



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



Cofinanțat prin  
programul Erasmus+  
al Uniunii Europene



# Maritime Simulators and Training Facilities Network for Enhancing the Exchange of Good Practices and Digital Learning – project overview

PhD Marcin Kluczyk

KA220 - Cooperation Partnerships in Vocational Education and Training  
2021-1-RO01-KA220-VET-000029412



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



Cofinanțat prin  
programul Erasmus+  
al Uniunii Europene



# PROJECT OUTLINES

- **PROJECT ACRONYM: MARS-NET**
- **PROJECT START DATE: 2022-02-01**
- **PROJECT TOTAL DURATION: 24 MONTHS**
  - **PROJECT END DATE: 2024-01-31**
  - **GRANT APPROVED: 207.970 EURO**





## Project Partners

- RNA - Romanian Naval Academy - Academia Navala "Mircea cel Batran" (E10093117 - Romania)
- PRU - Piri Reis University - T. C. Piri Reis Universitesi (E10105404 - Turkey)
- NVNA - Bulgarian Naval Academy - "Nikola Yonkov Vaptsarov" Naval Academy (E10108590 - Bulgaria)
- PNA - Polish Naval Academy - AKADEMIA MARYNARKI WOJENNEJ (E10090628 - Poland)
- LMA - Lithuanian Maritime Academy - Lietuvos aukstoji jureivystes mokykla (E10108901 - Lithuania)



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



Cofinanțat prin  
programul Erasmus+  
al Uniunii Europene



## MarsNet Steering Committee:

**Project director: Alecu Toma**

**Project responsible RNA: Sergiu Lupu**

**Project responsible PRU: Taner Albayrak**

**Project responsible LMA: Rima Mickiene**

**Project responsible PRU: Marcin Kluczyk**

**Project responsible NVNA: George Dimitrov**



## ***Intellectual output nr 1 - “Building the updated pool of competencies for maritime education to improve the value of simulating facilities in maritime education”:***

**10 course syllabuses to be harmonized** for selected STCW courses, to value the simulation learning methods on hard and soft skills requirements:

- Ship Handling and Manoeuvring,
- Cargo handling,
- Navigational Watchkeeping,
- Engine Room Watchkeeping,
- Radar Navigation,
- Maritime Search and Rescue,
- Coastal Navigation,
- Naval Machines and Equipment,
- Naval Communications,
- Celestial Navigation.

## Intellectual output nr 2 - *“Digital media tools to enhance the simulating teaching efficiency in maritime education”*:

- **1 guide for best practices in modelling the digital course content** to exchange good practices in building the digital materials, as to be forth commonly used in exchange programmes implemented among the partners.
- **1 evaluation/assessment guide for simulation courses** in maritime education will be conceived to facilitate the common practices implementation on hard skills courses, solving a great issue faced among the partners in reference to the simulation facility usage.
- **5 common harmonized course/seminar digital materials.**
- **25 video tutorial materials for simulating classes instructions** will be prepared.



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



Cofinanțat prin  
programul Erasmus+  
al Uniunii Europene



## Intellectual output nr 3 - “Virtual digital campus for teachers, researchers and students”

- **1 virtual network** for teachers/experts/ and 1 virtual collaborative e-campus for teachers and researchers.
- **1 video conference system** .
- **5 subject shall to be uploaded on the platform** available to facilitate the dual education system for cadets onboard the ships -each partner will be responsible for one course, as assigned in O2:
  - ✓ **Ship Handling and Manoeuvring** (Navigation simulator)
  - ✓ **Navigational Watchkeeping** (Navigation simulator)
  - ✓ **Radar Navigation** (Navigation simulator)
  - ✓ **Engine Room Watchkeeping** (Engine Room Simulator)
  - ✓ **Cargo handling** (Cargo handling Simulator)

## Intellectual output nr 4 - “Joint scientific research partnership for building a more efficient and effective teaching learning environment based on simulation facilities”

5 research studies on simulating environment efficiency and effectiveness for maritime education and training

- *Class leadership and methods to overcome the limits of virtual education*
- *Evaluation methods for students on learning by simulating environment*
- *Virtual scenarios development*
- *Leadership studies on bridge team management using the simulators*
- *Research study about connecting solution of simulating facilities of partners (academic network of simulators)*

## **Intellectual output nr 2 - “Joint scientific research partnership for building a more efficient and effective teaching learning environment based on simulation facilities”**

- **250 students and 20 teachers will be virtually enrolled in digital classes**, to support the developing of the digital content materials.
- **5 digital courses**, fully covered with harmonized curriculum (O1), teaching materials (O2) and online available resources (O3), digitally developed in virtual manner to stimulate the cadetship dual system programs, the virtual mobility of international students and the digitization of simulating classes.
- For each online course **10 students x 5 partners = 50 students will be enrolled**.
- For each module digital resource learning: **7 topics /2hrs+ 7 seminars/2hrs – recorded online (capture) + 5 video tutorials (laboratory) to be filmed in the simulator - to be uploaded via marplat.eu.**

## “Learning, Teaching and Training” activities



### **INTENSIVE PROGRAMMES FOR HIGHER EDUCATION TEACHING STAFF (3-5 days training program)**

**C1 -“Digital exercises on shiphandling simulator – exchange of good practices and building tutorial digital courses”,**

**C2 -“Digital exercises on engine room simulator – exchange of good practices and building tutorial digital courses”,**

**C3 -“Digital exercises on cargo handling simulator – exchange of good practices and building tutorial digital courses”,**

### **INTENSIVE PROGRAMMES FOR LEARNERS (5 days training program)**

**C4 -“Watchkeeping course on bridge simulator for deck cadets – blended training session on practice to virtual”**

**C5 - “Watchkeeping course on engine room simulator for engine cadets – blended training session practice to virtual”**



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



Cofinanțat prin  
programul Erasmus+  
al Uniunii Europene



# MARS NET