

Scottish Ferries Review Public Consultation 2010 Questionnaire

Preliminary Question

We know that different communities across Scotland often view their ferry services very differently, sometimes for reasons which are specific to the local area. If you would like to enter your postcode in the box below, that will help us to make the best use of the information you provide to us in this questionnaire.

<i>Submission by David MacBrayne Limited</i>

Consultation Question 1

Do you agree that a change is required, to improve consistency in provision and secure funding for the future?

Yes ☐

No ☐

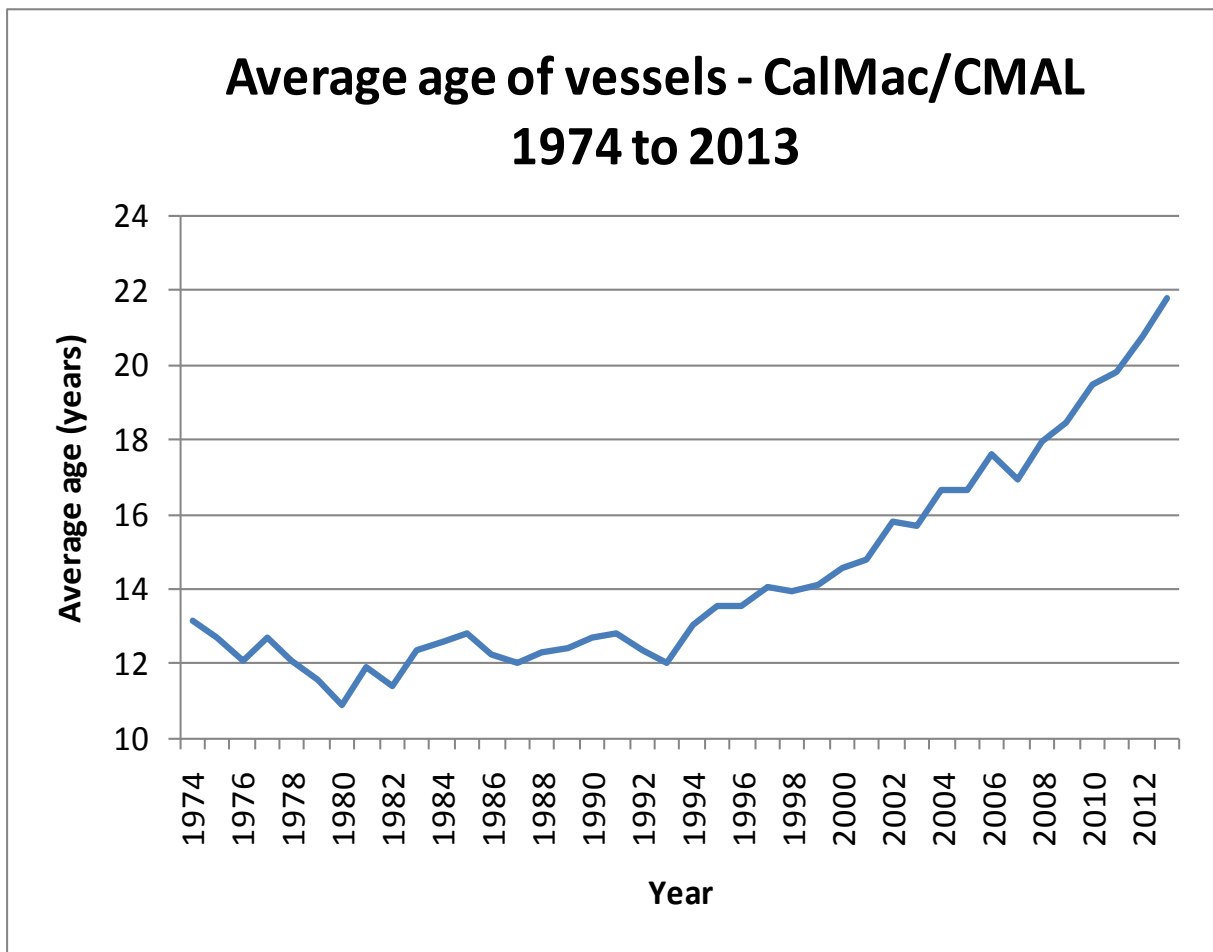
Response: YES - conditional

Comments:

A change is required to the funding mechanism because it is apparent that the government and local authorities cannot, or will not, fund the capital improvements that are now urgently required to support an efficient service. Capital investments have generally long lead-times and many assets are already well beyond effective use and are impediments to provision of sustainable lifeline service and plain good value for money.

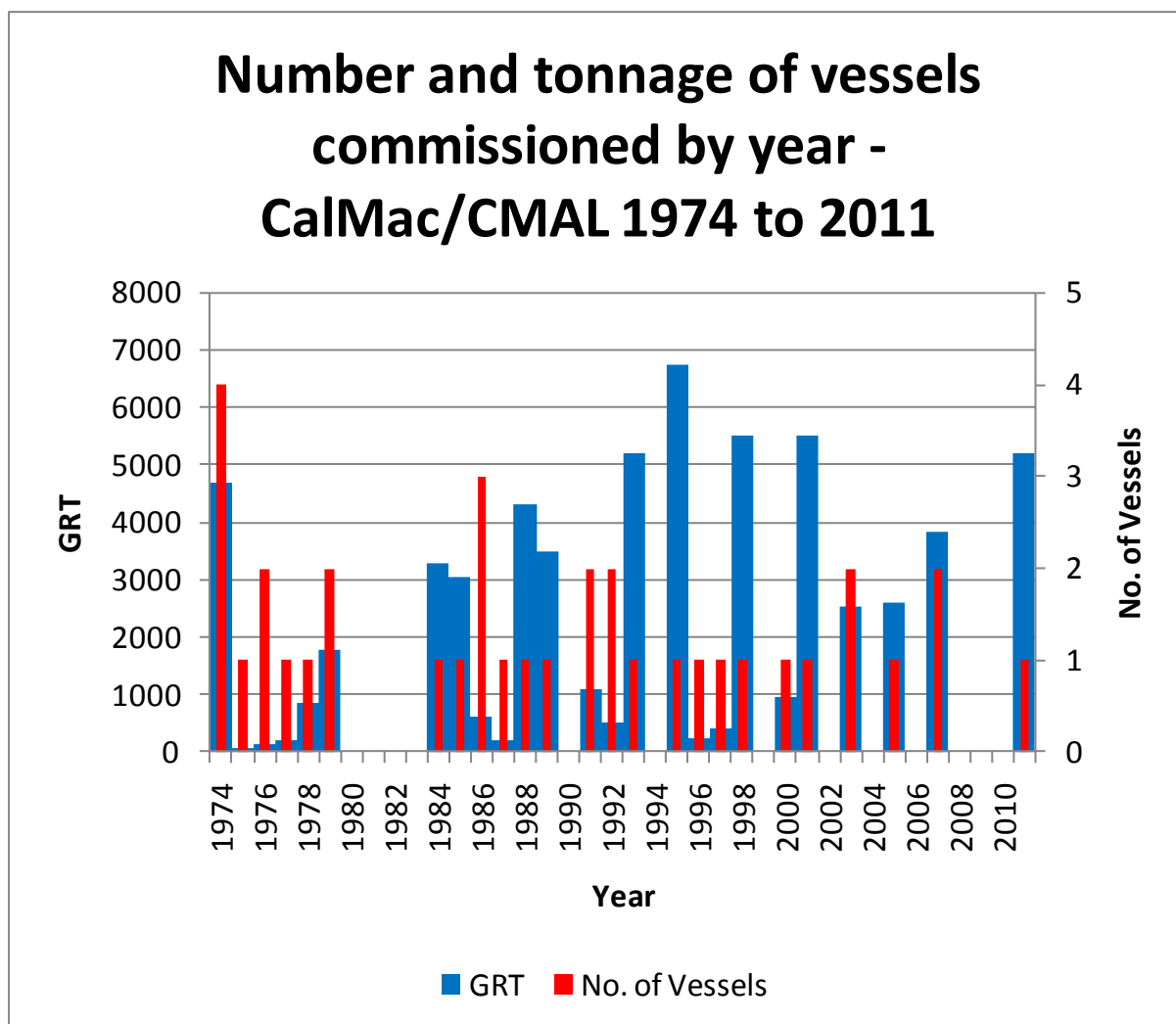
The Caledonian Maritime Assets Limited (CMAL) 'Vessels' report indicated that the average age of the Scottish Ferry fleet is 19 years – for the largest fleet (the CMAL/CalMac vessels) **Graph 1** illustrates how this has fluctuated over the last 35 or so years. With MV Finlaggan the only addition to the fleet in 2011 and assuming that 2013 is the earliest that any additional vessels could be procured by, the average age of the fleet will have increased to 22 years by 2013 – double that of 1980. (The graph assumes that no disposals will take place up to 2013.)

Graph 1: Average vessel age 1974 to 2013 – CalMac/CMAL fleet



In tandem with the increasing fleet age, the rate of bringing new vessels into service has been reducing over time with a greater time period evident between commissions. **Graph 2** shows the number of vessels commissioned by year combined with the total gross tonnage of the vessels.

Graph 2: Number and tonnage of vessels commissioned 1974 to 2011 – CalMac/CMAL fleet



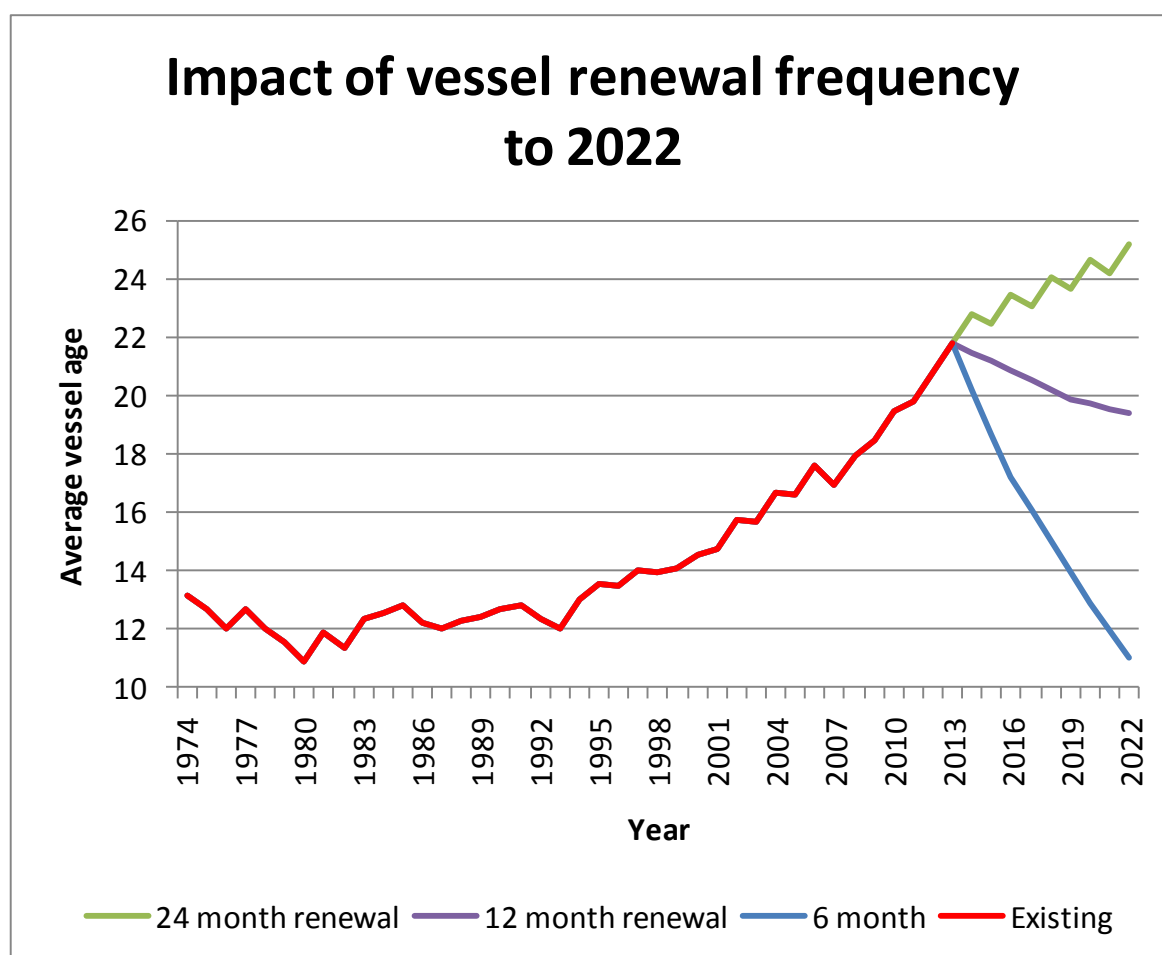
From July 1979 until April 1984 no new vessels were added to the CalMac fleet and in the 4 years prior to this the only additions had been the major vessel MV Claymore and 6 smaller units (MV's Lochmor, Saturn, Isle of Cumbrae, Raasay, Canna and Eigg).

With the average age of the fleet beginning to increase, albeit slowly but masked by the disposal of 13 vessels in the 1974 to 1983 period, a programme of vessel renewals commenced in 1984 which saw the introduction of 4 major vessels (MV's Isle of Arran, Hebridean Isles, Isle of Mull and Lord of the Isles) and 4 minor vessels (MV's Loch Striven, Loch Linnhe, Loch Ranza and Loch Riddon) by 1989. This sustained period of investment, which continued with the introduction of a further 4 minor vessels and 1 major vessel in the period to 1993, stabilised the average age of vessel in the fleet at 12 years.

The step increase in demand brought about by the RET pilot is putting considerable pressure on the capacity available on the routes involved in the scheme. Vessels which were designed to satisfy forecast demand for 20 plus years are already running full for prolonged periods of time with little or no scope to increase volumes carried during the high season. If ferry services are to continue to support the reasonable needs of the communities served, the cost of providing adequate capacity will result in more and larger vessels being needed driving up the need for even greater investment in the fleet.

Graph 3 illustrates what a future vessel investment strategy may mean for the age of the fleet over the period of the Review. Impacts are shown for 2 yearly, yearly and 6 monthly vessel renewals. (The graph assumes that vessels are replaced on the basis of 'oldest first'.)

Graph 3: Impact of vessel renewal frequency to 2022 – CalMac/CMAL fleet



In order to reduce the current trend, and assuming that vessels have a lifespan of 30 years, vessels need to be replaced at a rate approaching 1 per year. During the period of the Review this will have the effect of reducing the predicted average age from 22 years to 19.5 years i.e. the existing position.

It is evident that new sources of capital funding are urgently required if the increasing fleet age profile is to be arrested or reduced. Private funding sources are available in various forms, but clearly all of these have implications for government in the consequences for longer term operating costs and fares. If a funding 'solution' sees new vessels leased from a private owner (like the NorthLink passenger vessels which are leased from RBS) the ongoing lease costs may have to be guaranteed for the life of the vessel. Government may choose to revert to the traditional grant funding for vessels once economic conditions allow, however, solutions which utilise private funds may be a preferred way forward.

