

AI and robotics push ahead the digital transition of the Ports of Genoa

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The Western Ligurian Sea Port Authority and the University of Genoa have sealed a memorandum of understanding which marks the beginning of a strategic cooperation in the implementation of the “RAISE Project - Robotics and AI for Socio-economic Empowerment”, funded by the National Recovery and Resilience Plan, which is designed to promote the adoption of advanced technologies in port operations at the Ports of Genoa, Savona and Vado Ligure.

The agreement consolidates the active partnership between the Port Authority and the University of Genoa, and dovetails with the broader protocol for the elaboration of the new Port Masterplans which commenced in 2022 and identified technological innovation as a cornerstone for the sustainable and competitive development of port activities.

The RAISE Project, structured according to the Hub&Spoke model, has been developed within Spoke 4 “Smart and Sustainable Ports”, with the University of Genoa serving as the key hub for digitalisation, sustainability and innovation across the Ports of Genoa and Savona-Vado. The working team groups together five university departments (DIME, DIBRIS, DICCA, DIEC, DITEN) and numerous public and private partners, including leading scientific research centres CNR, IIT, ENEA and INFN, and major industry companies such as Fincantieri Nextech, Cetena, Leonardo, Engineering, Circle and Aitek.

The project activities, as outlined in the MoU signed between the Port Authority and the University of Genoa, focuses on the application of artificial intelligence and robotic solutions to port operations, integrated cargo and passenger traffic management and environmental monitoring, with specific attention provided to data collection and analysis for the development of dynamic forecasting models. The pilot projects will be conducted across living labs and operational pilot scenarios in the Ports of Genoa and Savona, integrating technological solutions into infrastructure planning.

The RAISE Project is strategically positioned as a catalyst for innovation in the elaboration of the new Port Masterplans, capable of integrating the long-term visions for the future with the competitive and environmentally sustainable challenges, and creating a synergy and interface between scientific research, industry and governance.