Funded by:





Digitale

Testfelder in Häfen

Federal Ministry for Digital and Transport

on the basis of a decision by the German Bundestag

FAQ – SANTANA

1. What does SANTANA stand for?

SANTANA is the acronym for <u>Service</u> and Data <u>Network</u> Port of Hamburg.

2. Who is funding the project?

The project is funded by the German Federal Ministry for Digital and Transport as a part of the Digital Test fields in ports (DigiTest) funding program.

3. Who are project partners?

Collaboration partner: The Hamburg Port Authority A.ö.R. is realizing the project • together with DAKOSY Datenkommunikationssystem AG.

Hamburg Port Authority

Since 2005, the Hamburg Port Authority (HPA) has been operating a future-oriented port management from a single source and is active wherever efficiency, safety and economic efficiency in the Port of Hamburg are important. The HPA meets the growing demands of the port with intelligent and innovative solutions. The HPA is responsible for the efficient, resource-saving and sustainable planning and implementation of infrastructure measures in the port and is the point of contact for all questions relating to water and landside infrastructure, the safety and ease of shipping traffic, port railway facilities, real estate management and economic conditions in the port. To achieve this, the HPA provides the necessary areas and assumes all sovereign tasks and port management services. It promotes special, port-specific expertise and also represents Hamburg's port interests at national and international level.

www.hamburg-port-authority.de

Contact: Hamburg Port Authority AöR | Public Relations Office | Tel.: +49 40 42847-2300 | E-Mail: pressestelle@hpa.hamburg.de

DAKOSY Datenkommunikationssystem AG

As one of the leading software houses for logistics, DAKOSY has been offering digital solutions for international freight forwarding, customs clearance and supply chain management for almost 40 years. In addition, DAKOSY operates the Port Community System (PCS) for the Port of Hamburg and the Cargo Community System (FAIR@Link) for Frankfurt and Hamburg airports. All companies and authorities involved in the export and import processes can handle their transport processes quickly and automatically by using the digital platforms.

www.dakosy.de

Contact: DAKOSY Datenkommunikationssystem AG| Public Relations Office | Tel.: + 49 40 37003 - 320 | E-Mail: presse@dakosy.de

Associated partners: Hamburger Hafen und Logistik AG (HHLA), Eurogate GmbH & Co. KGaA, KG and the Hamburg Vessel Coordination Center (HVCC) accompany the project as central stakeholders and partners without public funding. The associated partners contribute to the success of the project through expertise and know-how, among other contributions. The Ministry for Economics and Innovation (BWI) also supports the project as a supporting partner, e.g. in the promotion of the project results.

4. What are the goals of the project?

With the creation of the SANTANA digital test field, the digital infrastructure in the Port of Hamburg is to be further developed to improve multimodal process control and the innovation environment in the port. The test field is consisting of 6 subprojects, which will be realized along the modes of traffic road, rail and water. As a result, relevant data is to be collected via sensors in the physical port world, processed further in data products and services, and linked to form a virtual representation of the port world, which can be individually assembled and used according to areas of expertise. A common marketplace will provide easy access to this data, information and services for stakeholders involved in port operations. In addition, a real lab (Living Lab) will be set up in each of the 6 subprojects, in which the development and testing of innovative solutions will be promoted even after the end of the project.

The sub-objectives of the project can be summarized as follows:

- 1. Development of an open architecture model as a test field for data sharing between logistics and traffic and infrastructure management and to promote service innovations for the Port of Hamburg
- 2. Increase connectivity and interoperability of existing data domains in the port through interface specification and partial integration.
- 3. Increasing the database through sensor technology and further development of digital infrastructure for intermodal real-time evaluation and control
- 4. Development and assembly of different data products and services by potential users
- 5. Breaking down existing data silos and developing structurally harmonizing and networking specialized data domains in the traffic and infrastructure management

5. What does the project contribute to the Port of Hamburg?

As a "network of networks," SANTANA is intended to further advance digital networking between private-sector logistics and public infrastructure and traffic management in the Port of Hamburg to realize efficiency improvements in multimodal transport operations. As a digital test field, the project will also put the collaborative innovation environment in the port on a broader footing. SANTANA will thus contribute to the attractiveness of the Port of Hamburg as a location

Besides the overall benefit of SANTANA, the individual subprojects also result in concrete added value along the respective modes of traffic:

- Maritime shipping: Improvement of the waterside process control through the realization of a central technical data platform for vessel arrivals in the Port of Hamburg
- Inland shipping: Improving the provision of information by developing a digital application among other measures
- Rail traffic: Improved use of logistics resources through further development of the Rail Port Community System (transPort rail)
- Road traffic:

- Increasing capacities on the existing road network through real-time traffic light control coordinated across the network
- Optimization of processing in import & export and road container logistics through improved data exchange between logistics and infrastructure & traffic management

The realization of the subprojects and the digital infrastructure to be created are expected to have positive effects on the climate and environmental protection. The optimization of process control will lead to better forecasts and more precise planning through the simplified and rapid exchange of data. For example, it will be possible for ships to know the exact speed at which they must arrive in the German Bight at the agreed time before leaving the outer port to reach the tidal window for the journey to the upstream section of the Elbe. Information about the optimal average speed, the reduction of waiting times in the German Bight, and the saving of unnecessary calls in the port area until the advised berth is free can lead to significant emission reductions in the area of maritime shipping in long-term. Together with the expected reduction in incidents and congestion thanks to better advance notifications and adaptable planning, this will in turn have a positive effect on road and rail transport, both in the port itself and in hinterland traffic. Furthermore, some of the planned measures will help to change the modal split from road towards waterway or rail.

6. What is the duration of the project?

SANTANA has a duration of 30 months (January 2022 to June 2024).

7. What is the budget?

The total budget of the project is around 15 million euros. Of this, 80 % is funded by the federal government.

8. Who are the responsible persons?

- Program directorate HPA: Dr. Phanthian Zuesongdham
- Program directorate DAKOSY: Evelyn Eggers
- Program management SANTANA HPA: Dr. Julia Wernecke