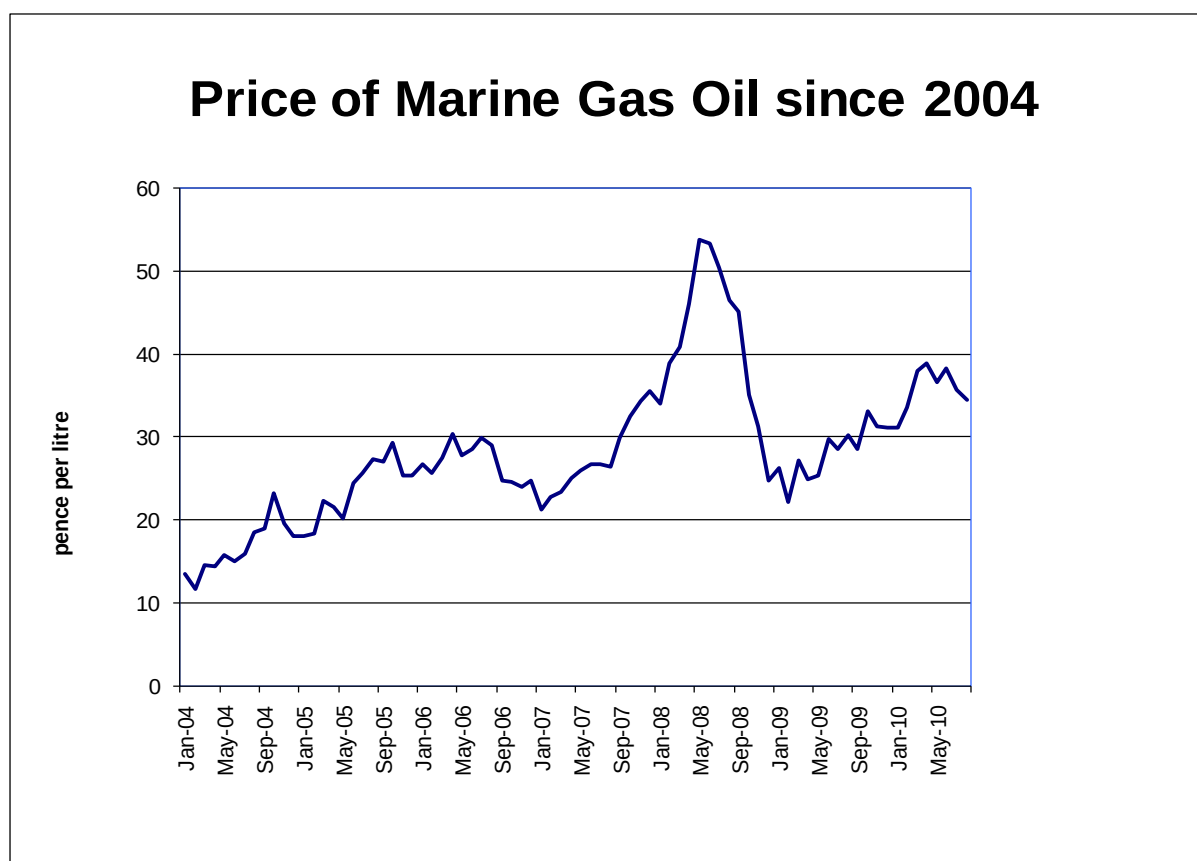
The 2002 investment in the new passenger vessels for the NorthLink services has resulted in passenger carryings levels which are 18% higher in 2009 than they were in 2003.

We are ready to support government in reaching and implementing the funding decisions vital to enable the continuation of efficient and effective services and we fully endorse the Small Ferries Project initiative which is being driven jointly by CMAL and its Irish partners. The Project should ensure consistency in provision of vessels and allow economies of scale once a suitable funding solution can be found.

As illustrated in Figure 9 in the Consultation Document additional revenue funding is also required to support the on-going costs of service provision where external costs, such as fuel and berthing dues, which fall outside the control of the service operator, continue to rise faster than ticket price increases. Therefore, the subsidy gap between costs and fares income also increases each year.

Graph 4 shows the change in price for Marine Gas Oil (MGO) since January 2004. Whilst DML has benefited from fuel hedging (essentially advance purchasing at an agreed price), longer term trends in prices still have to be borne by the service providers.

Graph 4: Marine Gas Oil prices per litre since January 2004



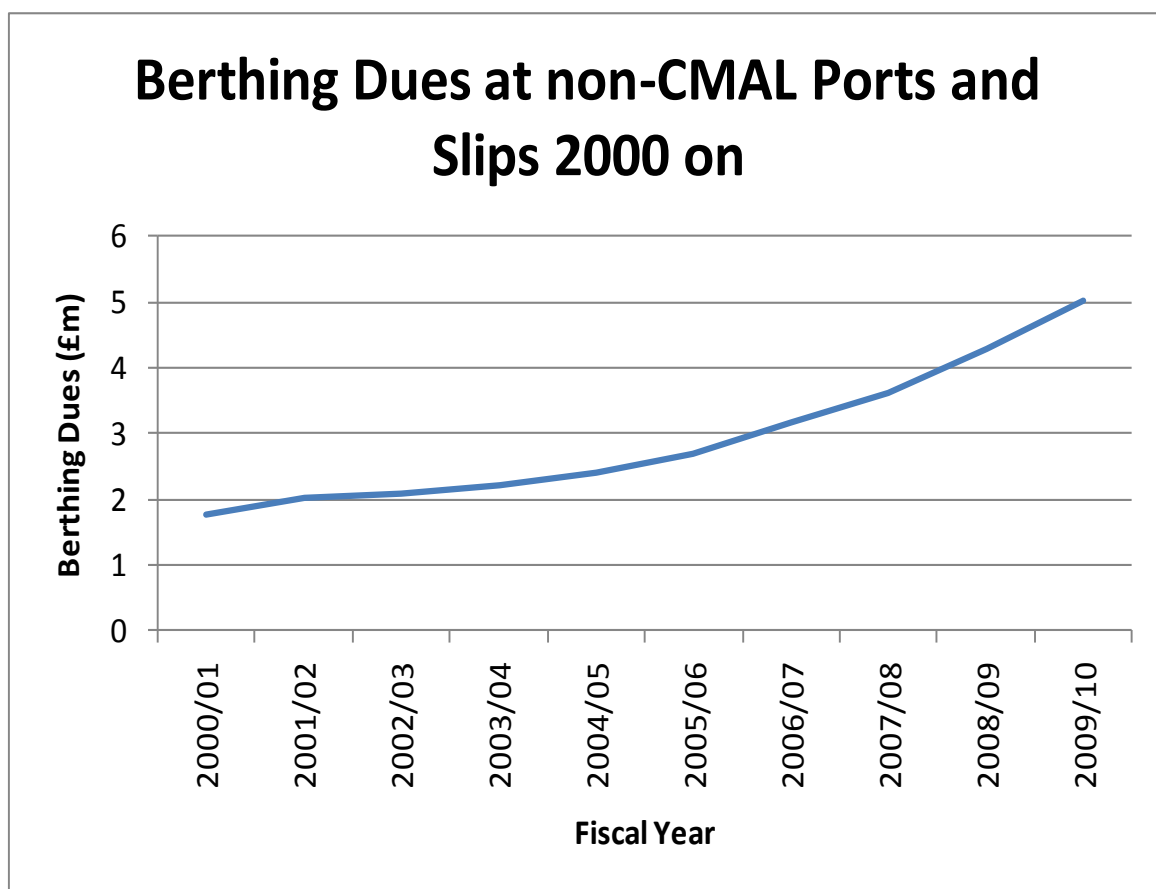
For CalMac Ferries MGO accounts for 63% of the total fuel consumed with Intermediate Fuel Oil (IFO) accounting for the remainder. With the introduction of MV Finlaggan in 2011 the proportion of MGO consumed will reduce to 56%.

Whilst IFO is considerably cheaper than MGO, the sulphur content is higher and therefore more polluting. In the Northern Isles, legislation covering the level of sulphur emissions was tightened in July 2010 resulting in a greater proportion of MGO being used. This had the effect of increasing the annual fuel bill by £1.5m. A further tightening of the rules to increase the use of ultra low sulphur fuel takes place in 2015 which will see another £3.4m added to the fuel bill. Similar changes are expected on the CalMac services in 2015 which will see the cost of fuel for the vessels burning intermediate fuel oil increasing by approximately 12% or 4 pence per litre (at current prices).

Another cost item which is outwith the operator's control is berthing dues.

Graph 5 illustrates the rapidly increasing costs of berthing vessels at non-CMAL ports and slips. Whilst these are outwith the control of the operator the expenditure is broadly retained within the overall public 'purse' either to Local Authority (LA) ports or to Trust Ports.

Graph 5: Berthing charges at non-CMAL ports and slips 2000 on



Changes in legislation, which again are outwith the control of the operator, also bring upward changes to operating costs. European directives which state the maximum work and minimum rest hours for sea-going staff have increased the number of crew required to operate the services. Marine pollution regulations now require vessels to have onboard sewage processing equipment fitted to deal with waste and enhanced safety requirements have necessitated the fitting of fast rescue craft to the larger vessels. Additional equipment is not only expensive to fit, it requires additional on-going cost to operate it, maintain it and to train crew in the use of it.

The above is not a criticism of changes in legislation but an illustration of what the impacts are on the ever increasing costs of operating ferry services.

Whilst we agree that change is required to support the consistency of funding and provision of vessels and ports, consistency is not a vital aspect of service provision. We believe the government wants to be fair to all in the way it governs and delivers vital services. We support this, alongside the need to support Scotland with efficient and effective services.

Consultation Question 2

Do you think that harbours should be self funded through harbour dues or do you think the current system of funding improvements through grants should continue?

self-funded ☐

funded through grants ☐

Response: Self-funded

Comments:

Harbours should be funded to ensure they provide facilities which meet the needs of the users and support a safe and effective ferry service. Users of the ferry services should have a positive customer experience and this can only be achieved by the provision of both modern vessels **and** harbours.

We do believe that harbours should be funded by users, and we do consider that an appropriate system of Harbour Dues and Wharfage can provide funding both for operation and improvement/development in the longer term. We are concerned that there is insufficient investment in maintaining and improving harbours.

In many cases the use of harbours in cramped and shallow locations is compromising the size of vessels which can be used with the resulting increase in capital and operating costs. This is not a criticism of the current set-up but an illustration of how the passage of time has left many harbours as the weak link in the chain of service provision. Two examples in the CalMac network are as follows:-

- Lochboisdale: rocky outcrops on the approaches to the port limit the draft of vessels which can enter the port at all states of the tide. This is the main 'bottleneck' which determines the restricted draft of all but one of the major vessels in the CMAL/CalMac fleet; and
- Ullapool – Stornoway route: the deeper water at these ports allows vessels with a greater draft to operate at all states of the tide. Whilst this restricts the flexibility of using such vessels anywhere else in the CalMac network it does open the possibility of more 'industry standard' drafted vessels (i.e. 4.5 to 5.5m) operating to this route. The maximum length of vessel which can service the route is limited by the quay in Ullapool – the longest vessel to serve this route was 116m. If this restriction is removed this would open up the most northerly of the CalMac routes to a number of vessels which are operating within Europe.

In the Northern Isles network, the port of Aberdeen has been a constraining factor in determining the size of vessels which can be used on the routes to Orkney and Shetland. The port is built at the mouth of the River Dee and, like

many west coast ports, has adapted to the increasing needs of the maritime sector (principally oil and gas in this case) within the constraints of its environs – the proximity of the city centre and the exposed nature of the harbour entrance. Tidal restrictions limit the draft of vessels which can be used and result in disruption to the timetabled service in easterly gales (less of an issue for oil and gas industry vessels) whilst the positioning of the linkspan berths and passenger facilities in the harbour have limited the maximum length of vessels which can be deployed.

Where investment has been provided, e.g. Lerwick, Hatston and Scrabster, these ports are now able to accommodate a greater range/size of vessels and have ensured that these facilities are no longer a constraining factor in the development of efficient services. Unlike the west coast ports, these ports accommodate a wide range of users – of which the lifeline ferry service is one – whilst ports like Oban and Uig have been designed to cater almost exclusively for the ferry service.

In September 2005 the Maritime Transport Division of the Scottish Executive Enterprise, Transport and Lifelong Learning Department published a summary paper titled 'Uniqueness of the CalMac Fleet' (Scottish Executive Development Department, Economic Advice and Statistics, June 2001). It concluded that

"The fleet as it currently stands appears to have evolved into the best mix of vessels to meet the requirements of the varying routes. It is almost impossible to believe that there would be a similar fleet anywhere, which contained the correct mix of vessels, of the correct types and of the required dimensions, in respect of draft, beam and overall length. Some of the vessels possess unusual features such as, side ramps and open car decks and it is even harder to see from where alternatives to them could be sourced, given the nature of the cargoes they are required to carry. To this extent it can be said that the fleet is uniquely fit for purpose. However, a conventional 5 metre plus draught vessel could serve the Ullapool - Stornoway route without having compromise its efficiency by running with a reduced load, due to the depth of water available in the harbour."

A full copy of the summary paper can be found in **Annex 1** of this response.

We believe each harbour should have a funded strategy for maintaining and developing its facilities, and that this is funded by an appropriate economic mechanism to ensure Scotland and the Islands get the service they need. Whilst it is a longer term aspiration, which falls outwith the period of this Review, it would be prudent to consider harbour developments which seek to reduce and/or minimize the 'bottlenecks' which currently exist and to open up the major vessel network to more conventional tonnage.

To have an appropriate system of Harbour Dues and Wharfage charges, a couple of key factors do need to be got right however:-

- Outwith the CMAL network, harbours are funded by a combination of harbour dues and grant support for capital projects. Unfortunately, we feel that some harbour authorities may be exploiting this system and use the harbour dues levied on the lifeline ferry operator as a 'back door' method of accessing funding support from Scottish Government (SG). An example of this can be found at Uig Pier which is owned by Highland Council and remains one of the most expensive piers to access and yet the standard of facility and amenity remains poor. Expenditure at Uig has been confined to the provision of the ro-ro berth and linkspan in 1985 and the addition of two dolphin structures for the introduction of MV Hebrides in 2001. Both projects were 75% grant funded by SG. Therefore, any harbour dues funding strategy has to be ring-fenced to the operation and improvement of the facilities users are paying for; and
- Traditional Harbour Dues typically have a significant charge for the call of the vessel and then small per item wharfage charges per passenger, car, animal, tonne of cargo, etc. Given the lifeline nature of many services with small volumes of traffic in off-peak months a fairer, and better economic system would have only a small (if any) charge per call (perhaps only reflecting the staff costs associated with the call) and a higher wharfage charge. Such a change would need to be explained and introduced carefully, but would provide more equitable assurance that users were paying for services as provided, even if subsidised. We believe such an approach is favoured by the low cost airlines as it gives facility costs which are linked to passenger volumes (and hence revenues).

We believe that within Scotland there is a need for a comprehensive Scottish Ports Policy - a policy document that would identify the existing and future needs of all port users, including lifeline ferry services, and which would address such issues as environmental and economic impacts; the legislative framework (Harbours Act, Harbour Revision Orders, CMAL/LA/Trust status); connectivity and integration; funding.

Consultation Question 3

How much of the funding should come from the users of the service?

