



Autonomous Operation of the MOSES Innovative Feeder Vessel

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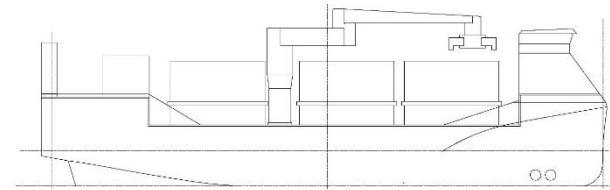
- Introduction
- MARIN Scope in MOSES Project
- Autonomous Operation of the Innovative Feeder Vessel
 - T3.2 - Time-domain simulations
 - T7.3 - Basin scale model tests
- Pilot Demonstration Visitors Day
 - Program
 - Photographs and video



This project has received funding from the European Union's horizon 2020 research and innovation programme under grant agreement No. 861678.

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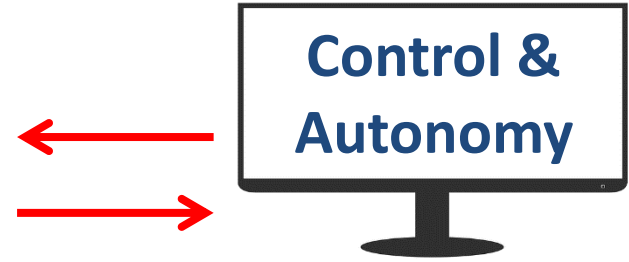
- T3.1 - Innovative Container Feeder Design
 - Dimensions, general arrangement, hull shape
 - Energy concepts, round-trip logistics
- T3.2 - Autonomous Operation
 - Vehicle control, autonomy
 - Time-domain simulations (Mykonos-Piraeus)
- T7.3 - Pilot Demonstration
 - Scale model of the Feeder Vessel
 - Demonstration of the autonomous operation



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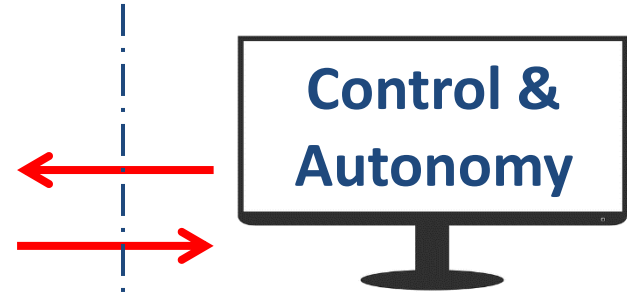
On board



