

Announcement Case Study:

Smart Inland Waterway Management

Context

Waterway transportation emits three times less CO₂ than road transport. Transport by barge is predominantly used for big-volumes, as a barge replace a lot of trucks. Effective logistics engineering is essential to ensure cargo consolidation, requiring an accurate synchronisation between operators and a collaborative approach demanding organisational and behavioural change from logistics professionals. One of the requirements for a modern logistics communication infrastructure in inland waterway transport is that it should make supply chain management possible beyond company boundaries. Information in the form of documents or databases must be exchanged in closed user groups. The co-operation of the stakeholders (consignors, inland waterway operators, owner-operator, post-carriage forwarder, consignees, and customs) must be carried out in a common, partly open electronic infrastructure.

Tasks

Students are expected after an extended literature review on the topic to describe the state of the art of information management in the European inland waterway network and design instruments to do a field research in order to gather relevant information about the requirements for smart Inland Waterway Management Systems.

Applicants

Students are expected to demonstrate good study performance, high motivation and capability to work, under tutor's guidance, independently and target-oriented on the theme. Finally, applicants should have proficiency and good communications skills in English.

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