offering up to 3 sailings/day

Norway's state aided ferry network comes with no state intervention as to ferry design and procurement . Ferry provision is mainly provided by ferry companies from these private sector companies ([Fjord1](#)/[Torghatten](#)/[Norled](#)) .

Fjord 1 is the major ferry provider with approx 50% market

In the period 2016 to 2020 Fjord 1 has, or will deliver into service, 27 new ferries with combined vehicle capacity of approx . This is in stark contrast with SG's failure to deliver FP1's replacement programme of 6 new ferries by 2019, and possibly only add two new CHFS ferries by 2023 ,at a cost of £200m . Heads should roll
Fundamental ferry re design is required .

Other submissions to the RECC offer intensive details and evidence that the current design of H801 /H801 is totally inappropriate to CHFS ferry requirements,I endorse most of these alternatives

If SG is serious about its carbon emission targets it needs to prioritise ferry replacement and its funding.

- 5. How might the experience of the procurement and fulfilment of the current hybrid ferries contract inform the development of an updated Ferries Plan?**

Never to be repeated . Start afresh <https://www.gov.scot/publications/procurement-legislation-in-scotland-in-the-event-of-a-no-deal-brex-it-sppn-1-2019/>

6. What are the likely implications of the Scottish Government's decision to take Ferguson Marine Engineering Ltd. into public ownership for the fulfillment of the current contract and the award of future contracts for the construction of new ferries?

- (1) A disproportionate drain on SG's budget resources . (2) failure to deliver these ferries and any future ferries w/out significant recruiting quality skilled management and labour . (3) In the absence of same then bar FMEL(2) from tendering for any future ferry contracts.

7. What impact is the United Kingdom's departure from the European Union likely to have on the future award of new ferry construction contracts, in particular as regards ongoing compliance with applicable rules on state aid and competitive tendering?

Silly Q as any answer can only be speculative . Irrespective SG guidelines suggest no change even in a NO DEAL Brexit senario ie

However as CHFS ferry provision is already de facto nationalised , and SG has now nationalised Scotland's sole ferry building shipyard it is a no brainer to assume whatever

rules apply (EU or SG) state aid procurement rules they will be ' bent ' to ensure that FMEL(2) will become the exclusive ferry shipbuilder for SG .

This will be a lousy deal for the tax payer, but by possibly the only way to ensure that SG delivers its ferry obligations . On the balance of priorities SG would appear to prefer to maintain 'employment ' on the Clyde rather than to invest in ferries to sustain the socio economic welfare of its Islands . By maintaining 'employment ' on the Clyde SG by default may implement ferry investment as per any FP2, as opposed to its failure to implement ferry investment as per FP1.

27/1/2020

APP A

FLAWED FERRY DESIGN

The substantive evidence confirming a continuum, and the consequences of flawed CHFS ferry design are:-

- **CMAL's CEO Kevin Hobbs de facto admission of flawed ferry design, as per the minute of the May 2017 EFG meeting :-..'*that whilst demand for vehicle-deck space could sometimes exceed capacity, passenger capacity is rarely an issue, however he will pick this up with CalMac and CMAL during vessel design stage consultation***

There is a lack of evidence that TS-CMAL-CalMac have rigourously assessed alternative ferry design options.

A major contributory factor to this continuum, is the lack of design synergy within TS-CMAL-CalMac, sustained, in part, by the absence in Scotland-UK, of (a) vibrant ferry design, and (b) substantive commercial shipbuilding

Addressing (1):-only requires looking at the significant contrast in ferry Passenger Vehicle Ratio (**PVR**) between Scottish[7] and Norwegian ferries [3] and the corresponding demand PVR[3] and [2]

Critics of this basic point will offer, without analysis that there is **NO** equivalency between Scotland's and Norway's requirements arguing naively that the latter, in the main, serves a contrasting socio-economic demographic dynamic with shorter crossings, operating in more sheltered waters.

But analysis of Calmac's Traffic Stats (2016) demonstrates a closer Norwegian equivalency.

ROUTE	Pass	Cars	Comm Veh	Traffic PVR	*Ferry PVR	Car:Comm
Ardrossan to Brodick	828262	202843	10106	4	9 and 5.9	20
Oban to Craignure	644827	162288	7388	4	13.8 and 6.25	22
Mallaig to Armadale	250764	61797	225	4		274
Oban to C/bay-LochB	43348	15662	1068	2.76	5.5	15
Uig Triangle	188138	74657	5888	2.5	6.1	12.6
Ullapool to Stornoway	264055	86242	12492	3	4.9	8
Kennacraig to Islay	203219	69687	11015	2.9	6.5 and 7.5	6.9
Oban to Coll -Tiree	56417	17842	1684	3.2	7	10.5

*Ferry PVR: for ferry(s) deployed on route ie Ard-Brodick Caledonian Isles and IoA/ Oban -Craignure IoM and Coruisk/ Kennacraig-Islay /Finlaggen and Heb Isles. Mallaig-Armadale view the cocktail of ferries deployed is irrelevant to above but LoTI PVR is 9.4

These show:-

- (1) that the **traffic demand ratios** for the Outer Hebrides(OH) and Islay correspond closer to the Norwegian model
- (2) why vehicle traffic proportion on these routes is not met by the deployed ferries.

These 2016 Calmac's traffic statistics show why commercial traffic to the OH, and Islay, cannot be met by the continuum of CMAL-CalMac's ferry design model a/o current ferry scheduling.

