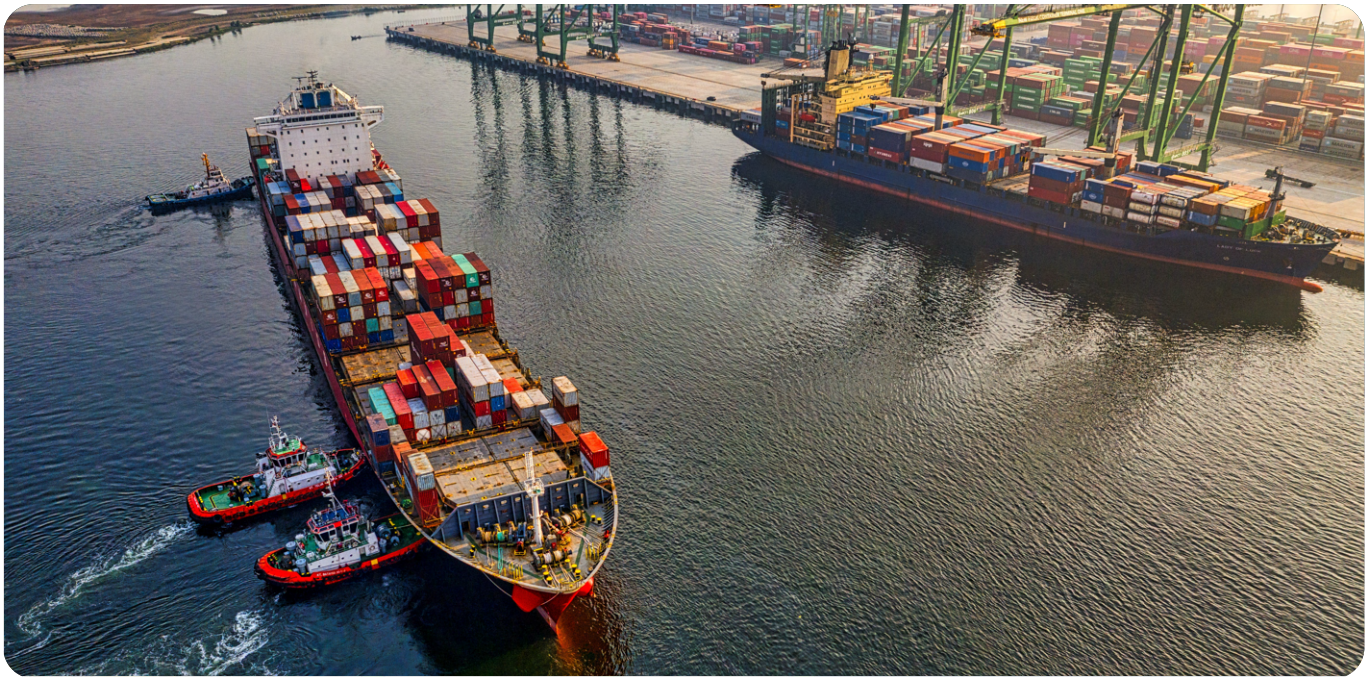
SPEED Project

Innovation ecosystems are a critical part of our modern world. In many sectors the private and public sector, academia, and start-ups are innovating for the future – together. SPEED: Smart Ports Entrepreneurial Ecosystem Development project, which was funded by European Interreg 2 Seas and successfully completed last December, uses the Wazoku Platform to better collaborate, co-create, and improve the future of ports.

SPEED project aims to improve ports in Belgium, France, the Netherlands, and the UK by using new advances in technology and data science. The project builds networks to develop good practice, facilitate the exchange and transfer of knowledge, and strengthens cohesion between member states and stakeholders. Knowledge-sharing networks, particularly in our digital age, act as a critical tool to overcome present and future challenges.

The SPEED open innovation portal is designed to bring together ports stakeholders, researchers and start-ups/ small to medium-sized enterprises (SMEs) for discussion, action, and project management as one of the main deliverables of the SPEED project. SPEED Portal is hosted on the Wazoku Platform and maintained by Bournemouth University which has been one of the leading partners of the SPEED project. Port stakeholders and service providers can come together to **exchange ideas, tackle shared challenges, and outline collaboration opportunities.** By bridging costly information gaps in port logistics and silos between nations, Project SPEED members can discover the latest in smart port solutions and then collaborate: all in one place.



> SPEED is a first of its kind collaboration in the ports sector, where we have found real, tangible value by working with data and technology SMEs that help us to improve the port logistics ecosystem across Western Europe.

Dr Deniz Çetinkaya
Principal Academic in Computing, **Bournemouth University**

The Challenge

Global competitiveness is putting pressures on Western European ports to be more efficient and innovative. In large and complex port environments especially, there are numerous opportunities for efficiency gains in logisitics. Simultaneously, new advances in data science and the Internet of Things (IoT) technologies are enabling more efficient ways to communicate and integrate entire supply chains.