1. Time-domain Simulation



On board



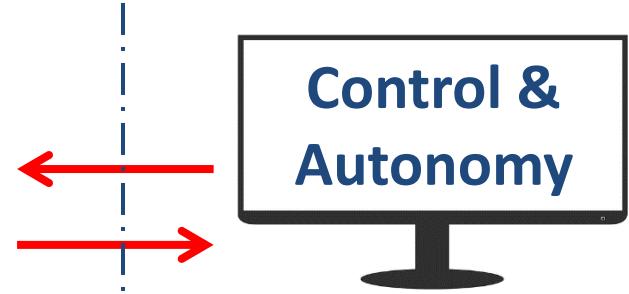
On board

2. Split Simulation Model

Task 7.3 - Autonomy Basin Demonstration



On board



On board

On shore

3. Add Operator GUI

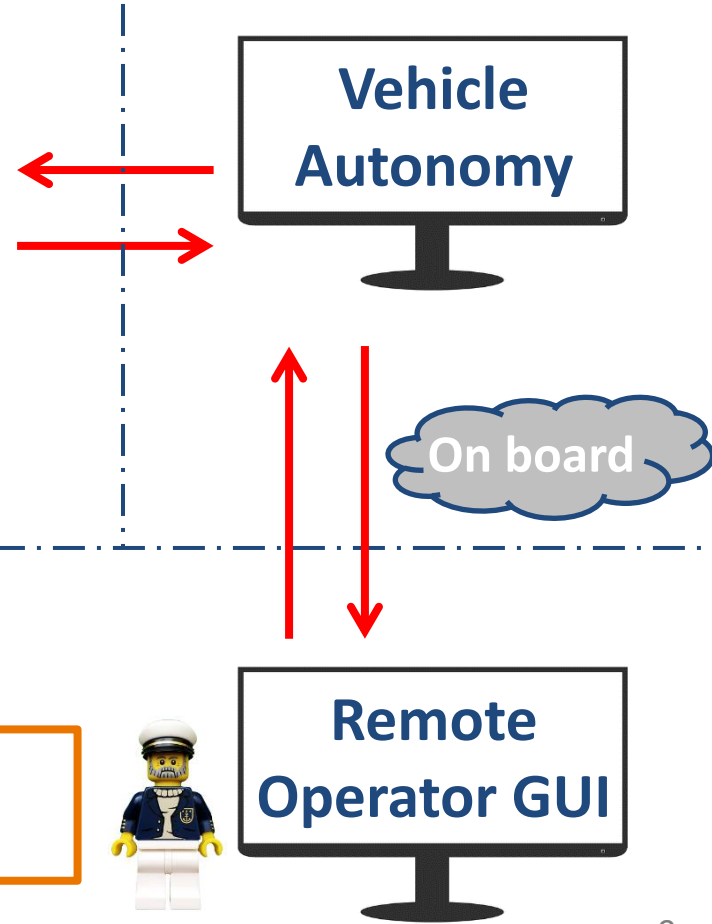


Task 7.3 - Autonomy Basin Demonstration



On board

On shore



4. Basin Demonstration

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- Date : 14 September 2023
- Program :
 - Presentations (morning)
 - Lunch
 - Basin demonstration (afternoon)
 - Project information stands (afternoon)
 - Drinks
- Invitations : ~ 130 people
 - MOSES partners 4 + 11
 - Dutch maritime industry, research institutes and academia 13

