



Ports & airports

Automation
(physical) and
robotics

Port Automation: Berthing & Terminal Simulation



Funded by the
European Union

This project has received funding from the European Union's Horizon Europe research and innovation programme under grant agreement No 101147693

Developed by :



Project by :



AutoMoTIF
LOGISTICS SOLUTIONS SYNERGIES

Operational fields

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PORT AUTOMATION: BERTHING & TERMINAL SIMULATION

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Solution description

A fully simulated port berthing automation solution evaluating all phases of a vessel's port call: arrival, manoeuvring, berthing, and unberthing.

It integrates autonomous tugboats and an Automated Mooring System at Piraeus Port to model complex operations under varied conditions.

The simulation uses digitalisation and AI to replicate real-world scenarios and assess performance, safety, and operational innovation.



Benefits

- Increased operational efficiency.
- Reduced manoeuvring and berthing/unberthing times.
- Increased port traffic capacity.
- Enhanced safety during critical operations.
- Potential environmental impact reduction.
- Reduction of energy consumption

Main beneficiaries:
Ports, Vessel Operators, Tugboat Operators, Logistics Providers



Technology readiness level : **4**
Implementation stage : **Simulation**

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Would you like to know more?
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