

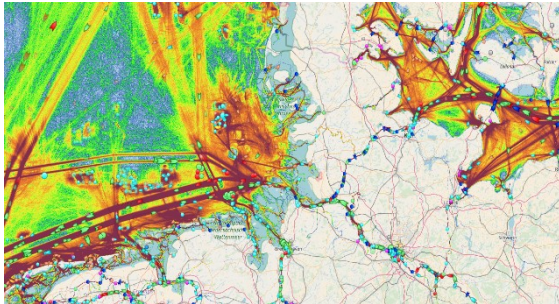


e **MIR** eMaritime Integrated
Reference Platform

e-Navigation Underway 2018

OFFIS – Institute for Information Technology

eMIR eMaritime Integrated Reference Platform



Modelling and Simulation

- > Understanding the Real World
- > Safety and Efficiency Analysis
- > IT-Architecture Development
- > Risk Monitoring



Research and Development

- > Development Methods and Processes
- > Requirements engineering and IT-Architectures
- > Validation & Verification Lab
- > System-of-Systems aspects



Evaluation

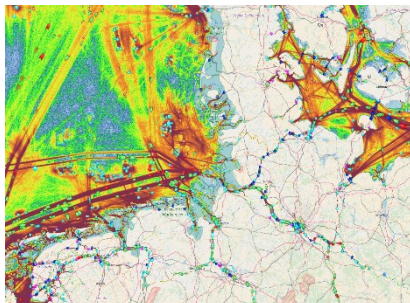
- > Testing of Concepts and Software Systems
- > Testing in Real Environments
- > In situ Demonstration
- > Technologies and Services

Flagship project for Civil Maritime Safety Implementation of the National Master Plan Maritime Technologies (NMMT)



Traffic Safety

- > Traffic Guidance and Monitoring
- > Maritime transport chains
- > Safe Navigation



Environmental Safety

- > Environmental Monitoring
- > Coastal Protection
- > Ship Emissions



Safe Infrastructures

- > Ports and Critical Assets
- > Vessels
- > Offshore and Underwater Infrastructures



Cross-cutting topics

- > System Integration and Standardization
- > Comm. and IT Security
- > Qualification
- > Operational Safety

HAGGIS

Virtual R&D Environment

- > Maritime Traffic Simulator
- > 3D Simulation
- > Scenario Editors
- > Co-Simulation Ecosystem
- > Simulations

eMIR eMaritime Integrated Reference Platform



LABSKAUS

Physical R&D Environment

- > Reference Waterway
- > Experimental Bridge
- > Mobile Bridge
- > Maritime Control Station
- > NaviBox
- > Research Vessels
- > Communication
- > Infrastructure



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