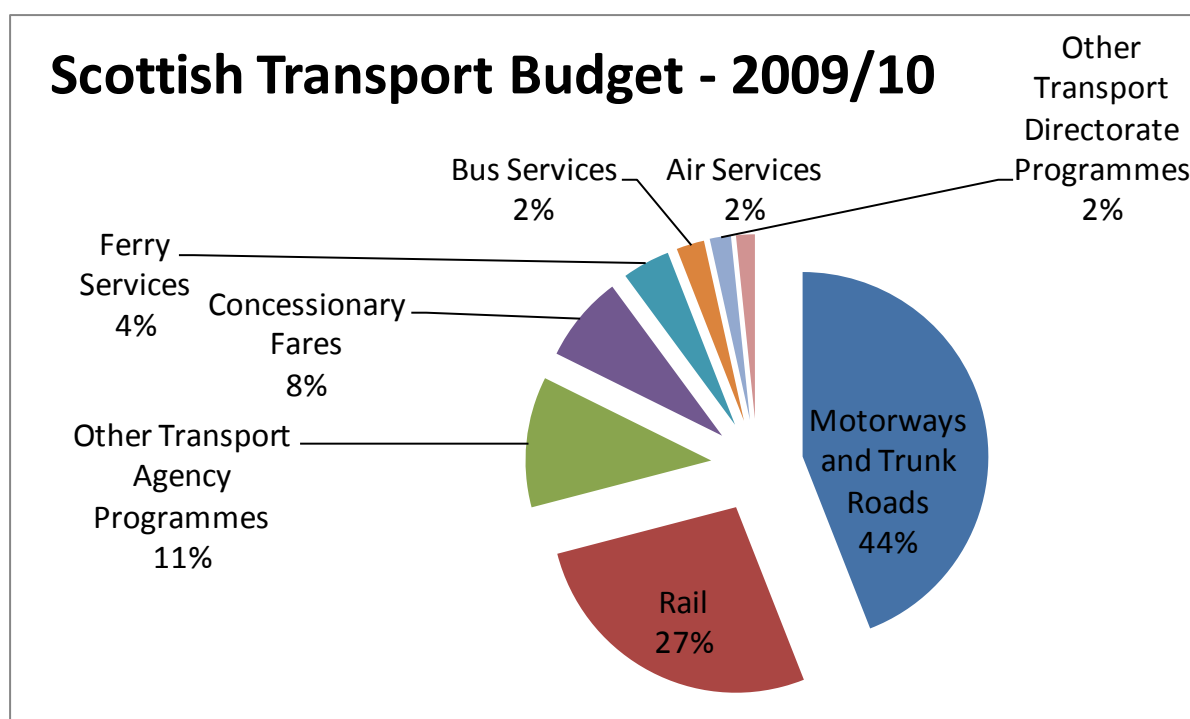
Comments:

Ideally, it is desirable that all funding should come from the users of a service. Where this would lead to a service provision lower than is necessary to sustain a desired level of local or regional economic activity and social security this may be subsidised by government, either by subsidising the users payment of fares (e.g. Air Discount Scheme), or by subsidising the service provider to deliver the required level of service (e.g. Clyde and Hebrides Ferry Services contract).

Essentially, there are only two sources of income – the user or the public purse. Whilst Figure 9 in the Consultation Document shows revenue of c. £90m, of which £2m is from Government funded concession schemes, it is unclear how much of the reported income is from other public agencies e.g. NHS and local authorities.

Figure 1 illustrates how the Scottish transport budget is currently divided across the various sectors with support for the ferry services (CalMac, NorthLink and Streamline) representing just 4.2% of the total budget. Road and rail attract the greatest share of the budget accounting for some 71%. A reduction of just 1% in the funding levels for both road and rail and a re-allocation of the funds to ferry services would have a significant impact on the ferries budget allowing much needed investment to take place.

Figure 1: Scottish Transport Budget 2009/10 – split by sector



The David MacBrayne Group is not skilled in analysis of the macroeconomics of this question and is unable to comment on changes in the proportion of funding which ferry services receive and the impact of such on the economies of the islands served. Government is currently undertaking a Road Equivalent Tariff (RET) pilot on selected routes, but has not analysed the pilot so far. In the absence of analysis of the RET pilot it is even more difficult to constructively contribute to a response.

European legislation governing ferry subsidies permits States to make up the difference between income levels and the costs of providing the service (i.e. the subsidy) based on the provision of fares which are affordable by users. In unsubsidised commercial ferry services operators use fare price as a mechanism to maximise carryings and utilisation whilst at the same time ensuring that there income is maximised.

A very sophisticated approach to this is, of course, well known to rail and air travellers and increasingly to ferry travellers, where operators use their variable ticket pricing strategy to encourage the best use of capacity.

In 1993, Caledonian MacBrayne introduced a pilot scheme – CFares – on 4 routes the rationale of which was to have a fares structure which better reflected the costs of providing the service. The mechanism was trialled in response to concerns from HM Treasury that the cost of providing increasingly larger vessels to cater for peak demand was expensive and that fares should at least recognise

the cost of doing so. The trial saw fares on a number of routes go down in the winter season, offset with summer fare increases which were at levels above the general fares increase. The most obvious remains of the scheme today (see above) are the 'Full Fare' sailings on the Ardrossan-Brodick and Oban-Craignure routes as well as restrictions on the use of certain discounted tickets at peak times on the Largs-Cumbrae Slip route. Combined with the use of some targeted, discounted fares products which are 'subject to availability' these give a very crude form of demand responsive pricing.

Consultation Question 4

Do you agree that we should test the market by tendering some routes on a single basis with the option for the operator to bring their own vessel(s)?

Yes ☐

No ☐

Response: No

Comments:

We do not believe that a single route tender is feasible or sensible and we reject this option as being unworkable. Further we do not believe it is practicable or logical to conduct market tests whilst the RET pilot is still running and in any case we could not see, from the Consultation Document, what the benefits would be (to SG and customers as opposed to potential operators) from a single route tender and contract.

Tendering some routes on a single basis could be done but for economy of scale reasons it is very unlikely that an operator bidding for a single route could offer a better price or service compared to an operator with multiple routes who is able to share overhead costs and resilience capability across a number of routes. For a single route, stand alone operation, any operator requires to have ready access to a second vessel in the event of breakdown or to cover annual maintenance/dry-docking. We do not believe a single vessel operation constitutes provision of a lifeline ferry service.

Caledonian MacBrayne's response to the consultation paper (April 2000) on meeting European Union Requirements on State Aids in the maritime sector, "Delivering Lifeline Ferry Services", highlighted the following benefits of tendering on a single network basis:-

- It maximises service reliability for the communities served and simplifies the processes for operational management of vessels e.g. reallocation between routes as a result of vessel maintenance, breakdown or cascade as a result of replacement;
- It maintains the network benefits from marketing, distribution and ticketing without the need for an activity separate from the operator;
- It facilitates the flexible use of staff between routes;
- It provides economies of scale in company management, safety and quality systems, fuel purchase and insurance, all to the taxpayers' advantage;
- A single operator simplifies liaison with community bodies, user groups and regulatory authorities;

- It facilitates integrated timetables and services;
- It is the simplest to achieve from an organisational perspective, requiring only the separation of operations from the *Services Specification* and vessel management functions within the existing Company. As such, it avoids all the complex, disruptive and potentially costly human relations problems which will arise from also having to separate all staff and functions into several route groupings;
- The larger package is likely to attract more competition and should improve the ultimate value for money achieved;
- Potential bidders' costs would be minimised by having to compete in only one competition; and
- The procurement costs to government would be minimised by having to run only one competition.

The response above was echoed by the Scottish Executive, Local Authorities and Trade Unions prior to the tendering of the Clyde and Hebridean Ferry Services (CHFS) services in 2007. Most recently, Scottish Government (SG) has restated its support for the bundle in its response to the Commission's Enquiry into State Aid for Maritime Transport Services in Scotland. Whilst the SG response (referred to as a 'UK authority') has never been published the Commission's Decision of 28 October 2009 refers to it and acknowledges that:-

"The UK authorities provided credible arguments justifying the bundling of the 26 routes.

They argued that bundling ensures maximum flexibility of the fleet to best serve the network. For example in case of break-down of a vessel, the immediate provision of a relief vessel is critical to ensure the reliability of the lifeline services. Relief vessels are also needed in case of poor weather conditions, when vessels have to undertake maintenance works and when there is an unexpected need for increased capacity. At present, CalMac can organise a relief vessel often by managing a series of sequential movements of vessels between routes. It would be more difficult to ensure continuity of services and capacity optimisation if there were a range of operators serving the network.

Moreover, the bundling of all routes enhances integration of the network by making it easier combine safety, quality and environmental aspects of vessel and port operations and to ensure that standards are applied evenly across the network. The United Kingdom's Maritime & Coastguard Agency Regional Office for Scotland and Ireland has made it clear that the fragmentation of the network may not be the most efficient way to ensure the continuation of safe and reliable services.

Furthermore, bundling leads to economies of scale particularly in ticketing and marketing and supports integrated transport by allowing customers access to bookings on a series of routes in a single transaction. This also applies to tourism promotion.

It may be argued that in order to minimise costs, each route should be tendered out separately. However, the Commission acknowledges that the administrative costs and burden of such individual tendering (26 individual tenders) could be too high.

A mid-way solution, bundling only some routes might also be considered, but it would be speculative to predict whether the outcome of such tendering in terms of overall cost to the public budget would be higher or lower than the actual cost resulting from the bundled tender.

The Commission Communication on the interpretation of the Maritime Cabotage Regulation states that "Member States often wish to group public service routes to and from different islands into a single bundle in order to generate economies of scale and attract operators. Bundles as such are not contrary to Community law provided that bundling does not lead to discrimination. The most appropriate size of bundles should be decided by taking account of the best synergy to be made in meeting essential transport needs".

Given the legal framework which explicitly allows for the bundling of routes and the reasonable arguments presented by the UK authorities, it cannot be concluded that the bundling of routes is an unnecessarily unfair condition of the public tender and inevitably increases the cost to the State for discharging the public service obligations.

Since the CHFS contract commenced in October 2007 the ability to maintain lifeline services across the network has been tested on several occasions. Two high profile examples illustrate this as follows:-

- A mechanical problem with MV Clansman in summer 2010 resulted in her withdrawal from service for a period of just over 6 weeks. By redeploying one of the vessels on the Islay service and a rescheduling of timetables and vessels on 5 other routes we were able to maintain the lifeline services at the height of the tourist season. Whilst some routes operated at a reduced capacity the redeployment of vessels and crews, as well as the ability to re-route affected travellers on to alternative services, ensured that no community was cut off for a prolonged period of time; and

- In July 2009 a mechanical problem on MV Isle of Lewis on her Friday morning run to Stornoway resulted in her being out of service for 2 days. By operating additional sailings during the night on the Tarbert – Uig service and by redeploying the second Islay vessel to the Ullapool-Stornoway route, delay and disruption to customers was kept to a minimum.

The ability to redeploy vessels within the network during the overhaul period in the winter is a routine which is repeated every year. Most operators in Europe have fleets of vessels which are large enough to allow them to do the same during the quieter winter months, however, the smaller operators have to charter in tonnage to cover their requirements (or cease operating for a period of time). Whilst many of them will have arrangements with other operators to supply them with a vessel during overhaul periods this will not extend to cover periods during the peak summer if, for example, a breakdown occurs. In July and August all spare tonnage in the northern hemisphere is usually fully deployed and operators have little option but to reduce frequency/capacity and/or withdraw services in their entirety until their own vessel is repaired.

In the CHFS network the limited vessel draft requirements compounds this lack of availability meaning that it is highly unlikely that a suitable vessel can be found elsewhere to cover breakdowns during the busy summer period - it is only with redeployment of other vessels within the network that services can continue in a satisfactory manner. Despite extensive efforts to charter a vessel to assist during the breakdown of MV Clansman no suitable vessel could be found at that time of year. Similar capacity vessels from the Baltic Sea were considered, however, they were found to be unsuitable as they are limited to operation in 2.5 metre waves whilst the 'sea-going' CFL/CMAL vessels operate in seas of up to 5 metres.

The uniqueness of the CMAL/CHFS fleet has already been illustrated and a full copy of the updated Caledonian MacBrayne paper 'The Uniqueness of the CalMac Fleet' (CalMac Ferries Limited, December 2009) can be found in **Annex 2** to this response

There is definitely a case for encouraging all operators to bring their own vessels as this would ease the funding burden on the state (or at least the initial capital cost of procurement). However, on the routes suggested, and with a contract period of only 6 years to remunerate capital, this will make no practical impact on the magnitude of the funding backlog and deficit in the Scottish Ferry Fleet and Scottish harbours. Much bigger steps to find new funding are urgently required.

We understand that the SERCO Denholm Northern Isles bid in June 1999 was rejected on the grounds of cost (it was the highest bid) and it was considered

unacceptable as the bidder, had he been successful, wished to sell the vessels or transfer the leases to the Scottish Executive at the end of the contract. Clearly, the bidder was unwilling to take the risk of not securing a subsequent contract and being left with the vessels should another operator provide his own in the subsequent tender. This was for routes where the vessels were of a non-specialised nature, as they are on the CHFS services, and where they could have been deployed elsewhere if the contract had been lost.

We also think it is probable that, capital funding issues aside, SG will end up paying more subsidy overall. If SG chooses to tender some routes on a single basis and bidders bring their own vessels then SG will still have the costs of current (now unused) vessels. Are these to be sold? If so, come the next tender, SG will be in an uncomfortable position (as previously in the Northern Isles) where the incumbent operator is very hard to displace because the cost of market entry for another bidder is so high. The incumbent operator would be able to 'name his price'.

If a single tender operator fails to provide the contracted services, who would exist to pick up the pieces and ensure the provision of lifeline services? It is likely that government would be forced to pay the price of continuing with the current operator.

History has shown that once an operator has a 'foot in the door' they tend to be successful at retaining subsequent contracts. In Denmark the tendering of 27 routes has resulted in a change of operator on only 2 routes despite an increasing number of tenderers. In Norway a similar position existed in the first 6 tenders after 1994 with 5 out of the 6 tenders returning the incumbent operator – despite the tenders attracting between 6 and 9 bids each. The tendering of the Gotland service (Sweden) in 2006 also resulted in the existing operator continuing to serve the routes that it already served. Closer to home Clyde Marine has been successful in retaining the tender for services between Gourock and Kilcreggan/Helensburgh.

Time after time the incumbent operator has been successful in securing subsequent tenders and it can be argued that the loss of the level playing field, in favour of the existing operator with his own vessel(s), has given them a distinct advantage during retendering.

Consultation Question 5

Do you agree that the following routes are the correct routes to consider tendering as single routes?

Ardrossan - Brodick	Yes ☐	No ☐
Wemyss Bay - Rothesay	Yes ☐	No ☐
Oban - Craignure	Yes ☐	No ☐
Largs - Cumbrae	Yes ☐	No ☐
Pentland Firth	Yes ☐	No ☐

Response: No to all of the above

Comments:

See response to Question 4. We believe tendering single routes from the bundle will increase costs to the Scottish Government, and may also reduce the quality of service provided to users of these services e.g. potential for total loss of service during periods of breakdown, lack of integration between services provided by other operators, no one-stop-shop for bookings or ticket sales for users travelling on multiple routes. With the single bundle the islands are marketed as a one with all islands promoted equally together whilst with a mix of single route operations, islands will potentially be marketed against each other. This is especially true for neighbouring islands.

