



## Digitale Testfelder in Häfen

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# *SANTANA – SERVICE AND DATA NETWORK PORT OF HAMBURG, Digital Test Field Hamburg Network of Networks*

## Initial situation/motivation

Data is one of the most important fundamentals for digitalization. Data is also essential for improving logistics as well as traffic processes in ports. In many places, data is collected, refined and used for single approaches. However, these are usually not easily accessible and difficult to link, so that further potential for improving processes in the area of Logistics 4.0 cannot be easily realized.

## Project objective

The "SANTANA" project aims to establish a digital test field in the Port of Hamburg, which will focus on connecting the existing digital networks of public transport and infrastructure management with those of private-sector logistics to form a network of networks. This is intended to create a broad, holistic and technology-open data information basis for digital innovations in the port. The approach also aims to improve the exchange of data between the different port domains of the public sector. On this basis, six further digitalization measures for the digital test field will be implemented to create more concrete testing opportunities in the form of living labs in the field of logistics and traffic and infrastructure management.



## Realization

After an analysis and planning phase, the network of networks is implemented with simple and non-discriminatory access. Based on this, the Living Labs will be established in the following areas:

- Handling of import and export
- Processing of road-based container logistics
- Information of maritime shipping by means of data platform Nautical Information Network Elbe
- Tracking/information inland shipping
- Road-based traffic flow optimization in ports by means of novel AI technologies
- Management of traffic in rail transport

In general, new sensors and actuators will be procured, installed and integrated into the digital test field, in addition to information technology adaptations of existing digital structures. Furthermore, the implementations will be coordinated with relevant port stakeholders so that the Living Labs cover the needs of potential users of the digital test field as early and broadly as possible.

### Project coordinator

Hamburg Port Authority AöR

### Project partner

DAKOSY Datenkommunikationssysteme AG

### Project budget

15 M. €  
(Funding quote 80% from FMDT)

### Project duration

01/2022 – 06/2024

### Testing options for third parties

- Sandbox (testing area) SANTANA service marketplace for developing and testing innovative software solutions
- Access to the SANTANA service marketplace for provision of innovative software solutions
- Testing areas in the port of Hamburg for physical testing of innovative solutions

### Contact

[SANTANA-PMO@hpa.hamburg.de](mailto:SANTANA-PMO@hpa.hamburg.de)

### FAQ