

Bottlenecks and obstacles in case B

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Executive Summary

AEGIS is a concept for the future of short-sea transportation logistics that is presently being created. The goal is to find automation solutions to some of the issues that the short-sea shipping sector is now dealing with. This document, *D9.3 Identification of bottlenecks and other obstacles*, is part of the AEGIS project work package 9, Use Case B – short sea and inland interface in Belgium and Netherlands. In summary, this WP looks at a transport route that connects larger RORO ships from Europe to ports in the Netherlands and other smaller ports in Belgium and the Netherlands, using new inland RORO shuttles.

This report's objectives are to identify barriers and then determine the priority and importance of bottlenecks for two scenarios in use case B, which are as follows:

- 1) The baseline (non-AEGIS) scenario: Which involves shipping cargo from Ghent to Rotterdam (and vice versa) by truck.
- 2) The AEGIS scenario: Cargo is moved from Ghent to Rotterdam (and vice versa) via a canal onboard an AEGIS vessel.

For this purpose, this report considers six types of bottlenecks named operational bottlenecks, transport technology bottlenecks, ICT bottlenecks, Infrastructure and geography bottlenecks, bottlenecks related to regulatory, and finally, other bottlenecks.

After identifying the bottlenecks, a questionnaire was drawn up so it could adapt to and cover both scenarios. The questionnaire outcomes were collected so as to understand smooth logistics systems and, secondly, to gain insight into the perceived transport bottlenecks and inefficiencies among the respondents.

In summary, the questionnaire was intended to meet the following objectives:

- To assess the performance of selected scenarios
- To identify the main obstacles associated with smooth transport flows
- To improve traffic flow efficiency by highlighting areas needing improvement

We received nine responses (six from our partners and three from our Advisory Group¹). By analyzing the data and comparing the results of the two scenarios, the issues related to what challenges will arise with the implementation of the AEGIS method and what challenges will become less worrying have been addressed. The results are specific to Use Case B.

¹ The AG group responses were from Prof. Rod Franklin of Kühne Logistics University, Encabo Santiago of EMSA, and Sifis Papageorgiou from the Norwegian Maritime authority. We thank all of them for their input.