

# A Comparison of the Application Potential of Waterborne Platooning for the Danube and the Rhine Corridors

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## **Abstract**

In this study the implementation of the waterborne platooning transport concept in two of the largest European inland navigation corridors, the Rhine and the Danube region, is researched. Each region has different geo-economic and environmental features. These features are compared and their effects on the implementation of a waterborne platooning transport concept are studied. The waterborne platooning concept, referred to as the Vessel Train, aims to reduce crew cost by automating the navigation tasks and moving the navigational responsibility to the leading vessel of the platoon, which is fully manned.

This article assesses the viability of the Vessel Train concept for each corridor and determines the importance of their geographical and geo-economic differences. The results conclude that the application of waterborne platooning on the Rhine is less challenging than on the Danube. The implementation of the concept on the Danube is hampered by the low wages in the region, the low traffic density on the waterway and the common use of large push tows instead of self-propelled vessels.

## **Key Words:**

*Rhine Corridor, Danube Corridor, Waterborne Platoon, Reduced Crew Cost, Inland Navigation*

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