

Reducing ferry fuel consumption

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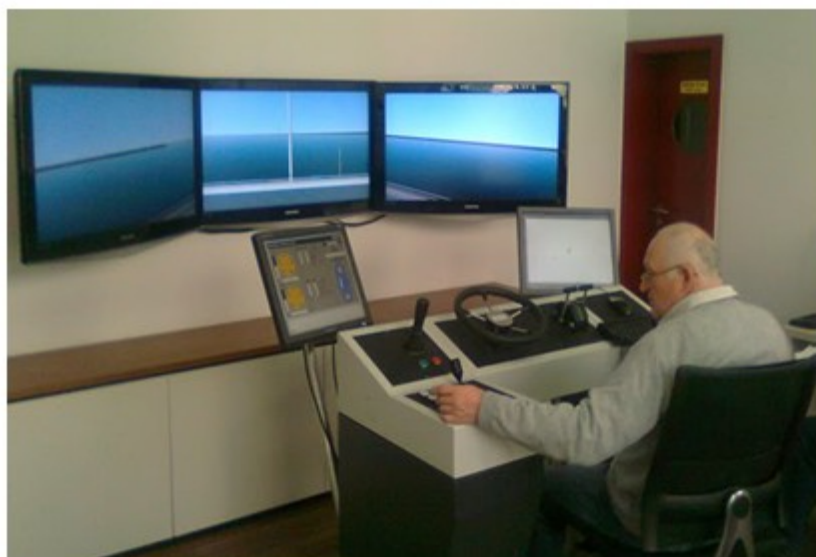
German ferry company and iTransfer partner, Weserfähre, operates passenger and vehicle ferries on the River Weser between Bremerhaven and Nordenham. The spiralling cost of marine diesel as well as a desire to manage its environmental footprint has encouraged Weserfähre to find ways of reducing fuel consumption.



Weserfähre was founded in 1910

The first step was to install fuel-flow meters in the engine rooms to measure the fuel consumption with repeater displays fitted in the wheelhouse. This gave the bridge team a real-time measure of how much fuel was being consumed in a variety of conditions. Being aware of consumption has encouraged the crew to operate their vessels in a more fuel efficient way.

Information recorded from the fuel-flow meters is also being used in a specially tailored vessel simulator created by marine propulsion experts Voith Schneider. Ferry staff are able to simulate river crossings in a range of tidal and weather conditions and practice alternative engine and helm orders to identify how best to optimise fuel consumption. Through using tidal stream and wind effects, it has been possible to reduce the power requirements of the main engines. This new knowledge has led to a change in how the ferry captains operate their vessels which, in turn, has resulted in a significant reduction in fuel consumption. Comparing fuel use in May 2012 with the same period in 2011, fuel consumption has decreased by 5000 litres.



The Voith Schneider simulator

Through changing the behaviour of the crew that operate these vessels, it has been possible to make Weserfähre's ferry operations more efficient and environmentally friendly.

The knowledge gained in this process is currently being shared with other iTransfer partners through a series of workshops.