

Terminal operators and port equipment manufacturers and suppliers to join the Waterborne Technology Platform

The Terminal Industry Committee 4.0 (TIC4.0) joins the Waterborne Technology Platform, further strengthening the waterborne ecosystem and the coordinated approach to research, development, innovation and its deployment

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The Waterborne Technology Platform, has received and warmly welcomes the application for membership by the Terminal Industry Committee 4.0 (TIC4.0). The Waterborne Technology Platform provides policy guidance to the European institutions towards research, development, innovation and its deployment, and coordinates the private side of the [Zero-Emission Waterborne Transport Partnership](#). Members of the Platform discuss the research priorities in different working groups, notably: Ships & Shipping, Ports & Logistics and the Blue Economy. The contributions from TIC4.0 will be key in shaping the strategic research and innovation agendas of these areas, and in particular related to Ships & Shipping and Ports & Logistics.

The waterborne sector is dynamic, featuring a diverse array of public and private stakeholders. These stakeholders range from classification societies, shipbuilders, and shipowners (both maritime and inland navigation) to equipment manufacturers, ports, infrastructure and service providers (e.g. dredging), as well as universities and research institutes. Small and medium sized enterprises (SMEs) form the largest part of the EU waterborne sector and play a crucial role in the sector and the European economy. The various stakeholder groups offer a wide range of services, trades and products. For example, the global fleet can be categorized by different ship types and services, classified according to power requirements and autonomy. Further distinctions are made between liner and tramp shipping and their business models, as well as between retrofitting existing vessels and building new ones. Furthermore, the ecosystem is highly interdependent. Taking these characteristics into account is essential to develop and deploy innovations, including zero-emission solutions, for all segments of the sector.

Recently, the Waterborne Technology Platform has updated its Strategic Research Agenda, laying down the mission and visions of the working groups with a timeline of 2040 and 2050. In the area of “Ports & Logistics” the research activities will focus on port operations, digital and green maritime and hinterland corridors as well as port infrastructure.

José Giménez, Secretary General, TIC4.0 said: *“For TIC4.0, it is crucial to be part of the maritime-port innovation & technology community and contribute to Waterborne’s Strategic Research and Innovation Agenda, providing the perspective of port terminal operators, equipment manufacturers and digital solution suppliers. TIC4.0 will actively participate in Waterborne by identifying technological gaps and priorities (e.g. in port-call optimisation, vessel-port interface, cargo-handling automation, energy infrastructure, and shore power integration) and promoting standardisation and interoperability (e.g. harmonising data models, contributing to standardisation efforts that align with EU digital initiatives). TIC4.0 will also foster cross-sectoral collaboration, bridging the gap between shipbuilders, maritime tech providers and port stakeholders to ensure a system-based approach to innovation. With regard to the Zero Emission Waterborne Transport Partnership (ZEWT), we see an important joint opportunity to collaborate in piloting and scaling innovation, developing living labs or pilot projects in port terminals and logistics hubs that test ZEWT technologies in real operational environments, thus facilitating replicability and scalability of solutions across ports and terminals in Europe.”*



Jaap Gebraad, Secretary General, Waterborne TP, added: *“The European waterborne sector is not only a diversified, but also a highly interdependent ecosystem. To develop and demonstrate deployable solutions, the involvement of all stakeholders of the ecosystem is key. The application for membership by the Terminal Industry Committee 4.0 is an essential step in further integrating all key players of the sector in our activities. Furthermore, the involvement of terminal and port equipment manufacturers and suppliers will further strengthen our contribution to the upcoming industrial maritime and port strategies, whereas innovation and its deployment will be key to ensure the transition towards a resilient, competitive and sustainable European waterborne sector. As a next step, our members will be formally requested to approve the membership application of TIC4.0, which is foreseen for our General Assembly of November 2025”*

WATERBORNE TP has been set up as an industry-oriented Technology Platform to establish a continuous dialogue between all waterborne stakeholders, such as classification societies, shipbuilders, shipowners, maritime equipment manufacturers, infrastructure and service providers, universities or research institutes, and with the EU Institutions, including Member States (www.waterborne.eu). The members of Waterborne TP comprise members as well as associated members from both maritime and inland navigation countries, representing about 19 Member States. In addition, the Associations member of the Waterborne Technology Platform represent the broader waterborne sector throughout the entire EU.

Enquiries concerning how to join and become more closely involved in the “Zero-Emission Waterborne Transport” partnership or other activities of the Waterborne TP can be sent to: Jaap Gebraad, Secretary General Waterborne TP, jaap.gebraad@waterborne.eu, tel: +32 493 835 626

The Terminal Industry Committee 4.0 (TIC4.0) is an international non-profit association established in 2019 and based in Brussels, dedicated to defining digital-based standards for enabling faster and more efficient digital transformation of the cargo handling industry (<https://tic40.org/>). Bringing together global terminal operators, equipment manufacturers, and technology providers, TIC4.0 defines harmonised terminology as well as a unified language, semantics and data models to facilitate interoperable, efficient, and scalable digital solutions across terminal operations and port logistics. TIC4.0 currently gathers more than 70 companies of the worldwide terminal and port industry, connecting experts in operations, engineering, IT, data and IT scientists as well as port equipment specialists.

TIC 4.0 drives the adoption of Industry 4.0 principles by delivering technical publications, supporting proof-of-concept projects, and developing a Publicly Available Specification (PAS 4000) together with the British Standard Institution as a precursor to international standards. The association also collaborates closely with research institutions and EU-funded innovation projects to promote harmonized, future-ready terminal ecosystems.