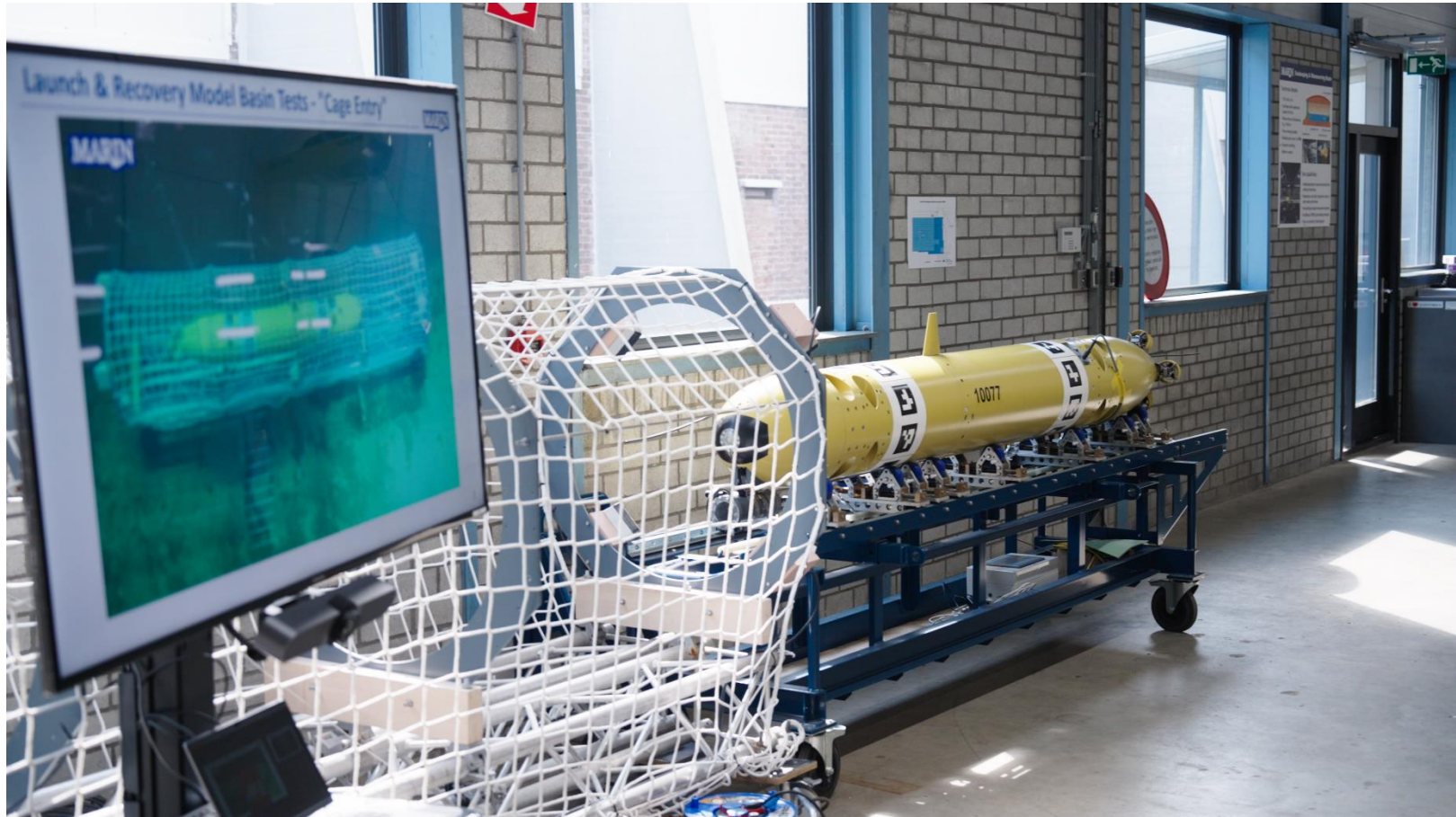


Information Stand (Zero Emission Lab)



Information Stand (Wind Assisted Propulsion)







L x B x D = 170 x 40 x 5 m

Main carriage (X) + sub-carriage (Y)

Maximum speed 6 m/s

Wave flaps on 2 sides (331)

