

MarEH4EU

Maritime Exploration Hall for Europe



Usage of the Maritime Exploration Hall by companies and research facilities from all over Europe

The main objective of the MarEH4EU project is to open the unique DFKI Maritime Exploration Hall (MarEH) in Bremen, Germany, to all interested researchers and firms in Europe and beyond. Specifically, the project has the following objectives:

1. To add a new Indoor Maritime Testbed for experimentation with Unmanned Surface Vehicles (USVs) to the RAWFIE federation of facilities.
2. To prepare the MarEH for remote experiments by installing cameras, motion tracking equipment, and other sensors needed for full control and monitoring of experiments with USVs.
3. To provide the necessary internet-based broadband command uplink and data streaming services to allow the remote control and supervision of experiments in the MarEH by researchers located in remote locations.
4. To place technical and scientific staff to interact with the experimenters (if necessary) and for on-site support.
5. To set-up and maintain a small fleet of USVs provided by the RAWFIE consortium for the purpose of remote-controlled experiments in the Maritime Exploration Hall.

To meet the objectives described above and the requirements issued by the RAWFIE project, the MarEH4EU project will

- adapt the DFKI MarEH technically to make it able to interface with the RAWFIE Platform (and through the RAWFIE Platform with the external experimenters),
- augment the existing sensor infrastructure with additional static sensors and motion tracking equipment,
- integrate up to five USVs provided by RAWFIE into the new sensor- and communication infrastructure,
- open the MarEH to external experiments that can be booked through the RAWFIE platform.

Full support including on-site staff to monitor and support the experiments, on-site data storage and full remote access to the site through experimenters will be provided for up to 25 experimentation days in this project. Additional experimentation days will have to be supported by the experimenters.

Duration: 10/2016 – 12/2018

Sponsored by:



**National and Kapodistrian
University of Athens**

Funding is provided by the University of Athens from the funding program "Road, Air and Water-Based Future Internet Experimentation" of the European Union's Research and Innovation Action program.

Contact:

DFKI GmbH & University of Bremen
Robotics Innovation Center

Director: Prof. Dr. Frank Kirchner

Phone: +49 421 - 17845 - 4100

E-mail: robotics@dfki.de

Website: www.dfki.de/robotics