The David MacBrayne Limited Group (DML) firmly believes that all islands should be treated equally and that the most efficient and effective way to achieve this is through the single bundle approach to the delivery of lifeline services. The services are run for the benefits of the communities served and to support their needs.

We also believe that some of the reasons set out in favour of the retention of the CHFS and Northern Isles Ferry Services (NFS) bundles could actually support an argument for the bundling together of both the CHFS and NFS services into one tender. Commercially, this would provide even greater economies of scale for the successful operator and reduce further the costs of tendering for SG. Whilst on a somewhat greater scale, the recent acquisition of Norfolkline by DFDS Seaways in June 2010 demonstrates a similar thought process in the private sector. This argument could be taken further still when other domestic ferry services are considered.

Removing from the bundle some of the higher revenue earning routes is classic 'cherry picking' leaving the State to pick up the pieces on remaining routes. If any of these routes were commercially viable (i.e. could be operated all year round without a subsidy) then they would not have ended up in the current

situation where the required level of service is only possible through State funding support.

If SG wants to see opportunities for small local businesses operating single routes then there are ways in which this can be achieved which do not require single route tenders and the associated costs and risks.

Consultation Question 6

Should we allow single routes to be tendered as a bundle or should we stagger the tenders?

allow a bundle ☐

stagger the tenders ☐

Response: The single routes in Q5 should not be tendered as a bundle; the single bundle should cover all the routes and services.

Comments:

See our response to questions 4 and 5.

We cannot find evidence in the consultation document to support fragmentation of tenders. For tendering on a single route basis a necessary macroeconomic condition is that ferry service provision is, or is close to, a commodity supply market (like buying shoes on the high street), and that there are no economies, or other benefits of scale.

We are quite clear that this is not a commodity supply market or anything near it. All year round lifeline services, by their nature, need a high level of technical and operational competence and sufficient redundancy of resource to ensure continuity of efficient operation. In the specific case of redundancy, it would be hugely wasteful of resources for each single route operator to maintain his/her redundancy of vessels and labour on an individual route basis.

Tender bidding costs a lot of money that must be recovered from users or SG in one form or another. Fragmenting or staggering tenders would probably suit SG for the purposes of the tender process but would increase the costs of bidders in preparing their tenders and also SG in that, bidders for multiple single routes could not assume future wins and hence spread of overhead costs.

In the event of single route tenders being sought, any staggering of these is likely to lead to progressing degrees of uncertainty amongst the users, more so if there is a continual stream of tenders. Stability in the provision of services gives the communities served the confidence to plan ahead and invest for the future. This will be especially true for islands with more than one route and even more so for customers who use more than one route.

Anecdotal evidence from the communities which are participating in the RET pilot suggests that the uncertainty of what will happen to fares after the pilot has concluded is affecting confidence levels and islanders are nervous about investing in their businesses until it is clear what will happen to fares in the longer term.

Consultation Question 7

Should the remaining routes stay within 2 bundles?

Yes ☐

No ☐

Response: Yes – As a minimum, all the routes should stay within the existing bundles

Comments:

We found no evidence in the consultation or supporting documents that the existing arrangement was "broken", so we do not think it needs a substantive fix. We welcome the Consultation Document statement to this effect in Chapter 2, paragraphs 43 and 44

"We [Scottish Government] have considered the pros and cons of splitting the bundles and have considered in particular the strongly expressed views by many of our stakeholders that the single bundle provides many strengths that it is not certain smaller bundles would continue to deliver. Given the European Commission's (EC's) recent Decision (...) we see no need to test this theory and as a result, other than removing the routes where commercial viability could be tested, we are not considering further changes to the bundles.

The bundled routes would be tendered as large bundles. On the remaining Clyde and Hebrides routes we are satisfied that the remaining large bundle would require to be tendered on the basis that the CMAL vessels must be used."

The existing bundles are split geographically with the Northern Isles services historically having connections with Scotland's east coast and the Clyde and Hebridean Islands having connections with the west. Within the two bundles the network strengths have been evident on a number of fronts:-

- The introduction of new vessels and the subsequent cascade of other vessels provides benefits to a number of routes rather than enhancements being restricted solely to the route with the new vessels e.g. MV Hebrides introduction allowed the displaced vessel (MV Hebridean Isles) to enhance services to Islay, likewise with MV Caledonian Isles;
- The deployment of the fleet relief vessels to augment services has provided greater benefits to the communities served than would otherwise have been the case had the vessel been on standby – Islay with MV Isle of Arran and Ardrossan-Brodick with MV Saturn;

- The ability to move vessels round during periods of disruption to ensure that service continuity is maintained;
- The commencement of new routes within the Western Isles which have improved connectivity for the communities served whilst also increasing available capacity on the services from the mainland by reducing the need for 'triangular' sailings e.g. Uig-Tarbert-Lochmaddy and Oban-Castlebay-Lochboisdale;
- The joining of two peninsular communities (Cowal and Argyll) with a service between Tarbert and Portavadie which in turn allowed a year round service between Arran and Kintyre;
- Extending services to join up a greater number of island communities e.g. Oban and Kennacraig with both Colonsay and Islay, likewise Coll and Tiree with Barra;
- Providing a roll-on roll-off service to the Small Isles which enhanced the viability of the communities served whilst allowing a winter service to be introduced between Mallaig and Armadale;
- Having a self sufficient fleet within the Northern Isles which is self relieving during the winter period, and combined with the use of modern transport methods has done away with the need for a chartered 'stock boat' in the peak livestock season;
- Engaging with mainland and island public transport providers to ensure that integrated timetables are maintained network wide; and
- Offering users the ability to travel on multiple routes with the minimum of fuss i.e. one single ticket to cover multiple routes and booked through a single point of contact.

We are very concerned that attention may be focused on the issue of bundling, when the real issues are about how lifeline services are to be maintained through a period of significant financial austerity and low availability of government grant funding. This Review has a 2022 horizon and attention should be focussed on what needs to happen by then to ensure that the provision of lifeline services are fit for purpose and are delivered effectively and efficiently whilst meeting the needs of the users.

Assuming the questions of funding are addressed with expediency and efficiency, there are, nonetheless, some further improvements and flexibilities in the two bundles that could be introduced. These would allow operators to be more

innovative with the way in which services are delivered and to offer users services which are able to keep pace with best practice in the industry.

Consultation Question 8

Should we consider the implications of a looser tender, where a minimum level of service is required but where the operator has flexibility to innovate and reduce costs where they see fit?

Yes ☐

No ☐

Response: Yes

Comments:

We assume that what SG are driving at in the term 'looser' is to give the operator a greater degree of flexibility to operate services which, primarily, meet the needs of the users and which also meet an appropriate level of demand and not slavishly adhere to a contracted timetable as at the moment.

We would welcome such a 'relaxation' and think this is a useful suggestion that could benefit users, and enable bidders to offer SG as the client, better value for money and more efficient use of public resources.

We recognise that specifying services in this way is challenging for SG, whether in specifying the requirement in a way that will enable bids to be evaluated equitably, or in encouraging bid variants that can equally well be comparatively assessed. This is particularly challenging under a marine cabotage regime where lowest cost bidding is very much the expectation. But given the potential benefits, we are ready to work with SG to develop and examine tendering options which allow the long-term provision of effective and efficient lifeline ferry services within the heavily regulated ferry industry.

By way of an example, services to the Isle of Man, whilst not tendered, are subject to a User Agreement whereby the operator (Isle of Man Steam Packet Company) is given exclusive access to the Manx Government owned linkspan in Douglas. In return the operator is obliged to provide in-bound freight capacity of 7,800 lane metres per week and an annual minimum of 936 return services to the North West of England. In 2009 the operator provided a service which was in excess of this minimum with almost 1100 sailings provided during 2009. A similar arrangement can be found in Jersey and Guernsey.

Whilst such flexibility may see increased costs of operation on occasions (through more sailings), the benefits of the additional income generated will ultimately see the costs to government reduced.

In Denmark, the Bornholm tender (Ronne – Ystad) specifies the required daily capacity during the peak season, the off-peak daily capacity, the crossing time, the requirement to use a high speed vessel for part of the year and the service frequency. In Greece a similar criteria is used with the addition of maximum fares levels and the maximum age of vessel which can be used.

A less prescriptive fares structure would also be very welcome giving customers a greater degree of product choice and also allowing the operator more freedom to better match supply with demand. The CFares pilot introduced in 1994 by Caledonian MacBrayne saw some fares reduce in real terms (to stimulate demand) while others increased by more than the rate of inflation to help spread demand over sailings and ultimately to make greater use of the available capacity. Some of these principles are still effectively used just now; however, the need for even greater flexibility and to be even more effective requires a tender which is 'looser'.

Consultation Question 9

Should we specify climate change objectives within the tender and require the operator to specify how he intends to meet them? Do operators agree and have views on how emission reductions should be defined? How would they measure and monitor performance, and demonstrate delivery?

Comments:

Operators should have positive incentives to achieve the outcomes the government desires, and if necessary, government should be willing and able to fund the developments necessary to improve environmental performance. Government should also be realistic in its expectations of what can practically be achieved by an operator, who knows he has only a maximum of 6 years to get a fair return on all his efforts and investments.

With the rigid specification of the current contracts, combined with the need to use the existing vessels, the scope of any meaningful climate change objectives is severely restricted. A 'looser' tender, combined with positive incentives, gives the operator some scope in managing its emissions – even with the existing vessels e.g. slow steaming, combining poorly utilised sailings where feasible. It should be stressed that such measures need to be considered in the round e.g. increased manning costs may result from longer operating days; sailing frequency may have to be reduced and integration with connecting services may suffer.

The vessel design measures outlined in the Environmental Report illustrates a number of ways that carbon dioxide emissions can be lessened. The report also comments that *"Vessel design to accommodate emissions reduction would most efficiently be undertaken when commissioning new vessels, rather than as retrofit."*

In the current financial climate, with the severely restricted opportunities to introduce newly designed vessels, climate change objectives are best considered through the volume and type of fuel consumed with fuel receipts providing an easy means of monitoring.

More fundamentally over the period of the Ferries Review, the government and other vessel owners will need to invest new capital in new vessels and technology which will be the most effective way to deliver reduced CO₂ production and reduced emissions. An alternative fuel source, e.g. Liquefied Natural Gas (LNG), also needs to be considered for the longer term as it provides further reductions in emissions and currently is substantially cheaper than oil based fuels.

An example of a climate change driven development which benefited both parties was when SG supported the NorthLink project to apply Teflon style antifouling underwater paint to Hjaltland & Hrossey as a means to saving fuel burn (through reduced drag) while also improving the environmental impact on the sea having replaced the use of the more common antifouling paint which relies on the slow release of biocide chemicals.

A similar approach was evaluated for the CalMac/CMAL vessels, however, the shorter routes on the west coast services and the proportionately longer manoeuvring times did not make this an effective use of resources. Instead, vessels have their hulls shot-blasted every 10 years and use conventional anti-fouling coatings giving savings in fuel consumed of up to 4%. These savings diminish over the 10 year period between the shot-blasting.

The SG is supporting CFL in reducing the fleet's CO₂ emissions by 2,000 tonnes by the fitting of new high efficiency propeller blades at the next annual overhaul.

SG also supported NorthLink policy to close check-in promptly at the 30 minutes before the scheduled departure time and then sail as quickly as possible to maximise the at-sea time available for the crossing and hence the speed/fuel burn necessary to achieve the timetabled arrival time monitored through the performance regime.

SG has supported NorthLink in its green local purchasing policies for food & beverage and the waste segregation and recycling which has seen a dramatic reduction in both food miles and landfill.

CalMac continues to work closely with CMAL to identify and evaluate opportunities which will lead to reductions in emissions. This has involved detailed hull profiling of MV Finlaggan, consideration of alternative propulsion systems for the proposed new vessel for the Ullapool-Stornoway route and the use of alternative fuel sources and hybrid propulsion in the Small Ferries Project.

Consultation Question 10

What else do you think should be specified in a tender document? E.g. accessibility requirements, integration requirements etc.

Comments:

See also response to question 9.

In any contract, the client (government) should only specify the outcomes it absolutely needs and is prepared to pay for. It seems to us that this is a specification which assures the provision of a safe, continuing and reliable lifeline service. It should never specify how it wishes services to be delivered, as it (a) does not have the expertise to do this, and (b) would suppress innovation and enterprising solutions if it did so.

Compliance with all legal and regulatory requirements is taken as a minimum, thereafter, government objectives should be prioritised and specified.

Within the current CHFS contract a good example of where the contract has given the operator some degree of flexibility can be found on the Fionnphort-Iona route. The first two sailings of the day are only required to operate if a customer advises that they actually require to use them. If there is no demand then the vessel does not sail. Similarly, on the Colintrave-Rhubodach service, a core timetable is specified with the ability to provide additional sailings if demand requires. In these instances the specified flexibility reduces the chance of wasteful empty sailings taking place whilst at the same time giving users the certainty that additional sailings will take place should demand dictate.

The current contracts require the operators to use the specified fares (which are published annually after agreement with SG) with only a limited number of occasions where 'special offers' may be used. Any such offers, whether they are short-term or seasonal, are sold with conditions attached and are always 'subject to availability'.

We believe that future specifications should allow the operator more flexibility to better match supply with demand and to be more innovative in the way services are delivered – perhaps using the 'models' mentioned earlier where a minimum number of sailings per year or month are specified and the operator is incentivised to provide over and above the minimum.

Consultation Question 11

What should be the rationale for, and purpose of, the fares policy?

PLEASE TICK ONE BOX ONLY

- (a) Fairness of fares across Scotland ☐
- (b) Community sustainability ☐
- (c) Supporting economic development ☐
- (d) Supporting tourism ☐
- (e) Supporting the particular need of the particular community ☐
- (f) Reduce the cost to government ☐
- (g) To manage demand on ferries i.e. a policy that encourages people to travel at different times ☐
- (h) To support "low carbon" travel ☐
- (i) Other ☐

Comments:

Sea transport services in the Highlands and Islands have traditionally been financially supported by successive governments and local authorities to maintain or improve economic or social conditions. This has allowed fares to be set at a level which would otherwise have been unaffordable and led to services which would ultimately have become unsustainable.

Across the UK there are a number of lifeline ferry services some of which are commercial enterprises and others which rely heavily on the public purse. A selection of fares on internal UK ferry services are shown in **Table 1**.

Table 1: Selected fares on internal UK ferry services – 2010 prices

Route	Crossing Time	Adult Return (open)	Subsidised by
Penzance – Scilly Isles	2h 40m	£95	No subsidy
Oban - Colonsay	2h 20m	£25.40	SG
Ullapool - Stornoway	2h 45m	£14.90	SG (RET pilot)
Scrabster - Stromness	1h 30m	£33.00	SG
Grutness (Shetland) – Fair Isle	2h 40m	£6.80	Shetland Islands Council
Kirkwall – North Ronaldsay	2h 40m	£14.10	Orkney Islands Council

Table 1 clearly shows the impact that varying levels of subsidy can have on the prices that users pay to access the islands. Subsidy levels are determined by the funding bodies and in many cases are set to fulfil national and local objectives.

It should also be borne in mind that for many journeys the ferry fare is only one element of the overall transport cost – bus, train, car or road haulage costs can often represent the largest proportion.

