

Public summary D.2.2

The main purpose of this deliverable is to develop a transport model to assess the business economical potential of the vessel train (VT) concept. The VT could become a new waterborne transport system, which should fit into the current and well-developed transport system.

In deliverable 2.1, the current situation of the working principles in inland waterway transport (IWT), short sea shipping (SSS) and sea-river transport are analysed and outlined. Competitive modes of transport, namely, rail and road transport have been examined to obtain insight into the working principles and to take advantage of their experiences in freight transport, especially in concepts similar to the VT. As a preparation for the development of the transport system model (this deliverable), current flows for two case studies have been compiled and performance indicators (PIs) have been determined.

In this deliverable, the transport model to assess the VT is developed. For this purpose, a new model has been developed due to the fact that the VT is a completely new transport system with a lot of special features that need to be included in the assessment model. This model allows a user to build a VT on the waterborne network along with the choice of a business model to operate the VT. For the VT concept, it is also possible to include the effect of pre-sorting cargo at terminal level (Marlo-IT tool) and to improve the cargo handling (WP4 developments). Based on this input, the VT will be compared to the base case situation. For all the different actors involved (vessel owners, vessel train organizers and cargo owners), the net business economic benefits will be calculated. These outcomes will determine if a defined VT is viable from a business economical point of view.

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