

73.6m Catamaran – Western Isles

Expert Ferry Group Paper

Post the last Expert Ferry Group Meeting on 16th May 2017 in Victoria Quay Alf Baird kindly forwarded an example of a Catamaran for consideration for use on the Western Isles Network.

CMAL requested some further information to assess potential suitability of such a craft on Western Isles Routes – this information was duly received, analysed and some questions asked of the MCA.

Brief Description

- LOA – 73.6m
- Length (BP) – 67.3m
- Beam (breadth) – 22.0m
- Depth Moulded – 5.75m
- Design Draft – 2.75m
- Speed (Max) – 23 knots or 17.5 knots (2 props)
- Passengers - 800
- Cars - 100
- 8 trucks (2 central lanes)
- Max Wave Height – 3.5m

General Comment

In terms of the vessels scale and carrying capability for passengers and cars then on the face of it a further investigation was merited.

Operational Aspects

The vessel has both a bow and stern door but given the beam and the central location of the ramps there would need to be major infrastructure investments in order that the vessel could successfully berth. We do not see an opportunity to offset the ramps as this would cause severe difficulties in loading the freight or heavier loads. There would need to be a link span investment at each end of the route plus associated infrastructure such as bank seat and lifting dolphins. This would probably negate any of the current ferries from berthing unless the new facility some 12m wide.

The height of the bow and stern ramp would also be unsuitable for current infrastructure although investment can resolve this aspect.

Deadweight is a total of 475 tonnes and a carrying capacity of 8 trucks (weight of fully laden would be 350 tonnes). This is inadequate for many routes with a requirement for 10 – 16 truck capacity. With the application of RET and also certain islands increasing both Whisky production and fish landings the future vessels are to be more freight orientated. There are only 2 lanes of trucks centrally loaded so no flexibility for additional units and with 10 trucks the full deadweight has expired (albeit they cannot be carried due to configuration)

Could the vessel accommodate the increasing number of motor homes as it seems that these would only fit in freight space. Therefore, potentially freight capacity is reduced further during the summer months.

As examples Finlaggan 750dwt and Glen Sannox 1000dwt

Environmental

Scottish Government Policy encourages Carbon Reduction measures and this vessel burns MGO. Our Policy, with the approval of SG, has been to introduce fuel types that reduce NOx, SOx, Particulate Matter plus Carbon emissions wherever possible. This has led to the design of Electric Hybrid Ferries and also the introduction of Dual Fuel Vessels that burn LNG as a primary Fuel.

It is appreciated that difference engine manufacturers have different emission levels but we are tracking towards a low carbon emission and all the associated additional pollutants.

Regulatory

It does not appear from the GA and available material that the vessel complies with Euro B in accordance with EC Directive 09/45/EC (6/05/2009) as amended on Safety Rules for passenger ships.

The GA does not show MES system which is a requirement. However, in addition there are significant other changes that would need to be included to comply with MCA Rules in regards to Safety and Fire Fighting etc.

Passenger Accommodation and Access

Minimum passenger facilities with airline style seating.

Passenger comfort compromised in high seas

No facilities for passenger services (no servery of coffee shop)

No passenger access doors so one assumes over the bow/stern door with incumbent H&S implications or split loading with potential delay

Not DDA Compliant for passengers with accessibility needs

Crew Accommodation

A total of 6 cabins overall with 1 x Captain's Cabin and 5 x double crew cabins with no natural light at the waterline

General

1 bow thruster only for forward manoeuvring (no redundancy)

External bridge wing controls

No indication of either workshop area or adequate stores for spares or perishable goods

Further Comment

We are aware through the EFG that many the aspects mentioned above are a matter for potential debate.

These areas could include

- Is it necessary to have current provision for passenger services for food and drink?
- What is wrong with airline style seating throughout?
- Should the crew be accommodated onboard or ashore and island based?
- Should passenger access the vessel via the link span and stern/bow door?
- Is there enough freight capacity for certain routes?
- Cost of vessels built in areas such as Vietnam are significantly cheaper than those built in Northern Europe. Are the component parts supportable through the life of a vessel? Significant savings are made in Labour.