For many users of lifeline ferry services publicly funded concession schemes can reduce still further (in some cases to, or near to, zero) the cost of travel.

In any case ferry fares appear to be only a minor contributor to economic development and tourism compared to other economic impacts and measures. Examples of this are as follows:-

- **Rothsay Creamery:** the closure of the creamery in 2010 was brought about by the lack of supply from the island's own dairy farms. This led to the plant making a loss and the decision was made to close the plant with milk supplies being taken to the mainland for processing;
- **Tourist accommodation:** the majority of the islands served have a very limited supply of tourist accommodation. During the peak season it is not uncommon for all bed spaces to be occupied and for potential travellers to abandon plans to travel as a result of this. For the operator, who has space to accommodate more customers, this can result in lost business or, if he is lucky, can attract day trip custom (on the shorter routes) to fill the available space instead; and
- **Campervans in the Western Isles:** related to the shortage of accommodation and combined with the fares reductions, more and more campervans are being conveyed. The self sufficient nature of the campervan/mobile-home results in minimal economic benefit to the Western Isles as most food and fuel are conveyed from the mainland and expenditure on accommodation is nil.

With regards to the rationale for, and purpose of, the fares policy we believe that ALL of the items listed in (a) to (h) are important for the various stakeholders and to varying degrees. Whilst reducing the cost of providing ferry services and tackling vessel emissions is a current priority for Scottish Government, the cost of sending a child to school in Largs may be the priority for a low income household on Cumbrae. A fares policy has to strike a balance between the diverse and often conflicting needs of stakeholders.

In the following situation the diversity of principles (c) and (f) can be starkly presented:-

Scenario – the operator has a vessel which is capable of carrying 50 cars. He can sell tickets which are either £50 or £20. On day 1 he half fills the vessel by selling 25 tickets at £50 giving him income of £1250. On day 2 he fills the vessel by selling 50 tickets at £20 giving him an income of £1000.

If his fares policy had principle (f) underpinning it then he would have sold only £50 tickets, whereas, if he had principle (c) as his priority then he would sell only £20. If he had a choice of vessels, or was planning to purchase a new one, principle (f) would drive him to use/purchase a much smaller, less expensive, cheaper to run vessel. The opposite would be true if principle (c) applied.

Whilst the RET pilot (which has principles (c) and (d) as its main drivers) is still ongoing and a full analysis of the impacts is awaited it is impossible to comment on the economic effectiveness of the pilot and to understand what a policy of RET across the board may mean for the communities outwith the pilot area. If RET can be demonstrated to support the principles of (b) to (d) above and SG can find the resources to roll it out across the board then it should do so, however, we believe that a more sophisticated approach (which takes demand levels into account) than that currently adopted could assist with a policy which also supports principles (f) and (g). We believe that principle (a) would only be achievable with this uniform approach and that ALL communities should be supported fairly and equally with a consistent fares policy.

Whilst the unsophisticated application of RET is readily understood by users, the system does nothing to address the imbalance of demand which can vary within the day, across the week and by season of the year. Prior to the introduction of RET capacity issues were already present on the routes in the pilot. This demonstrated that there was a higher willingness to pay amongst some users and this should not be lost when considering principle (f).

As the existing provider of contracted services to the Northern, Clyde and Hebridean Isles we recognise that the services we operate are there for the benefit of the communities we serve and, within the resources permitted by government, we aim to ensure that the services provided are as effective and efficient as they can be within the limitations of an ageing fleet and restricted ports. With a fares policy which supports a greater degree of freedom for the operator, asset utilisation and efficiency can be increased further ensuring an improved use of public resources.

Within the restrictions of the current contracts limited pricing initiatives have already been successfully deployed in both the NFS and CHFS operations:-

- On a number of CalMac routes the sale of discounted tickets e.g. Day Savers is restricted and they are sold 'subject to availability' with advance purchase restricted to one day before travel. This approach allows the tickets to be sold to attract business when capacity exists and to be withdrawn from sale when capacity is utilised by higher yielding users; and
- NorthLink's successful 'Friends and Families' scheme is used outwith the peak season and has successfully increased demand at a time when capacity is available.

Even within a published fares structure, the ability to control the availability of certain ticket types at certain times of the day/week/year when demand is high can lead to increases in yield whilst maximising the vessel utilisation. Such an approach is effectively used on the Ardrossan-Brodick, Largs-Cumbrae Slip and Oban-Craignure services.

For principle (h) our experience is that a good way to reduce carbon in transport operations is to minimise waste, by making sure that assets are efficiently operated and able to use the most efficient technologies. Operators will seek to minimise their carbon footprint because it will save them money. As mentioned above, having a fares system which supports better utilisation is one way that this can be tackled.

If the government is serious about reducing carbon emissions from ferry transport there are two much more important actions it needs to take as follows:-

- It must extend the length of contracts well beyond 6 years to ensure operators have an environment in which they can confidently invest, and get a return on new technology and techniques; and
- It must support and enable new sources of funding (in the absence of government grant) to enable the upgrading of obsolete vessels in the CMAL fleet.

Consultation Question 12

To what extent should fares differentiate between islanders/residents of peninsular communities and other ferry users?

Comments:

See also our response to question 11.

Ferry fares should be fair for all users and should continue to seek to maintain or improve economic or social conditions. Long term sustainability of services is a prerequisite if these conditions are to be met and fares, timetables and service delivery all have a role to play in achieving this. (Only once the full impacts of the RET pilot are available will we know to what extent fares are affecting the social and economic conditions in the communities served.)

We believe that a fares system should recognise the needs of all users and operators should have flexibility within the contract to achieve this. It is not unreasonable to have some degree of differentiation with, for example, frequency of travel being one such determinant. Initial direction of travel may be another.

Along with the flexibility to determine how best services should be delivered the operator is best placed to ensure a positive climate for the long term delivery of services which will attract sustainable external and local investment.

It is in the operator's interest to grow the business and to be serving vibrant and dynamic communities which will, in turn, ensure the on-going need for effective and efficient services. In air transport (as well as hotels, car hire, coach and rail travel) most providers now utilise some very complex fares setting techniques which allow them to match supply with demand whilst at the same time growing their overall business and ensuring that income is growing quicker than costs.

To provide a platform for such initiatives to stand the best possible chance of success, the establishment of contract terms which are greater than 6 years will help provide stability for users and will encourage operators to invest in services ensuring the best possible use of public resources.

Consultation Question 13

Should there be one fares policy across all of the supported Scottish ferry routes or should there be a different fares policy dependant on the need(s) of the community?

one fares policy ☐

different fares policies ☐

Response: N/A

See also our responses to Q11 and Q12.

DML believes that fares policy should be delegated to the operator wherever possible. Operators are best placed to balance supply and demand as they understand the needs of the communities they serve. Having the flexibility within a contract to set fares and charges accordingly ensures the best use of both assets and the increasingly limited public resources.

Consultation Question 14

Do you agree that there should be a consistent and fair way of deciding what ferry services should be funded?

Yes ☐

No ☐

Response: Yes

Comments:

In the period to 2022 (and beyond) funding for new vessels and improved facilities has to be consistent if confidence in the communities served is to be maintained – a confidence which engenders a climate for investment in, and by, the communities.

DML believes that a fair system for deciding 'who gets what' is essential. All the communities served deserve a fair share of the funding in the longer term, however, it has to be recognised that the phased approach required for the disposal of new vessels to make way for new ones can take 30 to 40 years per cycle. The same is true for port facilities.

Services should be funded and provided on the basis of what's needed and not what's demanded.

As demonstrated in Question 1, the high level of investment in the Northern Isles services has seen passenger demand grow by an average of 3% per annum in the last 6 years. (This has been achieved against a backdrop of cheaper air fares for island residents.) Confidence in the continued provision of high quality, reliable services has given rise to the following:-

- The opening of the Shetland Museum;
- The growth of Lerwick as a major port for white fish landings (2nd only to Peterhead);
- The development of the former RAF base at Saxa Vord in Unst into a holiday 'resort';
- A thriving 'premium brand' agriculture sector in Orkney; and
- The development of world class archaeological and historical sites.

The provision of more frequent services with greater capacity on the west coast services has resulted in a similar picture.

- The Isle of Arran is now an all year round destination thanks to improving facilities and a more frequent winter service;

- Growth in the production of whisky in Islay supported by increased capacity on the route;
- School children on Gigha and Lismore are now able to go home each night rather than having to board during the week;
- A dedicated overnight service for freight travelling to and from Lewis;
- The provision of roll-on roll-off services to the Small Isles; and
- The establishment of a Sabhal Mòr Ostaig campus adjacent to the ferry terminal in Armadale.

The uncertainty as to what will happen when the RET pilot is over is (anecdotally) affecting business confidence in the longer term. While the early indications suggest that the scheme has had a positive impact on the economies of the islands served, an element of 'holding back' with developments is reported pending the ultimate decision by government.

The islands around Scotland have become increasingly accessible over the years and the current level of service should, on the whole, be seen as a platform on which to grow. Only with continued and sustained investment by government will the confidence gained over the years assist with the maintaining and improving of the social and economic conditions of all the communities served.

Consultation Question 15

Do you agree that the ferry service should be designed to meet the most important needs of the community?

Yes ☐

No ☐

Response: Yes in part

Comments:

A ferry service should be capable of accommodating the most important needs of the community, however, communities are not homogeneous and hence care must be taken to balance the often conflicting needs within a community.

By way of example, the optimum timetable for farmers and freight hauliers may well conflict with that of islanders and in turn that of tourists. When changes to the Oban-Craignure timetable to satisfy the needs of farmers to travel to the livestock auction market in Stirling and return home the same day were implemented, there was outcry from other user groups. The outcome was that an additional sailing was added to the timetable to meet the diverse needs of the users.

Similarly, where car deck demand exceeds supply care needs to be taken to ensure the demands of one sector (e.g. freight) through block bookings does not block out the potential for tourist cars & coaches to be carried.

There is, as a minimum, a need to consider summer and winter separately. We believe this to be an essential step owing to the marked differences in community needs; however, we question whether or not monthly/weekly variations may also be required.

As a further example, the departure time of the Aberdeen to Kirkwall service attracts a lot of comment – islanders prefer the later time of arrival on the island (to allow them maximum time on the mainland) whereas tourists prefer to travel in daylight and arrive earlier. Whilst the summer and winter mix of islanders/tourist varies markedly, the same is also true within a summer week – demand from tourists is greater during the week than it is at the weekend.

In cases such as this the operator is best placed to understand the most important needs of the community and can set the timetable for the service accordingly. The flexibility to do this needs to be reflected in the service specification.

Where there are strong conflicting needs within a community e.g. hauliers wishing to move goods at night time but passengers not wishing to travel at night, the operator has to be able to react to ensure that the service provision is adequate enough to satisfy both these needs and not just to satisfy one set of needs to the detriment of the other.

In all of the above 'needs' and 'desires' have to be carefully managed whilst also ensuring that the service is designed to be responsive to the most important needs of the community as these can change over time.

Consultation Question 16

Is our assessment correct for your community? Please tell us what your community needs are and whether our assessment is right.

Comments:

DML feels it would be inappropriate to answer this question which is better left to contributors from the various communities served.

Consultation Question 17

Do you agree that investment should be prioritised to those areas that have the most potential to contribute to Scotland's growth?

Yes ☐

No ☐

Response: No (qualified)

Comments:

DML believes that all communities should be supported but with long-term investment carefully tailored to support economic development and always to be responsive to communities' changing needs.

The SG's objective of creating *'opportunities for all of Scotland to flourish, through increasing sustainable growth'* is, we believe, correct to identify ALL and not to exclude any communities from the opportunity, likewise the stated objective to *"to improve the level, quality and cost-effectiveness of services to remote island and rural communities."*

Investment planning for the longer term is vital to ensure that the targeting of investment is as effective as it can be. With the development of the first ro-ro services investment was targeted at the higher volume routes and larger communities first with the smaller communities and secondary routes to islands thereafter. The lightly populated remote communities within the Small Isles were the last group of islands in the CHFS network to receive a ro-ro service.

Prioritising and phasing of investment should support government strategy with the areas with the greatest need coming ahead of (but not in place of) the best performing areas.

Within the network of services investment in one area can often generate 'downstream' benefits in another e.g. a new vessel for community 'A' can, through cascading, provide benefits for community 'B', and possibly community 'C'. This is most easily achievable within the 'single bundle'.

On the Isle of Skye, since the 1990's the main crossing between the island and the mainland has seen continual and rapid improvements – 2 larger vessels on the route in the early nineties, 24 hour operation shortly thereafter, the replacement of the ferries with a toll bridge and finally the removal of the tolls. The eventual cascade of the larger vessels allowed direct enhancements to be made on a further 2 routes and, indirectly, on another 2 routes.

While supporting the continued social and economic wellbeing of fragile island and peninsular communities the primary focus of financial support should be on the future and scope for growth and decreasing (not increasing) dependency on State financial support of all forms.

With reducing State support in mind we believe that the anomalous situation, whereby the Northern Isles are served by two subsidised and competing freight operators (NorthLink and Streamline), should be reviewed. The parallel subsidy

arrangement is inefficient and we believe that the operator of the Northern Isles passenger and freight contract is well placed to adequately meet all of the import and export freight needs of Orkney and Shetland.

Even where islands have a very limited potential to perform better, investment will still be needed on a longer term, regular basis to just 'stand still' and ensure that the provision of a new vessel and facilities are at least catered for when the existing 'kit' becomes time expired.

Consultation Question 18

Do you think that the responsibility for ferries provision should be more consistent across Scotland?

Yes ☐

No ☐

Response: Yes

Comments

We believe this would ensure a more efficient and effective approach to the provision, operation and funding of ferry services across the country and avoid it being influenced (positively or negatively) by local politics. However, within a common approach a local authority (or Regional Transport Partnership - RTP) could still choose to fund the incremental cost of additional services, longer hours, etc. if they wished to do so. In Shetland, for example, the Islands Council would still have had the freedom to remove the fares on Bluemull Sound.

Two further examples of where this approach was previously adopted were as follows:-

- Sconser – Raasay: funding from the Rural Transport Initiative was used to provide an extra return crossing on the route on a Saturday, over and above the core timetable, to suit islander's shopping in Skye; and
- Largs – Cumbrae: North Ayrshire Council/Strathclyde Passenger Transport (SPT) paid for a late Friday night run during the winter period.

For the ferries which are provided/supported by local authorities as 'non-core' services e.g. Port Askaig-Jura, Corran-Ardgour and Laga-Tobermory-Drimnin the delivery of the services would be better placed within a ferry operating company. Not only would the routes benefit from being part of the larger network, the day-to-day responsibility for them 'sits better' with a ferry operator than it does with the local authority.

For completeness sake, we believe that this question should address not only responsibility for ferries provision but ports as well. Where the state has an interest in the provision of ports (CMAL, trust ports, local authority ports) then a more consistent arrangement would be to have a single state body responsible for all of them. Like the provision of ferry services this 'large bundle' approach would ensure a consistency in delivery, maximise the economies of scale and provide the most efficient use of public resources.

Consultation Question 19

Do you agree that it would be wrong for all ferry services to be the responsibility of the Scottish Government?

Yes ☐

No ☐

Response: No

Comments:

DML does not have a particularly strong view on the matter of who should be responsible for ferry services. Ultimately SG will have responsibility for all of the publicly funded services anyway, thereafter, we believe that the effective and efficient delivery of services to the communities we serve is what matters most, remembering that the services are only there for the benefit of the communities.

