

Digital Twins, Al and predictive technologies

Developed by :



Project by :



Simulating an autonomous vessel (SFAZ) network for urban logistics



This project has received funding from the European Union's Horizon Europe research and innovation programme under grant agreement No 101138261

Operational fields

NOTE CONTROL TOWER

1 milimili



Solutions

SIMULATING AN AUTONOMOUS VESSEL (SFAZ) NETWORK FOR URBAN LOGISTICS

Waterborne

Digital Twins, Al and predictive technologies



FOREMAST



Solution description

Simulating entire urban waterway transport networks with multiple vessels and routes.

Evaluating scenarios such as routing strategies, convoying/platooning, fleet sizing and traffic rules.

Modelling feasibility, efficiency and impact of deploying SFAZ in multimodal chains by simulating their interactions with each other and with infrastructure

Identifying optimal network configuration, service schedules and conditions where SFAZ outperform other modes



Benefits

- Coordination of vessel operations with trucks, vans, cargo bikes, terminals to create efficient end to end delivery.
- Maximisation of asset use, reduce delays, ...
- Use of Urban Waterway Network for last mile/first mile and shuttle services.

Main beneficiaries: Multimodal LSP's and Barge owners/operators who want to extend their services.

Less cargo – shallow water or clearance

and design





Technology readiness level : 5 Implementation stage : Concept

Operational fields

Technologies

Solutions

SIMULATING AN AUTONOMOUS VESSEL (SFAZ) NETWORK FOR URBAN LOGISTICS

Waterborne Digital Twins, Al and predictive technologies









Would you like to know more? Take contact :



Nik DELMEIRE Sr Expert – ETP-ALICE

J. Brellaan, 38 1200 Brussels – Belgium



nik.delmeire@etp-alice.eu

Solutions

) +32 494 56 07 07

Technologies

https://www.etp-logistics.eu/ https://foremast.eu/



Operational fields