

High-Speed Catamaran Could Ease Road Congestion

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A new high-speed cargo [catamaran](#) could significantly reduce the number of lorry journeys on European roads thanks to a grant of almost one million euros from the EU's Framework Programme. PACSCAT (Partial Air Cushion Supported Catamaran) is a 30 month project to evaluate the possibility of using high-speed river transport to help deal with the rapid growth in freight movement throughout Europe. The capacity of each catamaran will be around 2,000 tonnes - the equivalent of 45 truck loads – and it will be able to travel at almost 25 miles (37km) an hour, making it a much more realistic alternative to road transport than anything else currently available.

“With an already congested land-based transport infrastructure throughout most European countries the expansion of waterborne transport is essential”, says project co-ordinator Jonathan Williams. “The objective of PACSCAT is to develop and evaluate the catamaran to allow operation on inland waterways without the draught restrictions of conventional vessels. The vessel draught can be adjusted from 2.5 metres to as low as 1.5 metres to cope with shallow water and air draught can be similarly altered to overcome bridge height limitations.

“Although the initial development will focus on transport along two of the major European rivers, the Rhine and Danube, we are hopeful that the catamaran can be adapted to make it a viable option on many other waterways.

The air cushion on the catamaran is contained between the sidehulls and

end seals, and is generated by installed lift fans. The vessel will be designed to operate using existing berthing and loading facilities on the Rhine and Danube.

“Developing sustainable transport infrastructure is a key element of the Framework Funding programme”, says Cliff Funnell, FP6UK National Contact Point for Surface Transport (Maritime). “If we can move a significant amount of freight transport from the roads on to our waterways we will see a reduction in both congestion and pollution. Rivers and canals used to carry a great deal of our freight but the lack of speed made it less and less viable. Now we have the chance to make it work again and this has got to be to our long-term benefit.”

“The current Framework Programme (FP6) runs until 2006 and organisations wanting free, easy to access, information on the ^19bn of funding available to support internationally collaborative R&D should log on to fp6uk.ost.gov.uk or call central telephone support on 0870 600 6080.”

Led by the University of Southampton with management assistance from Marinetech South Ltd, the PACSCAT project is being carried out by a European consortium of 14 partners. They span the complete value chain from vessel design to operation, including interface with key regulatory authorities. The PACSCAT concept was developed by UK naval architects IMAA Ltd, who are the technical coordinators of the current project.

More information [here](#)

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