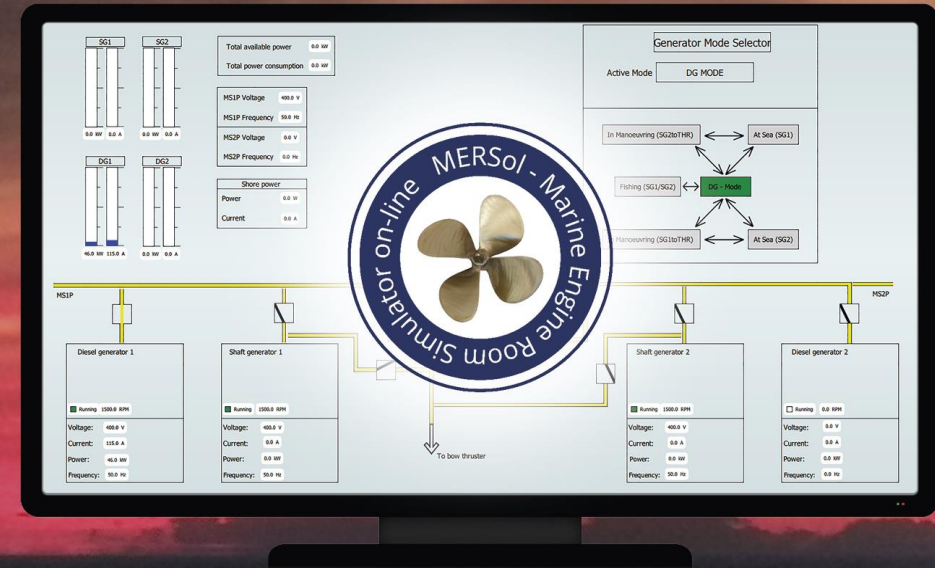


# MERSol

Maritime Engine Room Simulator on-line

**Heikki Koivisto** Master Mariner, project manager (maritime);  
**Minna M. Keinänen-Toivola**  
Head of Maritime Logistics Research Center, title of docent, Ph.D.

Maritime Logistics  
Research Center





# Maritime Education and Training (MET)

- Working onboard a ship is a world of its own.
- Knowledge to solve possibly appearing problems must be available in the crew.
- MERSol project offers up-to-date study and assessment modules for distance learning and testing this knowledge.
- Engine room simulator online gives an opportunity to run engine room operations safely and tests the user to solve different malfunctions in the operations even giving “permission” to fail.



# Maritime Education and Training (MET)

The European Education and Culture Executive Agency, EACEA, opened an additional call for proposals as part of the measures supporting recovery from the coronavirus crisis.

Evaluators of the project: “the project can be expected to produce results that are innovative for its field.”

MERSol-project equips well the marine education and training systems with new digital tools and highly promotes innovative methods for learning and assessment as improvements in education and lifelong learning.



# Intellectual Outputs = Products of MERSol-project

- IO1 study modules and assessment modules online (UPC)
- IO2 the specific software ERS online (IMAGESOFT)
- IO3 guide to related industries (SAMK)



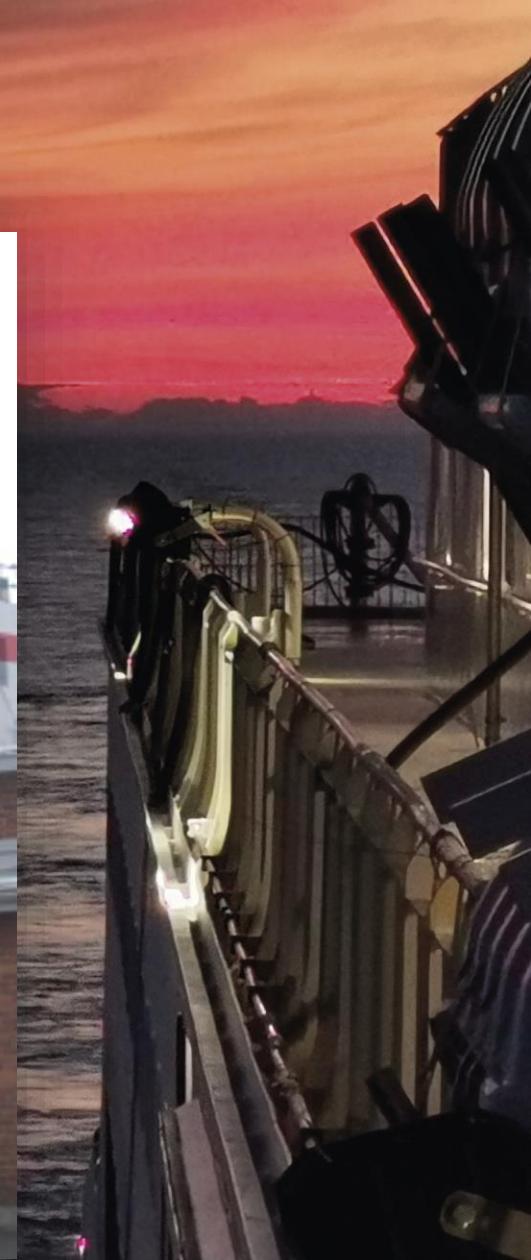
# Study and assessment modules in Moodle



