

PRESS RELEASE

Artificial Intelligence in future maritime simulator education and training

Hamburg / Turku, 6 October 2022. Well-trained seafarers are important, as the value creation and safety at sea depends on the seamanship and competence of seafarers. Although many functions onboard of modern vessels have been automated, a ship is still, to a great extent, a human controlled system.

High-quality vocational education is the cornerstone of effective youth transitions into the labour market for the European society. During the pandemic period, the suspension of maritime simulator-based training sessions has led to many challenges with regards to skill development, certification, and competency examination.

How can the effectiveness and accessibility of simulator-based education, safety, security, and performance of maritime operations of the future be improved?

Integrating Adaptive Learning in Maritime Simulator-Based Education and Training with Intelligent Learning System (i-MASTER) is a research and innovation project funded by Horizon Europe, with a budget of 3,286,602 EUR during the period 1.9.2022-31.8.2026.

The primary objective of the project is to develop an Intelligent Learning System (ILS) with maritime learning analytics and adaptive learning function for students engaged in both remote and on-site maritime simulator-based education and training.

The i-MASTER Intelligent Learning System contains of 3 innovations:

- 1) Digitalized navigational performance assessment
- 2) AI-enabled intelligent learning for remote (desktop) ship bridge simulator training
- 3) AI-enabled intelligent learning for on-site full mission ship bridge simulator training

The Finnish-German/German-Finnish Fraunhofer Innovation Platform for Smart Shipping at Novia University of Applied Sciences (FIP-S2@Novia) is one of the core partners in i-MASTER. FIP-S2@Novia is responsible for the maritime learning analytics development and the implementation and testing phase, thus digitizing maritime education. The project is coordinated by UiT - The Arctic University of Norway. Together with the further five partners University of Gothenburg (Sweden), TERP AS (Norway), Vienna University of Economics and Business (Austria), University of South-Eastern Norway (Norway) and the Swedish National Road and Transport Research Institute (Sweden) a distinct, complementary consortia is formed covering multidisciplinary knowledge and cross-sectorial experience. This is necessary to achieve the project objectives and to facilitate innovative, integrated, and emerging technology-enhanced maritime simulator-based education and training.

According to FIP-S2@Novia Director **Mirva Salokorpi**, the project brings together technological, educational, psychological, and economical expertise with experience in shipping.

“This is our first Horizon Europe project, and I am very excited about the auspicious consortium,” she says.

More information:

Mirva Salokorpi, Novia University of Applied Sciences, tel. +358 44 762-3532, fip-s2.fi

Hans-Christoph Burmeister, Fraunhofer CML, tel. +49 40 7941681-1500, fip-s2.fi