We believe this is most effectively achieved by services which are well funded, have the flexibility to adjust to the needs of the users and are delivered as 2 large bundles (CHFS and NFS).

Having a single agency responsible for ferry services is desirable as the economies of scale reduce the administration and support required to manage this responsibility.

A few years ago the management of the trunk road network was removed from local authority control and has been managed successfully from the centre since then. This has ensured a more efficient and consistent approach to service provision. A similar argument can be run for ferry services which are essentially 'floating bridges' on the roads network – 'bridges' which connect communities which are not 'local' to one another in much the same way that the trunk road network connects communities.

For the roads which have remained under the control of LA's, central government still has a vital role to play in that it sets the policies and standards for the entire roads network ensuring a uniform provision across the UK.

As with question 18, local authorities and RTP's would still have the freedom to fund additional services or reduce fares as they wished (always subject to rules governing State Aid).

Consultation Question 20

Do you agree that the Scottish Government should become responsible for all ferry services providing necessary transport links for island communities to access the mainland and Local Authorities or Regional Transport Partnerships should be responsible for the provision of all others?.

Yes ☐

No ☐

Response: No

Comments:

See response to Q19.

We believe the most effective way to meet the needs of the ferry users is to have the services delivered by way of the 2 bundles. See response to Q4 for a list of the benefits this brings.

With the appropriate levels of funding and the flexibility to respond to the changing needs of the communities served the contracted operators are best placed to provide this if responsibility for each bundle sits with a single body. This could be a different body for each of the 2 bundles, however, having a single body responsible for everything allows for a more consistent approach to be adopted.

Consultation Question 21

Question 20 assumes that where an island is attached to the mainland via a bridge, it is treated as the mainland. Do you agree this is the correct way forward?

Yes ☐

No ☐

Response: No

Comments:

Our interpretation of this question is that the following DML routes would be treated separately:-

- Mallaig-Armadale;
- Tarbert-Portavadie;
- Sound of Harris;
- Sound of Barra;
- Fionnphort-Iona; and
- Gourock-Dunoon.

It is unclear how the following services which are provided as part of the island/mainland link could be treated in the future:-

- Port Askaig-Colonsay;
- Coll-Tiree;
- Castlebay-Lochboisdale;
- Lochmaddy-Tarbert; and
- Small Isles inter island services.

DML believes that all of the aforementioned routes are best provided as part of the 'single bundle' of lifeline services as they are now – see Q4 for our reasons. Where a subsidy is currently provided this is recognition of the lifeline status of a route.

For most ferry routes the mainland provides islanders with access to a greater range of services than exists within their own community e.g. health, education, shops etc., however, in the case of the Tobermory-Kilchoan route Tobermory is

the most readily accessible community for some of the Morvern Peninsula population and is assumed to take on the role of the mainland.

Consultation Question 22

Do you agree that the provision of ferry services would be better placed within the remit of Local Government?

Yes ☐

No ☐

Response: No

Comments:

Our arguments for maintaining the bundles equally apply here.

By its nature the Scottish Ferry network crosses the bounds of 8 local authorities. This implies that 8 distinct bodies would have a role to play in the provision of services and we do not believe this is conducive to a consistent delivery of effective and efficient services to users. Many of the advantages of the large bundle would be lost.

Such a scenario would be akin to the devolvement of the responsibilities for trunk roads back to local authority control.

The operator responsible for the provision of lifeline ferry services needs to have the necessary competencies required and have sufficient resources at their disposal to match the large scale benefits which underpin the current bundles e.g. breakdown cover, ability to move staff across the area of operation, a consistent marketing offering, central admin function etc.

The revised form of local government funding is already giving problems as the central funds previously used for harbour works is now included in the general funding to local authorities and hence lost from its previous 'ring fenced' protection which ensured the funds were spent in this area. It is therefore probable that as the years progress the need for central expenditure on harbour projects will increase as LAs do not invest and the 'fix' costs get beyond the ability of LAs to fund.

DML believes there is a role to be played by local authorities (through the RTP's), however, that is best placed in ensuring that service specifications reflect the basic needs of their communities and, if desired, that the incremental costs of enhanced service levels or reduced fares can be funded by them. Within communities there are often diverse and conflicting needs and the LA's are well placed to assist in the prioritisation of aspirations.

Where they are working well the RTPs ensure that the voices of local authorities, local people and local organizations are strong in monitoring and shaping future ferry services but without the complexities that flow from local political control.

Consultation Question 23

Do you agree that Regional Transport Partnerships could play a key role in the procurement of ferry services?

Yes ☐

No ☐

Response: Yes, conditional

Comments:

Our arguments against de-bundling equally apply here.

Consultation Question 24

How should the responsibility be split between Local Authorities and Regional Transport Partnerships?

Comments: N/A

Consultation Question 25

Do you agree that the provision of ferry services should continue to be split between central and local government?

Yes ☐

No ☐

Response: Yes

Comments:

Whilst the responsibility for the provision of services may be split between central and local government, what is absolutely required is the delivery of safe, reliable, effective and efficient services to the users and this can only be achieved by operators who have the means and capability to do so.

Well funded operations utilising a modern fleet of vessels serving modern ports and underpinned by the many benefits of the bundles are key to the maintaining or improving of social or economic conditions on the islands.

As has been illustrated earlier, such bundles as exist at present have been proven over time, however, whilst there is a logic to local authorities retaining responsibility for intra-island services (e.g. within Orkney & Shetland) there is a loss of economy of scale given the similar nature of vessel types and the same need for technical management, crew management, ISM, ticketing/reservations, etc - when compared with CHFS. Given that intra-island services are largely funded by the State it can be argued that for economy of service provision, scope for backup cover, etc - where possible all similar services should be funded, managed and operated from a single entity.

Consultation Question 26

If a continuation of a mixed responsibility role is preferable going forward (i.e. responsibility continues to be split between Central and Local Government), how should the split be determined?

Comments:

See response to Q25

Consultation Question 27

Should there be a central provision of procurement expertise? For example, Local Authorities/RTPS could determine what services/vessels they wanted to provide and specify those services/vessels, with a central procurement team purchasing them on their behalf.

Yes ☐

No ☐

Response: Yes - in part

Comments:

See also our responses to Q23 and Q25.

The process of procurement needs to be considered in three parts:-

- The procurement of ports and vessels;
- The project management of delivery of major infrastructure projects; and
- The procurement of services.

Ports and Vessels

Ports and vessels are long term procurements – typically up to 30 years for vessels and 50 to 60 years for ports – and it is essential that they are fit for purpose both now and for the foreseeable future. As far as is possible within the time limits of tendered services, the vessel and port operators are well placed to ensure that the needs of the users (passenger/driver facilities, speed, 'network' fit etc.) are reflected in the service specifications. The asset owners are best placed to ensure that longer term strategic objectives (e.g. reduced emissions, minimum manning levels, reduction in through life costs etc.) are reflected in specifications which capture up-to-date technologies and allow for the most efficient use of the asset by the operator. If a services contract is to specify, for example, emissions targets then it is only fair to assume that an operator should have an input to aspects of vessel design (or modification) that have a bearing on that requirement.

The shallow waters at the ports in the west coast of Scotland, resulting from the centuries old location of many ports, has resulted in vessels which are unique (see response to Q4) and which are costly to procure and operate. The need for a modern fleet of vessels which are able to provide effective and efficient services and which are 'not unique', requires a long term procurement strategy which will deliver facilities that are free of draft restrictions and will gradually allow the uniqueness of the CMAL/CalMac fleet to be a thing of the past.

This can only be achieved through long term and sustained investment by a competent procurement body. As facilities are developed and the need for

'specialised' vessels lessens, the opportunity for an operator to utilise more 'standard' vessels, either through charter or purchase, is increased considerably. This should be reflected in reduced cost to government.

Project Management – delivery of major infrastructure projects

The ports used in the provision of lifeline ferry services are a vital part of the service delivery and major works to these facilities requires project management skills which allow the business of ferry service provision and construction/modification to take place simultaneously. DML believes that efficient project management for major projects sits best with the operator as the operator is well placed to juggle the often conflicting needs of the engineers/builders with that of the essential ferry services. We also believe that this approach (i.e. combining works and operational management) is the most efficient and avoids any duplication of effort which will inevitably drive up costs.

Up to 1 October 2006 Caledonian MacBrayne 'vertically integrated' projects in such a way ensuring that services continued to be delivered as effectively as possible. Even where linkspans were out of commission for the replacement of essential parts (the wires) disruption was minimal and 'workarounds' such as a passenger only service or a hoist loading service for vehicles were provided. Medium/long term closures of ports were avoided, recognition of the lifeline nature of the services being provided.

Services

Services are currently procured for a maximum period of 6 years - considerably less than the 10 year contracts in Norway (EFTA - non EU) and the 12 year contracts found in parts of Greece, Denmark and the Netherlands.

The current CHFS and NFS contracts are very tightly specified and leave little or no room for innovation by the operator. This is in contrast to those found in Greece, for example, where a specification may list the required frequency (sailings per week), vessel capacity (passenger numbers and lane metres), relief arrangements (the operator has to specify these at the outset) and fares (a maximum is specified for certain ticket types).

The specification for services should reflect the needs of the user and the desired outputs of the funders and be flexible enough to allow the operator to determine how best services should be delivered.

As with the procurement of vessels and ports the essential element in the procurement of ferry services for Scotland is the need for competence throughout the process – this may be at the state level for networks which span 2 or more local authorities (CHFS, NFS) or at the local authority level for LA wholly contained networks (SIC, OIC). Where local competence can be demonstrated then procurement can remain at that level i.e. with the LA. LA's

are already skilled at procuring public services (e.g. bus and air services) and the procuring of ferry services would be an extension to this.

At the state level, the competent authority is the Procurement Directorate – supported when required by specialist advisors.

Consultation Question 28:

(a) Do you think that recommendations A – G (see below) should be implemented now?

Yes ☐

No ☐

We believe that all good operators would wish to provide a service which satisfies the needs and expectations of as many users as possible. A significant proportion of the operator's potential market consists of Persons with Reduced Mobility (PRM's) and others with less obvious sensory impairments and it is in the operator's interest to ensure that barriers to travel are minimised and the services provided are accessible and open to all. A service which enables the needs of PRM's to be met will also benefit other users who may temporarily have restricted movement – those travelling with a pram or bags of shopping, for example.

By maximising the attractiveness and accessibility of the product for all, operators will be able to offer a higher quality service which will be attractive to a greater number of users. This in turn will benefit the communities served through greater social inclusion and increased opportunities to travel. Government will also benefit as a direct result of increasing patronage (income).

Our comments on items A – G are as follows:-

- A. A reasonable aspiration that will benefit from government's sustained, long-term investment in ports and vessels and provides the greatest (and most affordable) opportunity for the physical barriers to travel to be addressed during the design phase. The challenging aspects of the marine environment present practical difficulties which need to be recognised in many cases: ships are not static features like parked trains, buses and planes; designs of access systems need to accommodate ship movements at the berth as well as tidal variations; simply applying blanket minimum gradient requirements for ramps is not practical; slipway gradients are determined to allow ship operation; other means of management of pedestrian access need to be managed.
- B. In place currently although continued refresh and improvement is necessary.
- C. Generally in place but with room for continued improvement.
- D. In place for NFS and currently being updated for CHFS. New CalMac web site will have CRM information more clearly available.
- E. Agreed.
- F. In place but with room for improvement and always mindful of Health & Safety and child/vulnerable person protection requirements.

G. Agreed and already in place where practical. Always room for improvement bearing in mind security requirements.

The aged (and ageing) profile of the Scottish ferry fleet and associated port infrastructure is not conducive to a service provision which is evolving to meet the needs of PRM's. Where investment has been made the removal of barriers to travel have been reduced e.g. the provision of lifts ashore and afloat to ease access for PRMs (Oban, Wemyss Bay, Rothesay, MV Finlaggan etc.) A programme of continued investment is the best way to further reduce the barriers to travel.

(b) When tendering do you think these recommendations should be included in any future tender requirements?

Yes ☐ No ☐

Response: Yes, in part

Comments:

ITTs should not be over prescriptive but should seek to ensure that what is already provided continues to be provided and built upon where and when possible. There is already a requirement for tenderers to state their customer care intentions which should include a communications plan and assistance arrangements for PRM's and others. This should be weighted more highly in the quality assessment criteria. All good ferry operators will do what they can, when and where they can. To include it as a prescriptive requirement in an ITT (Invitation To Tender) could result in an unexpected significant additional cost and/or adverse impact on other passengers/services.

Tenders need to allow bidders to propose their own methods for complying with legislation and for meeting criteria set by approved guidance.

(c) Are there any of these recommendations that you consider to be of particular importance?

A. The design of new ferries and harbour/ shore infrastructure should take full account of the DPTAC guidance, for example the provision of handrails, ramps and assistance telephones. Consideration where possible should also be given to their use in smaller ferries and ports. ☐

B. The need for regular, recognised disability awareness training is viewed as a relatively cheap and quick solution in helping to reduce many of the barriers faced Good customer care and assistance by staff is often viewed as the key factor when deciding if ferry travel is possible, practicable or comfortable.



C. Port and ship operators need to plan their communication and information dissemination to take full recognition of PRMs. Audio, visual or other disabilities need to be considered, especially when considering passenger safety.



D. Accessibility information should be readily accessible to PRMs in order to aid journey planning. Where possible websites should be improved to take recognition of the needs of PRMs and make it easier to access this information.



E. Disabled Persons Assistance policies should be developed by all ferry and port operators as a matter of best practice.



F. A policy for those passengers which may require additional assistance which fall outside the general categorisation of PRM, for example people travelling with small children, or heavy / awkward luggage or baggage should be encouraged.



G. Provision where appropriate of some form of left luggage facility which would aid those passengers that are waiting onward travel connections.



Response: No

Comments:

All of the items mentioned are important and already feature to varying degrees in the provision of existing services by DML (see response to (a)). As services continue to develop the items listed in A – G are fundamental to the provision of high quality, customer focused services for everyone especially when supported with new and improved vessels and shore facilities.

(d) Are there other issues that should be addressed?

Comments:

We believe the following issues should be addressed by the Review:-

- The National Entitlement Card should be adopted for all ferry travel in Scotland and should be the only such arrangement available. The NEC is provided by SG and is the card used by all LA's within Scotland;

- Across the Scottish ferry routes there is a varying degree of discount arrangements for disabled vehicles. A single procurement strategy would help standardise this;
- DML believes that resources which are currently used to provide discounted travel for vehicles should be focused on providing an improved service with fewer barriers to travel for everyone. We believe this will help open up the services to an even greater number of PRM's;
- As highlighted in the Consultation Document, the main problem exists with access to the small ferry network operating from 1:8 slipways. To upgrade the network to replace 1:8 slipways to provide PRM access within 1:20 would cost in excess of £10 million per slip. Gradients shallower than 1:8 will not work with "landing craft" type vessels as the ship would be aground before the ramp is clear of the water. The only feasible solution would be to replace slipways with linkspans;
- More representation from the ferry industry in disability groups would be to the benefit of both PRM's and ferry owners/operators as a greater understanding of the challenges faced by both parties would ultimately provide a stronger partnership for dealing with some of the particularly challenging aspects posed by the marine environment;
- DpTAC (Department for Transport Advisory Committee) guidance review needs to be put back on track; and
- Greater investment in new vessels and port facilities is the most effective way to deal with barriers to travel as modifying existing vessels/facilities to comply with legislation can be prohibitively expensive (or impossible in some cases). The aim of this Review should be to set in train a programme of investment which will lead to a significant reduction in the barriers to travel.