- Electricity
  - Heating and ventilation
  - Auxiliary systems 1 & 2
  - Operation of engines
  - Water systems
  - Connection to the deck systems and bridge
  - Vocabulary
- (example ships, 7 x 150-word pages,  
MET produce -> MET check -> UPC approve)





# "M/V MERSol" (ERS online)




# M/V MERSoI (ERS online)

IS Online Login

## Server in Pori



Co-funded by the  
Erasmus+ Programme  
of the European Union



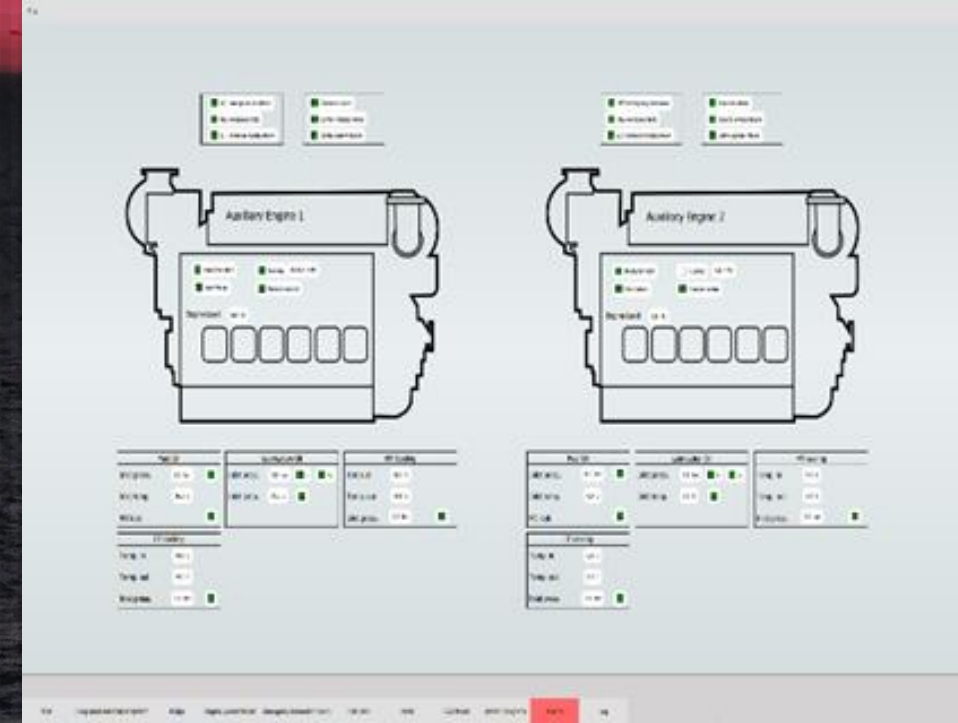
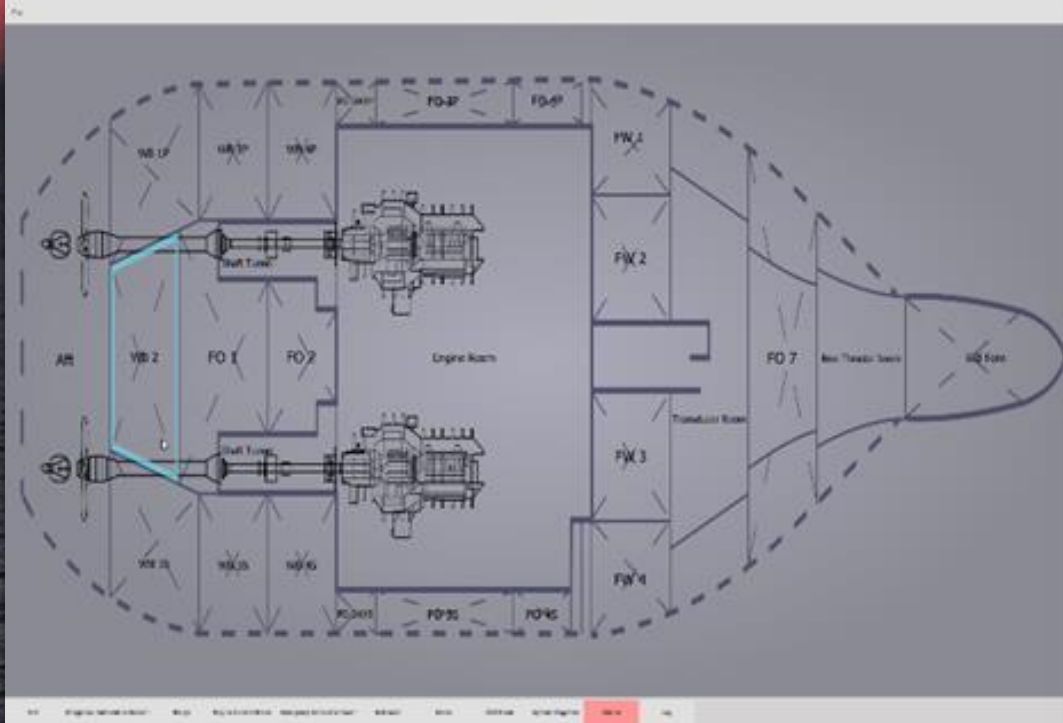
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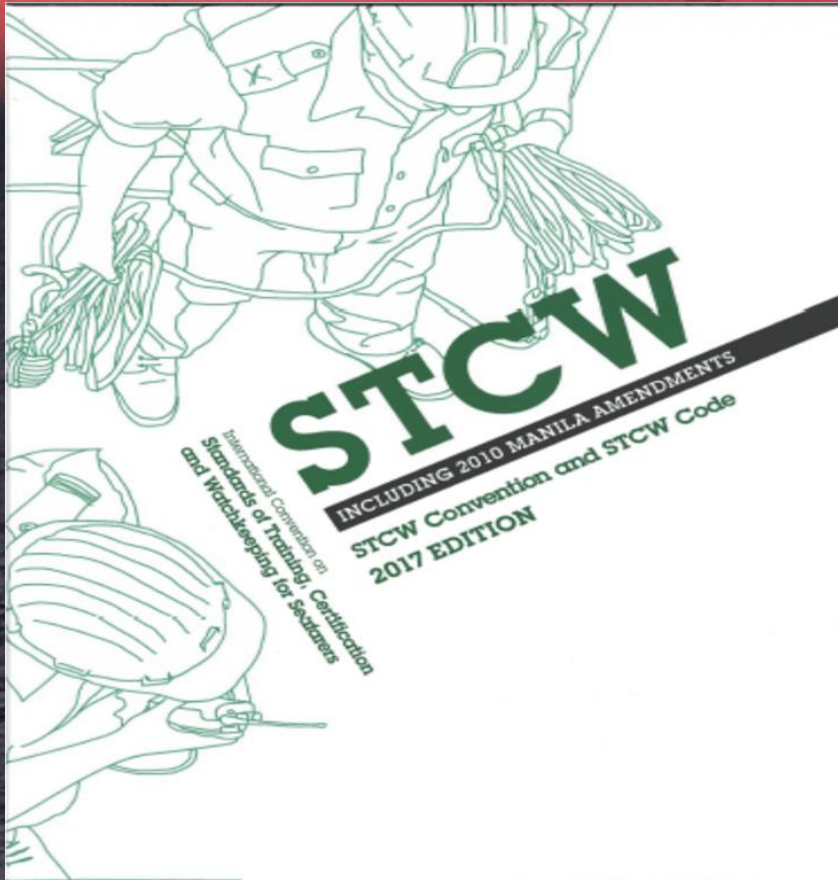


# MERSol 300pages, 25 exercises





# Engine Room Simulator on-line



Engine cadets

Deck cadets

Refreshment training



# Guidebook to related industries (SAMK)

- Set up
- Solved problems with explanations
- What would we do differently May 2023?



# 2-years Erasmus+ project, 263 290€

## Seven Partners in total:

FI, LT, ES, SL, TR, UKR



= the lead



UNIVERSITAT POLITÈCNICA DE CATALUNYA  
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LITHUANIAN  
MARITIME  
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# Thank you!