

# Europe puts BESST foot forward to slash costs

**Four-year project aims to develop technologies to cut lifecycle costs and boost energy efficiency**

**Craig Eason**

ONE of the largest ever research projects in European shipbuilding has been given a boost with support from the European Commission.

As European shipbuilders battle with their Asian rivals and a lack of new orders, the industry has launched a research project that aims to reduce the lifecycle costs of a ship by up to €120m (\$165m).

The Breakthrough in European Ship and Shipbuilding Technologies (BESST) project has brought together more than 60 European shipyards, universities, engineering firms, research institutes and classification societies for the four-year project. It is thought to be the largest group of organisations to work on a maritime project.

With Asian shipyards and manufacturers able to offer competitive costs, the European companies are hopeful that the offer of a huge saving in lifecycle and maintenance costs will offer a lifeline to the frail shipbuilding community.

The focus of the work will be on developing these technologies for the passenger and luxury yacht markets, two of the few vessel types the region still holds a competitive advantage in.

The project announced it would focus on the market segment of high value-added, complex, one-of-a-kind ships, in particular cruise vessels, passenger ships, ferries and mega-yachts.

However, the involvement of eight shipyards, 20 research institutes and universities, five classification societies and 31 industrial companies will make sure results can also be applied to other types of vessel.

The project's key areas of focus will be space optimisation; easy maintenance; improvements in payload to gross tonne ratio; cost-efficient building and refurbishment processes; reduced noise and vibration; improved reliability through model-based design and condition monitoring; optimisation of the logistics chain, and improved safety and security.

It also aims to tackle the issue of energy efficiency, setting itself a target of reducing CO<sub>2</sub> emissions by 12% per ship.

Work will focus on passenger ship design, partly due to the project co-ordi-

nator being Italian shipbuilder **Fincantieri**, although it has said advancements made in the project will be applied to other ship types built in Europe through modular and adaptable solutions.

The project is one of the few that brings together **Fincantieri**, STX Europe and Meyerwerft, Europe's leading cruiseship yards. It was initiated by Euroyards, a special interest group in Brussels that represents six of the region's shipyards.

BESST project manager Paolo Guglia said the project followed on from the InterSHIP project, which ended in 2007. This €38m project was also aimed at increasing the competitiveness of European cruiseship, ferry and ro-ro shipbuilders, with a focus on the shipbuilding process.

The four-year InterSHIP project started in November 2003, with the European Commission investing half of the budget. At the close of the project the intention to launch BESST was announced.

Mr Guglia said BESST had a budget of €29m, of which €17.5m has come from European Union funds. It is more than half of the overall budget, with the research institutions, universities and small businesses involved in the project having secured additional funding from Brussels.

The work is split into work packages to help achieve the goals of the specific focus areas.

"There are two ways to boost research in BESST," said Mr Guglia. "The first one is working on research and development — working on developing innovative systems to be installed onboard. The second is the integration of all the systems."

The objectives and goals of the various work packages have been estimated, leading to the current projection of saving a shipowner up to €120m in lifecycle costs and the 12% reduction in CO<sub>2</sub>.

But one of the thorny areas for all large commercial projects will always be intellectual property rights.

Having worked on the InterSHIP project, the major shipyards and engineering firms involved in BESST have experience of how to deal with this issue, according to Mr Guglia.

"We saw it was possible to work together. We have a common interest to sit together and develop knowledge of common areas of interest, and we can do this again in BESST," he said, adding that the implementation and use of the information by the companies would remain confidential and outside the remit of the project.

