



FOCI will bring back the Falls Of Clyde to Scotland to redesign, refit and reengineer the vessel to create a carbon-neutral vessel that will fly the flag for Scotland's engineering and green-tech abilities.

FOCI are working with specialist marine engineering suppliers for the development of innovative green-tech propulsion solutions.

As part of the route to full design development and physical works on the vessel, FOCI now would like Naval Architectural consultants to make proposals for the arrangement of the functional spaces of the ship:

- Propulsion spaces – FOCI will give indication of space requirement based on marine engineering proposals. Propulsion development is not the focus of this Naval Architecture Competition
- Crew accommodation
- Trainee accommodation
- Teaching areas
- Public Areas
- Mess rooms
- Service Spaces

All proposals to work with the existing structural layout and hull form. FOCI are looking for innovative concepts on how to best use the existing space.

Existing Technical Information:

There is limited technical information available for the existing vessel, but FOCI can make the following documents available to Designers:

- FOCI Statement of Technical Requirements Doc to give Designers a summary of main technical/functional requirements of Competition.
- Existing Vessel General Arrangement
- Existing Lines Plan Drawing
- High Level illustration of preferred propulsion solution, including required space envelope.
- Photo pack to illustrate current condition and spaces

Rules & Regulations:

FOCI envisage that the re-designed vessel will be compliant with all SOLAS and MARPOL requirements of a new build fully international ocean-going vessel.

Carrying a mixture of Crew and Trainees, the vessel will require full compliance with the IMO "SPS Code – Code of Safety for Special Purpose Ships". It is not envisaged that the vessel will operate as a Passenger Ship.

It is likely that Hydrogen may be carried onboard for use as Fuel. As such, the vessel shall comply with the IMO "IGF Code - International Code of Safety for Ships Using Gases or other Low-Flashpoint Fuels." and any emerging IMO regulation governing the use of Hydrogen as a Fuel.

Falls of Clyde will be registered with an IACS Classification Society. There is a preference for this to be Lloyd's Register of Shipping.

Crew accommodation should be compliant with the International Labour Conference – Maritime Labour Convention, 2006.

A Flag State has not yet been selected.

Deliverable:

FOCI are looking for innovative Concept Arrangements for the vessel that will best deliver the FOCI Statement of Requirements whilst complying with the required Regulations. FOCI require Competing Naval Architects to deliver:

- Concept General Arrangement drawing
- Concept Description Document – a brief illustrated document highlighting the key features of the proposal.

FOCI do not expect Competing Naval Architects to deliver any further Technical Documentation.

However, it is important that Concepts Proposed are feasible, robust and practicable. As such, FOCI would expect the Competing Naval Architects to use their experience consider the following key aspects:

- Lightship and Deadweight Weight Estimates – current weight unknown
- Intact Stability to IMO requirements
- Preliminary Subdivision to ensure Loadline and SPS Damage Stability Compliance
- IGF requirements for Hydrogen Fuel including location of tanks, ventilation, and escape arrangements
- Propulsion Power and Total Electrical Power requirements to ensure adequate allowance for onboard Power Generation
- Vessel Operational Profile