Consultation Question 29:

(a) Do you think that an Accessibility Improvement Fund should be set up?

Yes ☐

No ☐

Response: Yes, but with new money not currently available for Ferries

Comments:

See also our response to Q28.

Most ports are DDA (Disability Discrimination Act) compliant but further work and investment is required to ensure that all are compliant.

New ship designs will take DDA and current best practice into account. Existing ships are difficult to modify with confined spaces around stairwells, for example, preventing gradients to be changed whilst on the larger vessels, lifts where fitted may only serve a limited number of decks. These can be changed retrospectively but are unlikely to allow access to open upper decks.

The 'Access for All' scheme which is funded by The Department for Transport and managed by Transport Scotland, has enabled First ScotRail to invest £2m over the last 3 years in station improvements (automatic doors, variable height counters, etc.). First ScotRail have appointed a dedicated full time manager with responsibilities for DDA and a total of £41 million will be invested by First ScotRail by 2014 to specifically improve disabled access at stations across Scotland.

We believe such a scheme for the Scottish ferry network is desirable and necessary.

(b)How would this be funded?

Comments:

See our response to (a). Access to the same central resources which are available for the railways would provide a more equitable use of the available funds.

(c) Who would administer this fund?

Comments:

The fund should be maintained by Transport Scotland and be accessible to all asset owners. Operators have a prime role to play in identifying where the funding should be spent and this should be done in conjunction with the vessel and port owners (e.g. CMAL, port authorities and local authorities).

Consultation Question 30:

(a) Do you think that an information system indicating the degree of accessibility would be useful?

Yes ☐

No ☐

Response: Yes

Comments:

We believe that this is a desirable output of any transport system and is one that benefits all users.

The new CalMac website under development and due for launch in October 2010 will include more detailed information on ports and ships including detailed accessibility information.

The NorthLink web-site has details of facilities for PRMs and also a specific set of FAQs (Frequently Asked Questions).

The Accessibility Assessment undertaken identified that ease of accessibility for users is about more than just the physical features of a port/vessel - staff have a key role to play too - any system which is used needs to be the responsibility of the operator. Feedback from users can be gathered by the operators and used to help the development of PRM friendly services.

With sustained investment in new and improved vessels and ports, degrees of accessibility should become less of an issue for everyone as barriers are designed out. This should be the long term aim for government funded services.

(b) Are there any particular aspects you would like to see considered?

Comments:

We believe the following should be considered:-

- general description of the vessel/port with info on available facilities;
- the role staff will play from the initial enquiry through to the actual journey;
- any specific restrictions should be highlighted; and

- contact details should be available for customers who need special assistance over and above usual accessibility problems.

We also believe that the www.transportdirect.info website should be improved to cover the needs of disabled travellers as well as providing the same level of information on ferry services as it does on other forms of transport.

Consultation Question 31

How could the reduction of CO₂ emissions from ferries be delivered to assist in meeting the potential emissions reductions set out in the Climate Change Delivery Plan?

Comments:

For the period of this Review the greatest scope for reducing CO₂ emissions is the need to more closely match supply and demand and make more efficient use of capacity supplied. The contracts need to allow the operator scope to factor this in when deciding timetables.

In the longer term the main areas to address include fuel and propulsion types, however, sight should not be lost of the fact that these are lifeline services which are being considered and the need to reduce emissions should be offset against the needs of the communities served.

The fuel type attracting the greatest interest at the current time is LNG – the cleanest of all fossil fuels. Not only does it have the benefit of reducing CO₂ emissions (the combustion of natural gas emits 20 to 25% less CO₂ than oil) it is generally cheaper than intermediate fuel oil or marine gas oil, however, the supply and distribution network has been slow to develop and the UK availability is almost non-existent. In Norway, more and more vessels are being built to run on LNG or are being converted to use it – necessitating the development of a distribution network for the fuel along the coast. (LNG has the added benefit of being virtually SO₂ free and with NO_x emissions which are 20% that of oil.)

As a medium term aspiration i.e. within the period of this review, we would propose that LNG as a fuel source for the Scottish ferry network is fully evaluated – not only from an environmental perspective but also on the grounds of potentially reducing costs of operation. Whilst up-front costs will be considerable there are longer term benefits to be had.

We welcome the examination of alternative fuel types which are being considered by CMAL in the Small Ferries Project. Advances in technology are moving rapidly and we believe that by close cooperation with vessel owners during the design/development phase of vessels, operators will have at their disposal vessels which are fit for purpose and which are best placed to meet the challenges of tomorrow.

Technology advances quickly over the lifetime of a ship so the ship can only be up to date at time of build. New vessels provide the greatest opportunity for emission reduction features to be built in at the design stage. The Environment Report acknowledges that *"as the average age of the fleet continues to rise, overall fuel efficiency lowers"* and that *"at a broader scale it will require*

internationally co-ordinated action if climate change mitigation targets are to be met”.

The priority for SG should be the continued and long-term investment in the ferry fleets through a sustained program of new builds utilising proven new technologies. DML believes this is the only way that the reductions set out in the Climate Change Delivery Plan can be achieved.

There is potential for using the switch to a green fuel on ferries, as a means to overcome the logistical and safe handling issues that would otherwise be encountered in introducing a new fuel on islands. In this way Islands could have early access to new fuel sources. However changes may be required to enable this. For example, currently no bio content is allowed in marine fuel (ISO standard).

Consultation Question 32

Operators would be likely to appreciate the fuel-efficiency benefits of such a measure. Would operators be willing to implement such a measure on a voluntary basis? If not, can they provide suggestions for alternate methods of delivering emissions reductions?

Comments:

Operators already do manage fuel efficiency on a voluntary basis as far as they can within the constraints of the particular Public Service Contract (PSC) – prescriptive timetables, performance regime. Current contracts put onus on volume usage on the operator. New PSCs should allow the operator flexibility in scheduling to better tailor supply with demand and, further, should incentivise the operator to reduce fuel consumed.

Timetables need to take account of the optimum operating performance of the ships. For multi-engine vessels the scope for setting timetables which are best suited to the needs of users is greatly enhanced. On the NorthLink services to Kirkwall/Lerwick the vessels can operate on either one, two, three or all four engines – single engine operation requiring one quarter of the fuel used (and hence one quarter of the emissions) when compared to four engine operation. The scope for this is greatly reduced on the vessels serving the CHFS network as all vessels are twin-engine.

PSCs should specify a minimum core timetable to be provided with the operator free to input additional sailings on a demand management basis.

It should be borne in mind that what may appear to be attractive to an operator/government may not be attractive to the service user. Reducing speed to give lower fuel consumption may give rise to other costs e.g. longer operating days requiring increased crewing levels and missed connections resulting in increased costs of travel for customers.

Consultation Question 33

Would passengers support longer journey times as part of a CO₂ emissions reduction programme? If not, can they provide suggestions for alternate methods of delivering CO₂ reductions from ferries?

Yes ☐

No ☐

Comments: No

See response to Q32.

We believe it to be unlikely that passengers will accept longer journey times - indeed they often ask us for faster journey times. The government's objectives recognise that reductions in overall journey times are a desirable feature of all modern transport systems.

Longer journey times may lead to longer operating days for crews (at increased cost), reduced frequency/capacity (may not always be an issue when demand is low) and missed rail/bus connections.

The practical solution, at least in the short/medium term, is as stated earlier to better match frequency with demand and increase the capacity utilisation on each ship especially during the times of the year when demand is low. With a more flexible approach to the service specification operators are best placed to identify when such opportunities are likely to present themselves.

As already stated, the priority for SG should be the continued and long-term investment in the ferry fleets through a sustained program of new builds utilising new technology. DML believes this is the only way that the reductions set out in the Climate Change Delivery Plan can be achieved.

Annex 1

UNIQUENESS OF THE CALEDONIAN MACBRAYNE FLEET

A paper prepared by the Economic Advice and Statistics Division of the Scottish Executive Development Department in June 2001 on the basis of work carried out by Saltire Management Limited (Marine and Operations Consultancy).

**Scottish Executive Enterprise, Transport and Lifelong Learning Department:
September 2005**

FOREWORD

This paper was prepared in 2001 for the Maritime Transport Division of the Scottish Executive (which was then located in the Scottish Executive Development Department) by that Department's Economic Advice and Statistics Division on the basis of a research report prepared by Saltire Management Limited (Marine and Operations Consultancy). The paper was prepared as part of the development of the Executive's proposals for the tendering of the Clyde and Hebrides ferry services and fed into the Executive's consideration of the case for tendering the Clyde and Hebrides network as a single unit. The paper was not prepared with publication in mind. However, in the light of recent interest in this subject, the paper is now being published through the Scottish Executive website and by lodging it in the Scottish Parliament Information Centre.

Scottish Executive Enterprise, Transport and Lifelong Learning Department

Maritime Transport Division

September 2005

INTRODUCTION

1. The purpose of this paper is to examine the extent to which the existing Caledonian MacBrayne fleet can be said to be uniquely fit for purpose.

2. The fleet of vessels that Caledonian MacBrayne use to serve the Western Isles of Scotland is made up of 27 vessels serving 39 routes and can usefully be split into four principal designs of ship. These are as follows:

- The "Closed Car Deck" RO - RO Ferry (3 vessels)
- The Major "Open Car Deck" RO - RO Ferry (5 vessels)
- The "Double Ended" Open Deck RO - RO Ferry (15 vessels)
- The "Side / Rear" loading Ferry (4 vessels)

The paper will deal with each of these classes of vessel in turn.

Closed Car Deck RO - RO Ferries

3. Caledonian MacBrayne operates both "open" and "closed" deck RO - RO ferries. The "closed" deck ferries are similar to car ferries around the world. They have bow and stern doors and a fully enclosed car deck. The vessels built for CalMac however are built to a specific set of dimensions allowing a maximum length of 100 metres, a maximum beam of 15.8 metres and 3.2 metres maximum draught. These dimensions have been chosen in order to allow the company the flexibility to deploy any of these vessels to any port in the network. Blasting the bedrock or dredging could increase the depths of the berths at the ports, but this would be expensive and once the new depths had been achieved they would require regular dredging in order to be kept clear.

4. Vessels of the size of Caledonian MacBrayne's closed deck RO - RO ferries would normally be built with a draft of around 5 metres as the 3.2 metre draft limit results in vessels that are relatively expensive to run in terms of fuel efficiency. This increased fuel cost reduces the likelihood that other operators would have built vessels to similar dimensions. The routes, on which Caledonian MacBrayne operate however, are characterised by shallow ports, where the depth of water at the ferry berth is frequently less than 4 metres. A vessel with a nominal draft of 5 metres could operate from the same ports as the Caledonian MacBrayne vessels providing it was not fully loaded. This would however be a very inefficient way to operate.

5. On the Ullapool to Stornoway route Caledonian MacBrayne operate the MV Isle of Lewis. This vessel is unique within the major units of the CalMac fleet in that she has a draught in excess of 3.2 metres, a length in excess of 100 metres and a beam of more than 15.8 metres. She cannot operate elsewhere on the network other than on the Ullapool - Stornoway route. The vessel has been constructed to these dimensions because the route on which she operates is less restricted than for the other vessels, with a minimum depth of 7 metres. As it is common policy to allow clearance under such large vessels of one metre the route could be operated by any vessel with a draft of up to 6metres.

6. It is necessary to carry certain goods such as petroleum spirit, fertilisers and whisky to and from the Islands. The transport of these goods has to be carried out in accordance with the requirements of the IMDG code. The code classifies dangerous goods according to type and stowage requirements. Restrictions are placed on the categories and mix of goods that may be carried by passenger ships and the numbers of passengers who may be accommodated at the same time. It is an international regulatory requirement that some of these goods be carried on the open deck rather than in an enclosed car deck. As the Islanders are reliant on the import and export of traffic covered by these regulations it has been necessary to adapt the service to allow their carriage. The result has been a unique hybrid, the major "open decked RO - RO ferry". These vessels are able to carry a mix of passengers and dangerous goods that would be impossible on the closed deck vessels of the fleet.

Open Decked RO - RO ferry

7. The open decked RO - RO vessels operated by Caledonian MacBrayne are limited to the same maximum dimensions as the closed deck vessels for the same reasons. They are however unable to accommodate the same number of passengers as the passenger accommodation is curtailed by the constructional restraints imposed by the requirement to leave the car deck open.

8. The open car deck prevents the possibility of dangerous gases building up on the vessel. This has allowed these vessels to be granted an exemption, by the MCA, from the regulations restricting the number of passengers carried and allows them to operate an economic service while carrying restricted substances. It is a condition of this exemption that no suitable cargo service exists. If a freight service was introduced on these routes it is likely that this exemption would be withdrawn. In that case a more "traditional" RO - RO ferry could operate the routes providing it has a shallow enough draft. It is however, unlikely that a vessel could in any case be found with a draught of 3.2 metres or less.

Alternative Delivery options for Dangerous Goods

9. If an alternative freight service could be operated to the Islands it might prove possible to replace the "open decked" Ro - Ro's with closed deck vessels (albeit still limited to the same maximum dimensions). With this in mind an independent shipping consultant studied the practicality of operating either a single freight vessel on a circuit of the Islands or a freight only sailing by the regular passenger vessel once or twice a week.

10. From a purely logistical point of view it would be possible to operate a freight service that served all of the Islands over the course of a week. However, the consultant identified difficulties with this approach. When dangerous goods are carried in road vehicles on ferries it is a requirement that the driver of the vehicle travels with the load. This is because the driver is trained in the appropriate emergency procedures for his cargo. Some loads are however considered to be at least as dangerous when returning as when travelling out. By way of example both petrol tankers and bottled gas are considered dangerous when empty. This means that these vehicles and their drivers would not be able to return on the next scheduled sailing of a closed deck vessel but would have to wait for a week on the Island for the return of the freight ship. This is clearly uneconomic.

11. The second alternative examined related to the scheduled vessel operating one or two dedicated freight sailings per week. It was felt that if these sailings were identified clearly on the timetable there should not be too great an impact on passenger traffic as customers could adjust the timing of their journeys to avoid them. However, problems were identified with this approach. The first problem is that certain types of dangerous goods may not be carried on the same vessel at the same time. For example, petrol and butane may not be carried together. If there was only one sailing per week then cargoes might be unacceptably delayed. The obvious solution is to operate more than one freight sailing per week. Unfortunately, this is not practicable on many of the routes where the number of passenger sailings is already limited and this would impose too great a restriction on travel.

12. The use of "open decked" vessels allows the carriage of both freight and passengers to the Islands in a timely and safe manner. It appears to represent the most efficient way of providing the dangerous goods that the Island communities rely on.