High-tech start-ups and SMEs are leading the way in these technological developments. Currently, port environments do not fully take advantage of data science/IoT technologies. Further, high-tech start-ups and SMEs often struggle with the professionalization of their technological ideas and business activities. As a result, performance of the Western European ports is not as efficient as it could be. Similarly, the full development potential of high-tech start-ups and SMEs and their subsequent economic contributions are not realised. Pressures to become more cost-effective, efficient, and innovative led to the creation of the SPEED Project.

How better to overcome industry issues than with industry-wide cooperation and innovation?

SPEED Portal Objectives

On the SPEED Portal, hosted on a Wazoku Co-Creation Community, member organizations collaborate towards four main goals:

1. **Mobilizing** the port stakeholder ecosystem
2. **Connecting** the smart port stakeholders with a network of experts
3. **Supporting** development of smart port solutions
4. **Building** the structures for a sustained, forward-looking Smart Ports Innovation Ecosystem

By connecting challenges in ports, such as the potential automated sorting systems for shipping containers, with the start-ups and knowledge-providers who can facilitate them, Project SPEED minimizes the time between problem identification and potential solutions. This embodies Wazoku's Challenge Driven Innovation® methodology, where breaking larger, sector-wide problems into manageable segments can facilitate faster, more efficient innovation.

At a glance

SPEED Portal helps to mobilise a network connecting 2 Seas regional data science high-tech start-ups and SMEs, data science and maritime experts and knowledge centres and port stakeholders, to support the Western European ports and port stakeholders who need data science solutions.

250+

Members on the platform

17

Partner organization across industry, academia and start-ups

28

Challenges defined on the SPEED portal

Project SPEED Outcomes

The ports and stakeholders involved in SPEED use this Wazoku-based community for continuous improvement, scouting, and cross-sector innovation. **The initiative functions as a two-sided knowledge base and collaboration hub** for both established companies/stakeholders as well as SMEs. By facilitating the introductions, project overviews, and problem-solution matching that leads to further projects, SPEED caters to both the innovation seekers and innovation providers. Port of Antwerp (Belgium), Portland Port (UK), Poole Harbour (UK), Portsmouth International Port (UK), and the Port of Moerdijk (Netherlands) have all found notable technologies, challenges, and proof-of-concept solutions within SPEED.

Some notable Smart Port Technologies shared on the platform, both software and hardware, include air quality monitors, smart camera system solutions, water quality monitoring systems, and biometric access solutions. These submitted technologies by SMEs, research institutions, and start-ups directly address named challenges on the platform around pollutants, port operations, and on-site security. This built-in link between problems and their solutions in the SPEED community supercharges the time taken and efficacy of solutions.

Awards and Events

Project SPEED was named as a finalist in the IAPH World Ports Sustainability Awards 2021, featuring as the only European initiative in the category of 'Resilient Digital Infrastructure'. Finishing as a runner-up in a hotly-contested category is further evidence of Project SPEED's success, featuring as one of a record 64 projects from 37 member ports in 21 countries in the 2021 awards: voted on by more than 10,000 members of the public.

The SPEED Portal also hosts events, workshops, and hackathons related to port logistics and relevant technologies. Recently, webinars on topics such as AI have seen diverse attendees discussing 'Can low-cost sensors monitor, protect, and improve harbour water quality?'. These events blend technology improvements, sustainability aims, and efficiency gains, such as in the 'Smart end-to-end air quality management in ports' event.

Partners in SPEED Project

Lead partner: Antwerp Management School

Initial Project Partners:

- Bournemouth University
- Universiteit Antwerpen
- Stichting Katholieke Universiteit Brabant
- Nxtport
- Haven van Moerdijk
- Poole Harbours Commissioners
- Borough of Poole
- Université de Lille
- WSX Enterprise
- Portsmouth City Council
- CITC – EuraRFID Centre d'innovations des technologies sans contact
- Startups.be
- Portland Port Limited

Additional partners:

- JADS (Jheronimus Academy of Data Science) - JADS is a unique cooperation between the Province of North Brabant, the Municipality of 's-Hertogenbosch, Tilburg University and Eindhoven University of Technology (TU/e).
- Portsmouth International Port
- PORTXL
- Port+
- Port of Antwerp

The future and the role of Wazoku

Project SPEED members have used the Wazoku-based community to connect their challenges with the start-ups, individuals, technologies, and developments that will help to solve them. This area helps to incubate and accelerate smart ports solutions for stakeholders: any member can collaborate and examine existing business profiles, solutions, and technologies, with the portal acting as a living library of innovation.

Learn more and visit the SPEED Smart Ports Portal, an open community platform!