BearingPoint ®

SINLOG –
Digital Shipping Documents

Standardization approach to connect Inland Navigation to intermodal LOGistics

Challenges of inland navigation

Inland navigation is an integral part of the intermodal logistics chain with its transport capacities. Yet, when it comes to freight-related data exchange, the sector has so far trailed behind railway and road transportation in its degree of digitization. Consequently, inland navigation is not well-integrated into intermodal information exchanges which oftentimes are already transmitted digitally. The inability to participate digitally slows down the growth opportunities of this industry significantly. Additionally, there is a lack of possibilities to ensure with digital information that the transport of goods is free from manipulation across all supply-chain participants.

Digital document standard in inland shipping for intermodal integration
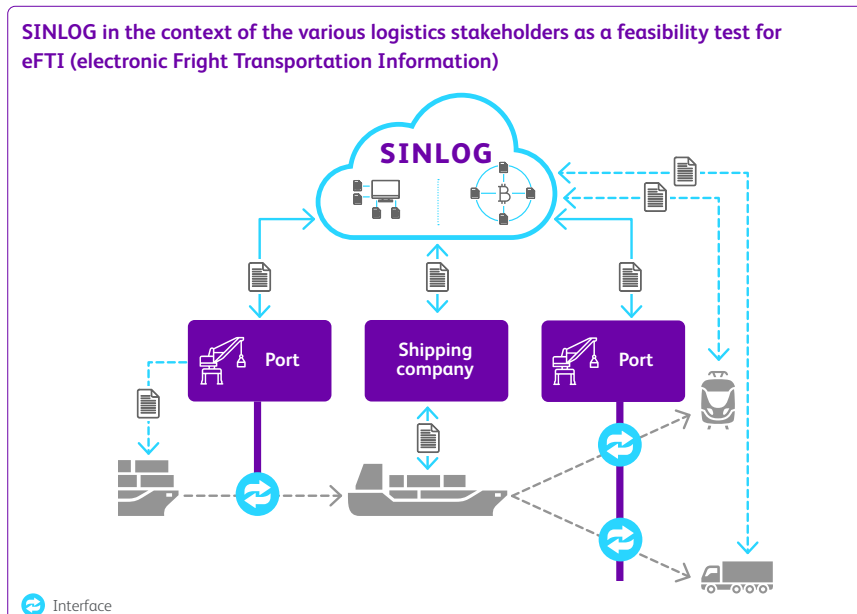
For inland navigation, achieving greater attractiveness, efficiency, reliability and credibility within a trimodal logistics chain is crucial. The research project is supposed to identify a solution to enable the digital integration of inland navigation into intermodal transportation chains. Standardization and data management are investigated and tested pertinent to the mode of transportation. The identification of standards and regulations relating to data should promote a successful interface management. Besides researching the standardization and use of digital freight and shipping documents, respecting the EU activities regarding eFTI (electronic Fright Transport Information), the correctness and authenticity of documents that are being processed using Blockchain technology and new governance structures will be researched.

Research focus areas
- Digitization and standardization of freight and accompanying documents
- Secure data management
- Blockchain to secure processes

"Digitization in transport logistics enables a shift of freight traffic from trucks to inland vessels, and an optimal use of the transportation hub of inland ports!"

– Volker Klassen, CEO Port of Trier

SINLOG in the context of the various logistics stakeholders as a feasibility test for eFTI (electronic Fright Transportation Information)

Research project SINLOG – "Standardization approach to connect Inland Navigation to intermodal LOGistics"

The research project "SINLOG" is funded by the mFUND, a research program of the Federal Ministry of Transport and Digital Infrastructure (BMVI). It is intended to digitize shipping documents for transport by vessel as main leg. The research results should be available mid-2022.

The research project is a cooperation among BearingPoint, the Federal Association of Public Inland Ports, Fraunhofer FIT, MSG eG, PMMG Group and the Port of Trier.

It is planned to test the SINLOG-solution within the framework of a field test from autumn 2020 onwards. The field test will comprise selected partners of the inland navigation sector. SINLOG is based on an Open Data policy in order to realise the biggest possible range of benefits for the digitization of inland navigation. Parallel to the research, there is opportunity for SMEs and start-ups to participate in the SINLOG solution as part of their own activities.

The cooperation partners of SINLOG will use their core competencies to solve the following tasks:

- Suitability of standards in intermodal logistics for inland navigation
- Integration of standards and associated data management into inland navigation
- Benefits of digital integration of inland navigation into intermodal logistics
- Benefits of blockchain technology in the context of process security

The assessment if and how digital freight documents can penetrate inland navigation as part of intermodal transportation chains as well as the benefits that are achieved doing so will be the result of this research project.

Funded by:

Overall responsibility:

Partner:

About BearingPoint

BearingPoint is an independent management and technology consultancy with European roots and a global reach. The company operates in three business units: The first unit covers the advisory business with a clear focus on five key areas to drive growth across all regions. The second unit provides IP-driven managed services beyond SaaS and offers business critical services to its clients supporting their business success. The third unit provides the software for successful digital transformation and regulatory requirements. It is also designed to explore innovative business models with clients and partners by driving the financing and development of start-ups and leveraging ecosystems. BearingPoint's clients include many of the world's leading companies and organizations. The firm has a global consulting network with more than 10,000 people and supports clients in over 75 countries, engaging with them to achieve measurable and sustainable success.

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