Double Ended Open Deck RO - RO ferry

13. Caledonian MacBrayne makes extensive use of double ended open decked RO - RO ferries. These vessels operate off inclined concrete slips on short sheltered crossings. The vessels are of specialised design, as the hull form has to be designed such that the propulsion units are not damaged when the vessel berths on the ramp. Though these vessels could be adapted to operate off linkspans it would be very difficult to convert vessels that operate off

linkspans to operate off the slips. There are other ferries of this type operating in UK waters as well as some in Norway, Sweden and Holland. While these vessels may be adaptable to suit some of the Caledonian MacBrayne routes it is unlikely in practice that they would be available.

Side / Rear Loading Ferry

14. Caledonian MacBrayne currently own and operate four vessels with side and stern rather than bow and stern doors (additionally the MVs Hebridean Isles and Lord of the Isles also have side doors in addition to their bow and stern doors). These vessels operate on the Gourock - Dunoon and Wemyss Bay - Rothesay routes. At Wemyss Bay and Gourock these vessels are loaded and unloaded via their stern doors as with other ferries. At Dunoon and Rothesay the vessels are loaded unloaded via their side doors. This is as a consequence of the construction of the berths at Dunoon and Rothesay, which cannot accommodate end on loading because the ramps are built at right angles to the face of the piers and there is no method of securing the ship end on. It would be unlikely to find similar shallow draft vessels with a combined side / end loading configuration operating elsewhere.

The carriage of Livestock

15. The economies of the islands served by Caledonian MacBrayne are dependent to a significant degree upon the agricultural sector. The Islanders rely upon CalMac to transport their livestock to and from the Islands. Livestock is carried to and from the Islands on multi tiered floats. Two and three tier floats are considered suitable for carriage on Ro - Ros providing that ventilation is adequate (up to 5 livestock vehicles, 10 air changes per hour). It is economically advantageous to transport livestock in the highest tiered vehicle possible and for this reason hauliers would prefer to use three tiered vehicles whenever possible. More efficient haulage has implications for the cost per head of shipping livestock and could potentially have an effect on the profitability of the producer.

16. Three tiered floats may only be carried by closed deck Ro - Ro ferries when the dockside temperature is below 20 degrees Celsius. On average, this temperature is exceeded in the West Coast of Scotland less than 50% of the year. On those days however, the existence of an open decked vessel allows the carriage of vehicles that would be prohibited on a closed deck ship.

The cascade and interchangeability

17. As the vessels in the fleet come to the end of their useful lives their capacity and performance have usually become insufficient for the route on which they serve. Usually, the fleet will require the replacement vessel to be the largest size that can be accommodated at all the ports in the network. The new vessel is added to the network at the point shown to be most in need of new capacity. The rest of the fleet may then be cascaded downwards as appropriate, so that multiple routes may benefit. If this process is to happen then new vessels are limited in size so that they themselves can eventually be cascaded down in the future. Such cascading is obviously limited to vessels within a given class. A large closed deck ferry cannot, as mentioned in paragraph thirteen above, operate off a slip.

18. Similarly, this ability to cascade is useful whenever a vessel breaks down or alternatively has to be dry docked for the renewal of her passenger safety certificate, as it allows the relief vessel to operate on any route (subject to the caveat in 15 above).

Shore Facilities

19. The linkspans that are in service at the ports on the network effectively limit the beam of ships using them to 15.8 metres at the present time. The use of a fender may permit narrower vessels to use the linkspan but if wider vessels were to be used then the linkspans would require modification. As discussed at 14 above the linkspans at Dunoon and Rothesay are only suitable for vessels with side ramps.

Alternative tonnage

20. Ferries, which are completely specialised, are normally built against specific routes. A fleet owner will normally take the decision to order a new vessel because an existing vessel has reached the end of its' working life or is going to prove too costly to upgrade to satisfy new safety legislation.

21. New vessels built as a result of the above scenarios will be designed with the aim of best serving the route on which they will be employed. It is normally expected that when a vessel is ordered for a route she will see out her working life on that route. The overall effect is that there is no ready supply of new tonnage or tonnage under construction, which is uncommitted, from which replacements for the larger Caledonian MacBrayne vessels could be found. The unusual draft and beam restrictions necessary for ships to operate on these routes further restrict the potential availability of second hand vessels from the external market. This restriction also applies to the medium sized vessels in the fleet.

22. The smallest vessels in the Caledonian MacBrayne fleet are not, as was pointed out in 13 above, unique. They are specialised, in that they have particular features of underwater design that match them to the routes they serve. Because there is a relatively restricted market for these vessels it is considered unlikely that craft would be available, either under construction or available new. It should be pointed out that these vessels are not particularly complicated from a technical point of view, and new build vessels could be ordered to replace any of them.

The Second Hand Market

23. The legislation governing the levels of safety required by RO - RO ferries at sea has been tightened in recent years as a result of the sinking of first "Herald of Free Enterprise" and then "Estonia". Vessels that were trading at the time the legislation was introduced were allowed time to comply. Some ships were physically unable to comply with the regulations as a result of their design and others were simply not economic to upgrade. This has resulted in the phasing out of older non-compliant tonnage. These older vessels have had to either be scrapped or sold on into markets where the regulations are not in force. This in turn means that there is virtually no supply of second hand vessels that comply with current safety legislation. This situation was exemplified by the inability of groups tendering for the recent Northern Isles ferry contract to identify suitable second hand tonnage. In the end the winning group (NorthLink) had to order three new vessels from the Aker-Finn shipbuilders in Finland.

24. This market situation has to be examined in conjunction with the particular features of the Caledonian MacBrayne vessels. These include, the requirement on some routes for "open decked" vessels in order that dangerous cargo may be carried, the shallow drafts required on nearly all of the routes, the capability of the slipway operated vessels and the requirement for the upper Clyde vessels to load and discharge over both the stern and side. This set of requirements and circumstances makes the probable total supply of alternative tonnage almost nil.

25. The Ullapool - Stornoway route is different in that, as a result of the greater depth of water, it is likely that an alternative vessel could be found to operate the route.

Conclusions

26. The fleet as it currently stands appears to have evolved into the best mix of vessels to meet the requirements of the varying routes. It is almost impossible to believe that there would be a similar fleet anywhere, which contained the correct mix of vessels, of the correct types and of the required dimensions, in respect of draft, beam and overall length. Some of the vessels possess unusual features such as, side ramps and open car decks and it is even harder to see from where alternatives to them could be sourced, given the nature of the cargoes they are required to carry. To this extent it can be said that the fleet is uniquely fit for purpose. However, a conventional 5 metre plus draught vessel could serve the Ullapool - Stornoway route without having compromise its efficiency by running with a reduced load, due to the depth of water available in the harbour.

Scottish Executive Development Department

Economic Advice and Statistics, June 2001

Annex 2

Uniqueness of the CalMac Fleet

Preamble

It has been suggested in the past that, in the process of inviting bids for the provision of services on the existing CalMac routes to meet the State Aids requirements, potential bidders should be allowed to obtain ships from the market either by purchase or charter. This paper is intended to show that it is extremely unlikely that suitable ships could be provided other than by new buildings.

The CalMac fleet serves a variety of ports in the Western Islands of Scotland and in the Clyde Estuary, from ports on the mainland and Skye, and between mainland ports in the upper reaches of the Clyde Estuary.

Almost all of the services are "lifeline" with the communities served depending almost completely on the transport services provided by CalMac for the necessities of life and to service the principal indigenous industries, tourism, crofting, sea fishing, fish farming and fish processing.

Though the tourist traffic is largely seasonal, the rest of the industries operate all the year round so that despite the huge reduction in passengers carried during the winter on some routes, freight requirements are maintained. This means that only a very limited reduction in services is acceptable in winter and because of the large physical dimensions as well as the quantity of the commercial traffic carried there can be no reduction in the size of the vessels used in winter.

Over the years the services provided have become more frequent and the increase in size and power of the vessels has resulted in increased reliability of operation despite the atrocious weather conditions frequently encountered, particularly in winter. This increase in vessel capacity and reliability has encouraged the growth of, and in many cases made possible, such industries as fish farming and fish and shellfish processing that depend on reliable transport services to get the products, in sellable condition, to the markets on the mainland and in continental Europe.

In addition to the atrocious weather, the ports served by the CalMac fleet are disadvantaged by shallow water, extreme tidal range, limited size of facilities and approaches made hazardous by skerries and rock outcrops.

As the total population of the islands served is small and the cost of providing the services high, it is essential that costs are kept down. To ensure that the limited market is given the best service possible at the lowest cost it is necessary that the ferries be maids of all work, doing the duties of passenger ships, cargo ships, dangerous cargo carriers and livestock carriers.

As the ships are passenger vessels carrying dangerous goods and livestock, it is essential that safety is the paramount requirement in the design and operation of the ships.

To this end the requirements of the Maritime and Coastguard Agency (MCA) for design approval and operational survey play a more than usual part in the business. All of the requirements of the various regulatory bodies are strictly implemented and regular inspections take place to ensure that there are no infringements.

All of these requirements have resulted in the gradual evolution of designs of vessel which are unique to the West Coast of Scotland.

There are three principal designs of ship:

- The "Closed Car Deck" RO-RO Ferry
- The Major "Open Car Deck" RO-RO Ferry
- The "Double Ended" Open Deck RO-RO Ferry

This paper will discuss the features which make these designs unique to the CalMac fleet. Firstly the unique features common to the "Closed" and "Open" ferries will be explored, then the peculiarities of the "Open" ships and finally the "Double Ended" ferries will be given.

Exceptions and Flexibility

Before going on to deal with the ships, the matters of an exception to the general rule and why the physical dimensions of not all of the ships are limited will be dealt with.

The "Cascade" and Interchangeability

As ships in the CalMac fleet come to the end of their useful trading lives their capacity and performance have usually become insufficient for the route on which they are employed. Usually too now, the fleet will require the replacement vessel which is to be built to be the largest size which can be accommodated at all the ports in the network. The new vessel is introduced to the route which, after appraisal, is shown to be that most requiring the capacity of the newbuilding. When the new vessel is introduced to that route the rest of the fleet is "cascaded" downwards so that every route receives some benefit. To allow this process to happen, no new building should be greater in size than will fit any of the ports in the network.

Similarly, to allow all of the fleet to be dry-docked annually as is required for renewal of the Passenger Certificate and for relief in the case of breakdown, for maximum flexibility the relief vessel must be capable of operating to any port.

Stornoway-Ullapool

The Stornoway-Ullapool service is an intensive service which requires a vessel of a greater commercial vehicle capacity than that necessary for any other route. This route is not limited by the draft restriction affecting the other routes. Designing the stern of the vessel by offsetting the stern ramp to allow berthing stern on only at the Ullapool linkspan, meant that a larger and faster ship could be designed for this route exclusively. Consequently "Isle of Lewis" is unsuitable for use on any other CalMac route and it is possible that a ship might be available on the market which could service Stornoway - Ullapool.

Common Factors Governing the Unique Design of the "Closed Car Deck" RO-RO Ferry and the "Open Car Deck" RO-RO Ferry

Dangerous Goods

Dangerous goods cannot be carried economically on "Closed" ships because the regulations only allow a limited number of passengers onboard.

Some vessels can be of "Closed" design because the islands which they serve are also served on alternative routes by "Open" ships which carry the dangerous goods required on the islands.

Overall Dimensions

The ports which the ships operate to and from are generally traditional ports which have developed over the centuries and which are located in, and developed from, natural harbours. The piers originally built to handle traditional cargo vessels have been strengthened and fitted with "linkspans" to allow RO-RO operation. The dimensions of the ports are limited by natural geological features and, as many of the island ports are located in what are little more than fissures in granite cliffs, there is little possibility of any of the ports being enlarged or dredged. Similarly, because of the nature of the terrain, there is little possibility of establishing alternative ports. These physical features result in the maximum dimensions of the ships which can operate from any port being 100 metres overall length, circa 16 metres overall breadth and between 3.2 metres and 3.4 metres maximum draft.

Traffic requirements have resulted in the latest vessels being built to the maximum of these sizes.

Shore Facilities

Where possible shore gangways are made permanent structures to minimise handling times and to minimise passenger inconvenience when boarding and disembarking. This feature means that the gangway position on the ship must be at the same position in relation to the ship's overall length and this position is common to, and unique to, ships operated by CalMac.

The dimensions of the latest linkspans are slightly greater than those initially installed. When the older linkspans are replaced they will probably be of a slightly wider dimension which means that eventually the design beam of the ships will be able to be increased.

Factors Governing the Unique Design of the Major "Open Car Deck" RO-RO Ferry

Dangerous Goods

As previously stated, dangerous goods cannot be carried economically on "Closed" ships because the regulations greatly restrict the number of passengers carried. It is necessary to supply the islands with the usual substances listed in the IMDG Code such as petroleum spirit, LPG, explosives, fertilisers and industrial chemicals of various sorts as well as the less obviously dangerous cargoes such as hay. Whisky is required to be taken off certain islands. As these dangerous goods are carried exclusively on road vehicles in relatively small quantities it would be very expensive to arrange cargo only voyages or to provide cargo only ships to carry them.

Consequently, to allow passengers to be carried as well as category B, C and D dangerous goods, (these are the dangerous goods listed above plus some further noxious or dangerous substances), the design of the "Open" type of RO-RO was developed in conjunction with the legislators. So open ships give sufficient operational flexibility to make economic sense of dangerous cargo voyages.

The open after deck also greatly facilitates the carriage of livestock, refrigerated vehicles with diesel driven coolers and similarly powered fish transporters.

The rules for the design, certification and operation of "Open" vessels of the dimensions of those of the major units, are unique to CalMac. There are, quite simply, no equivalent vessels in existence except those "retired" from the CalMac fleet.

Factors Governing the Unique Design of the "Double Ended" Open Deck RO-RO Ferry Operating from Slips

Operation from Slips

Many of the smaller islands are separated by only a short distance from the mainland or major island ports. In the early days of the CalMac operation these routes were serviced by small landing craft type vessels capable of carrying five cars and from which all traffic had to be reversed off. These vessels were relatively cheap and, perhaps more importantly, could operate from relatively cheap inclined concrete slips. These vessels served, and still serve, their communities well.

They were gradually replaced by a fleet of double ended RO-RO vessels, still operating off slips. This method of operation of vessels of the size to which the CalMac vessels have grown is again virtually unique.

Consequences and Conclusions

The above attempts to explain why CalMac ships have evolved to meet unique conditions and that these unique conditions have resulted in unique ships.

What has not as yet been highlighted is that building these unique ships, which maximise passenger and cargo uplift within the very restrictive overall dimensions permitted by the ports (particularly the draft limitations), results in relatively expensive ships for their size.

The comparatively large power requirements, to meet what is nowadays a relatively modest speed, enforced by shallow draft and the resultant high block co-efficient needed for stability, also makes for ships which are heavy on fuel and so expensive to operate.

Consequently, owners who require to build ships to carry quantities of passengers and cargo equivalent to those carried by the CalMac ships will usually build them with a draft of about 5 metres. This effectively prevents such ships being operable on any of the CalMac routes except for Stornoway-Ullapool.

Even if these deeper draft ships were available, they would be "Closed" ships since, as is explained above, the CalMac type of "Open" RO-RO is unique to CalMac.

It would appear therefore, that the only vessels available in the market which could fit the CalMac routes (with the exception of Stornoway- Ullapool) without modification of the port dimensions, are vessels sold out of the CalMac fleet. These vessels are now, because of their size, totally unable to provide an acceptable service and are unlikely to be made able to meet the present legislative requirements.