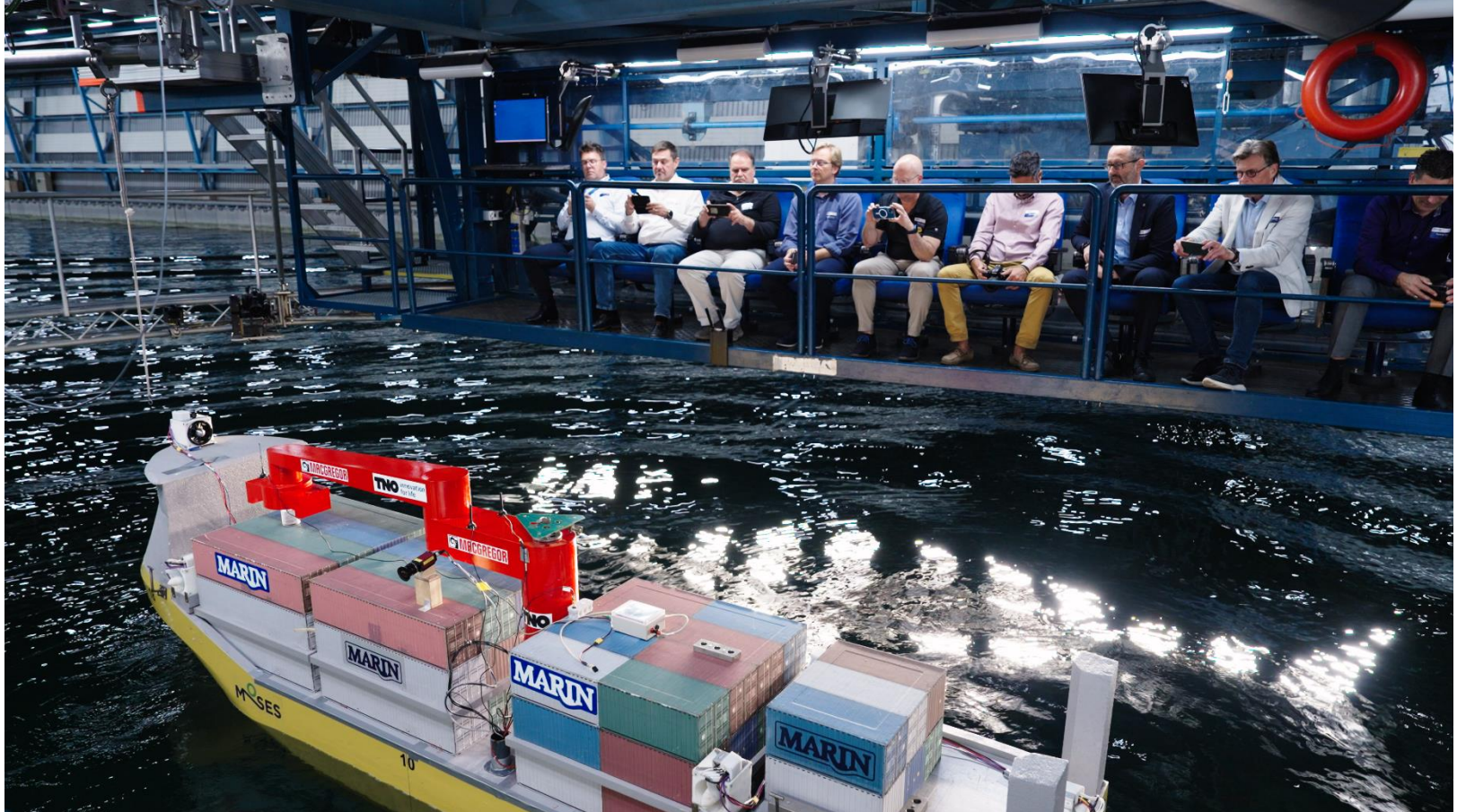
Beaches on opposite sides

Multi-directional waves ($H_s = 0.45$ m)

