

PROJECT ACRONYM AND TITLE: Cyber Security of Maritime ICT-Based Systems

**FUNDING PROGRAMME:** University of Rijeka

PERSON RESPONSIBLE: Boris Sviličić

### **FINANCIAL DATA**

| Project total cost | Overall funding assigned to PFRI |  |
|--------------------|----------------------------------|--|
| 39.663,38 HRK      | 39.663,38 HRK                    |  |

### **SUMMARY**

With the growing reliance on the Information and Communication Technologies (ICT) technologies, maritime cyber risk management becomes increasingly important. Managing the maritime cyber risk would allow not only data protection, but as well as safe and reliable ship operations and maritime transport. Recently, the International Maritime Organization (IMO) has published the Guidelines on high-level recommendations for maritime cyber risk management. In addition, IMO has imposed to include maritime cyber risk management in the ISM Code safety management system on ships by 1<sup>st</sup> of January 2021.

The project's research field is cyber security aspects of implementation of new and existing shipboard systems and equipment based on ICT technologies. The focus of the project is development and implementation of a complex set of related and interdependent actions that intersect so as to provide safeguards that are effective and corresponding to challenges presented by ICT technologies innovations, ship critical systems specifics and key shipboard operations. The research consists of six main parts to cover the complexity of ships: navigation systems, communication systems, power generation and propulsion systems, machinery systems, cargo management systems, and passenger servicing and management systems. Developed framework for cyber security assessment of critical ships systems is conducted by interviewing ship officers followed by cyber vulnerability scanning and penetration testing. The research is performed on ships of leading maritime universities and national shipping companies.

| Start date  | End date    |  |
|-------------|-------------|--|
| 07.03.2019. | 07.03.2020. |  |

## **PARTNERSHIP**

| Br. | Partner organization                       | Country   | Role         |
|-----|--|-----------|--------------|
| 1.  | Faculty of Maritime Studies Rijeka         | Croatia   | Lead partner |
| 2.  | California State University Maritime       | USA       | Partner      |
|     | Academy, USA                               |           |              |
| 3.  | Australian Maritime College, University of | Australia | Partner      |
|     | Tasmania                                   |           |              |



| 4. | Faculty of Maritime Sciences, Kobe | Japan   | Partner |
|----|------------------------------------|---------|---------|
|    | University                         |         |         |
| 5. | World Maritime University          | Sweden  | Partner |
| 6. | Jadrolinija d.d.                   | Croatia | Partner |
| 7. | Ministarstvo pomorstva, prometa i  | Croatia | Partner |
|    | infrastrukture                     |         |         |
| 8. | DINAMARIN d.o.o.                   | Croatia | Partner |

## **WEBSITE: -**

## **ADDITIONAL INFO:**

# Project team members:

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