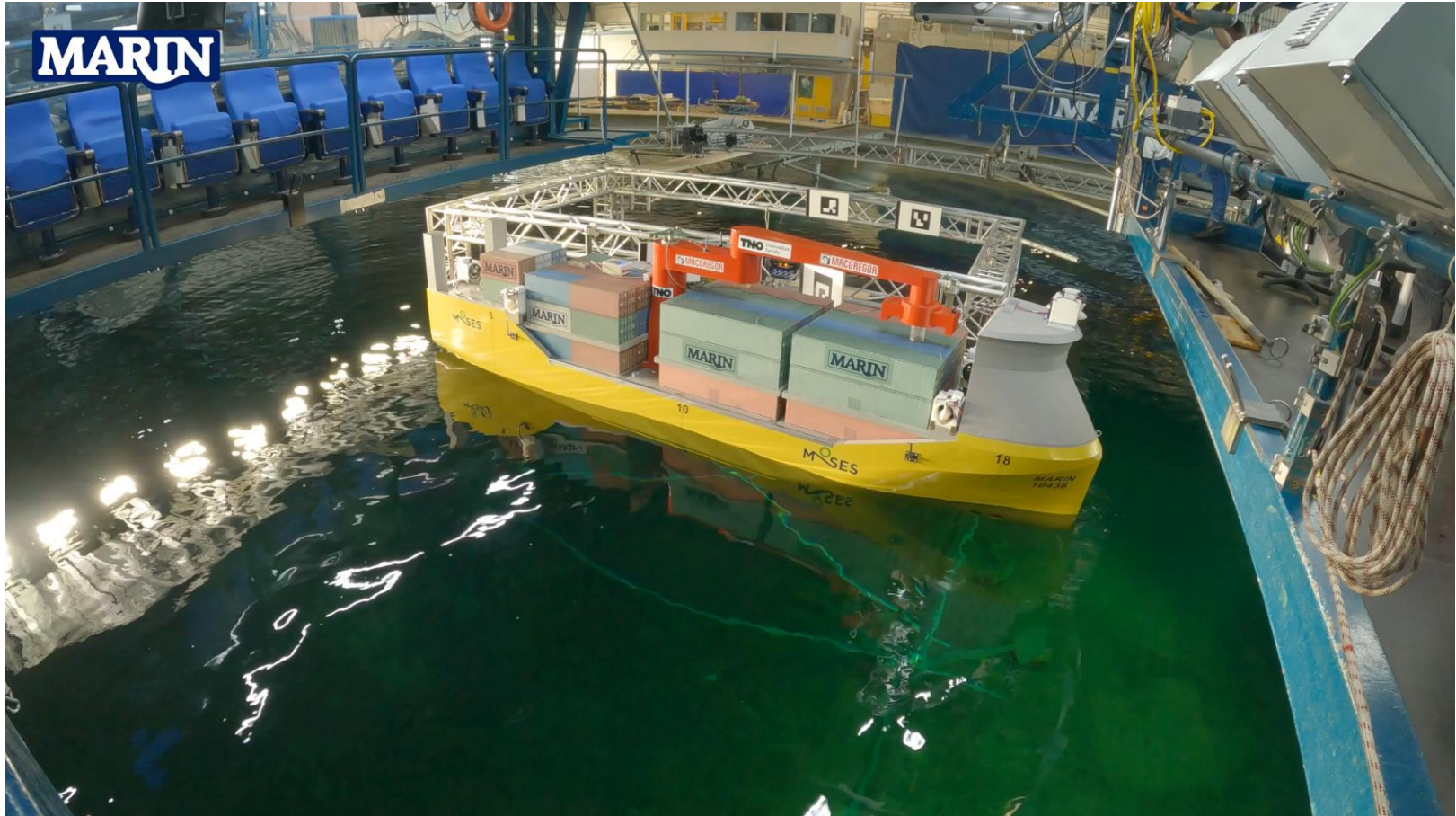
Free sailing tests

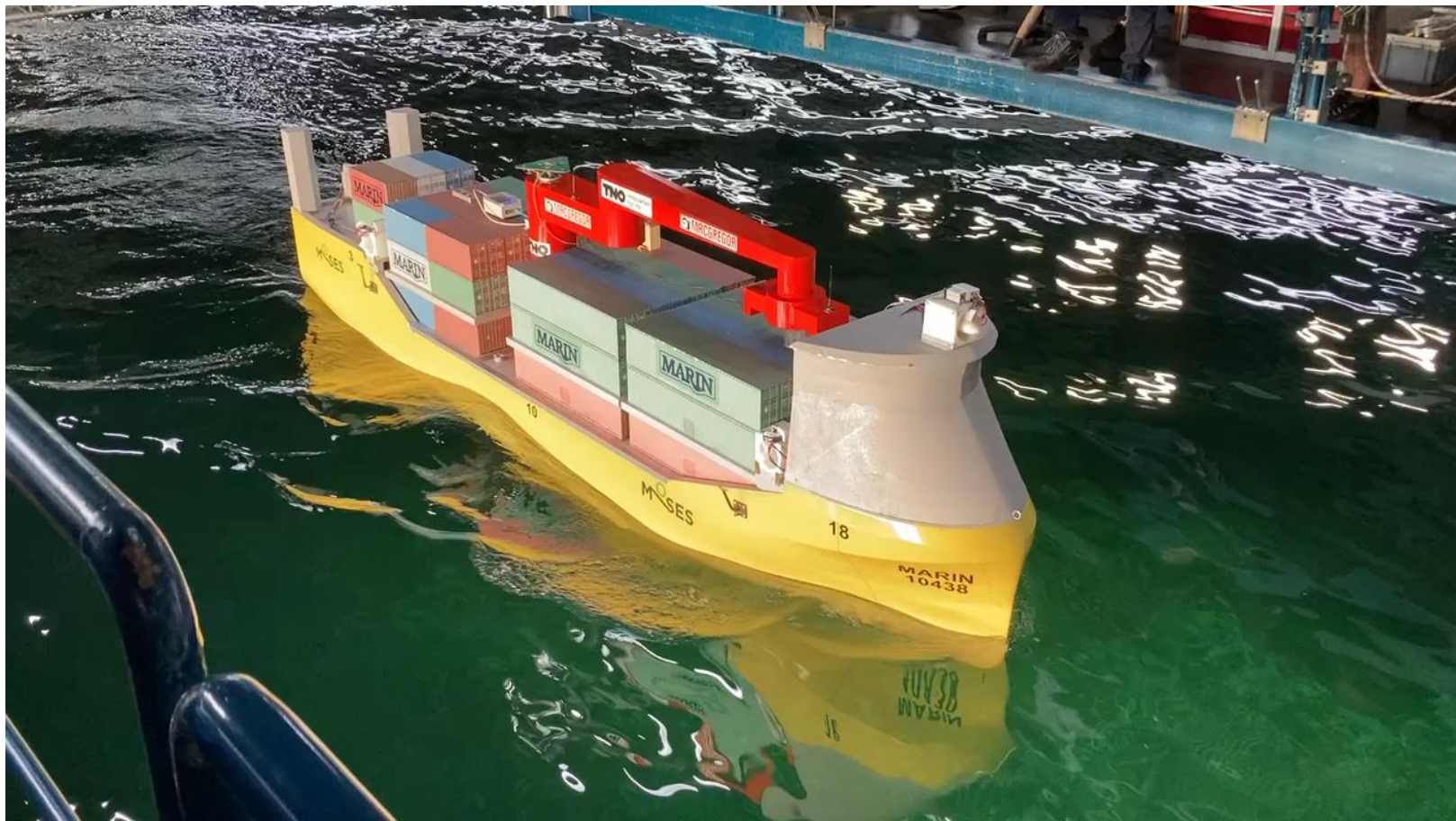
Captive tests

Rotating arm tests



Pilot Demonstration - Full Round-trip







Slido research survey

Join at
Slido.com
#3052 672



<https://app.sli.do/event/kJL1vT1CxoaNKyQV777Aro>

Thank You ! Any Questions ?



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