



Cyber preparedness actions for a holistic approach and  
awareness raising in the MARitime logistics supply chain  
(Cyber-MAR)

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# Who we are?

## GENERAL FACTS & RELEVANT EXPERTISE



ICCS stands for the Institute of Communication & Computer Systems, Athens, Greece.

A public scientific & technological institute which undertakes advanced research in the field of electrical, electronic and computer engineering & technologies.

- Electrical engineering
- Fusion and Perception Tools
- Signal and image processing
- Intelligent Transportation Systems
- E-mobility
- Electric vehicles
- Human-machine interactions
- Virtual Reality
- Simulation and modeling



I-SENSE Group - ITS Activities



## ICCS & POSITION OF THE I-SENSE GROUP



National  
Technical  
University  
Athens



Institute of  
Communication &  
Computer Systems

Intelligent System  
Engineering and  
Novel Simulation  
Environments Group

- 12 research units;
- 24 research labs;
- scientific personnel: more than 800 researchers;
- contracts with EC, National Authorities and Agencies, Industry



I-SENSE Group - ITS Activities

## LOGISTICS



- Data Handling & Analytics
- Warehouse Automation
- Goods monitoring/tracking platform
- Dynamic planning of deliveries
- Security/safety in logistics operations

Analytics and optimization for  
modal planning  
Integrated Port Management solutions



I-SENSE Group activities

13/11/2019



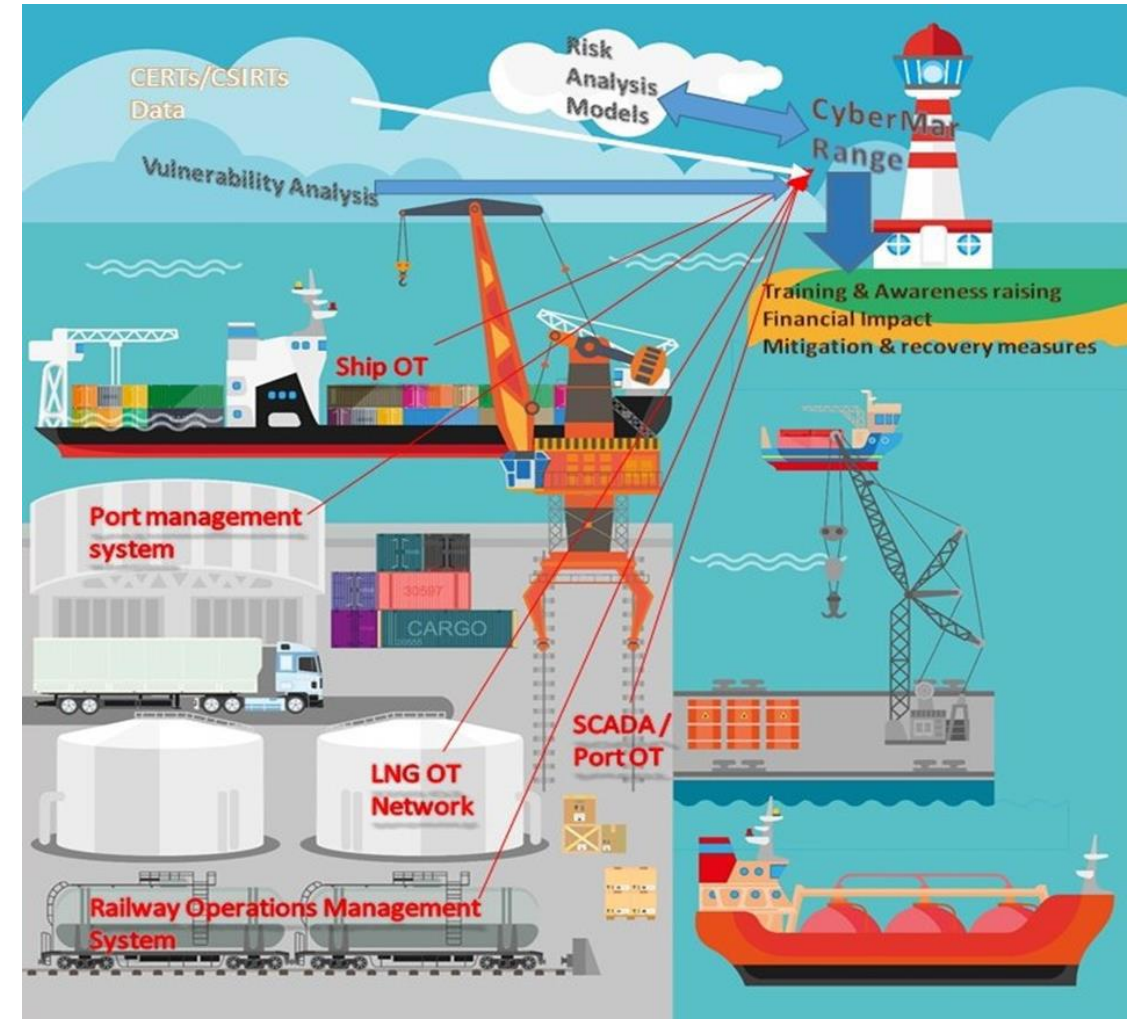
*#Maritime industry is easy meat for #cyber criminals*



# Cyber-MAR at a glance

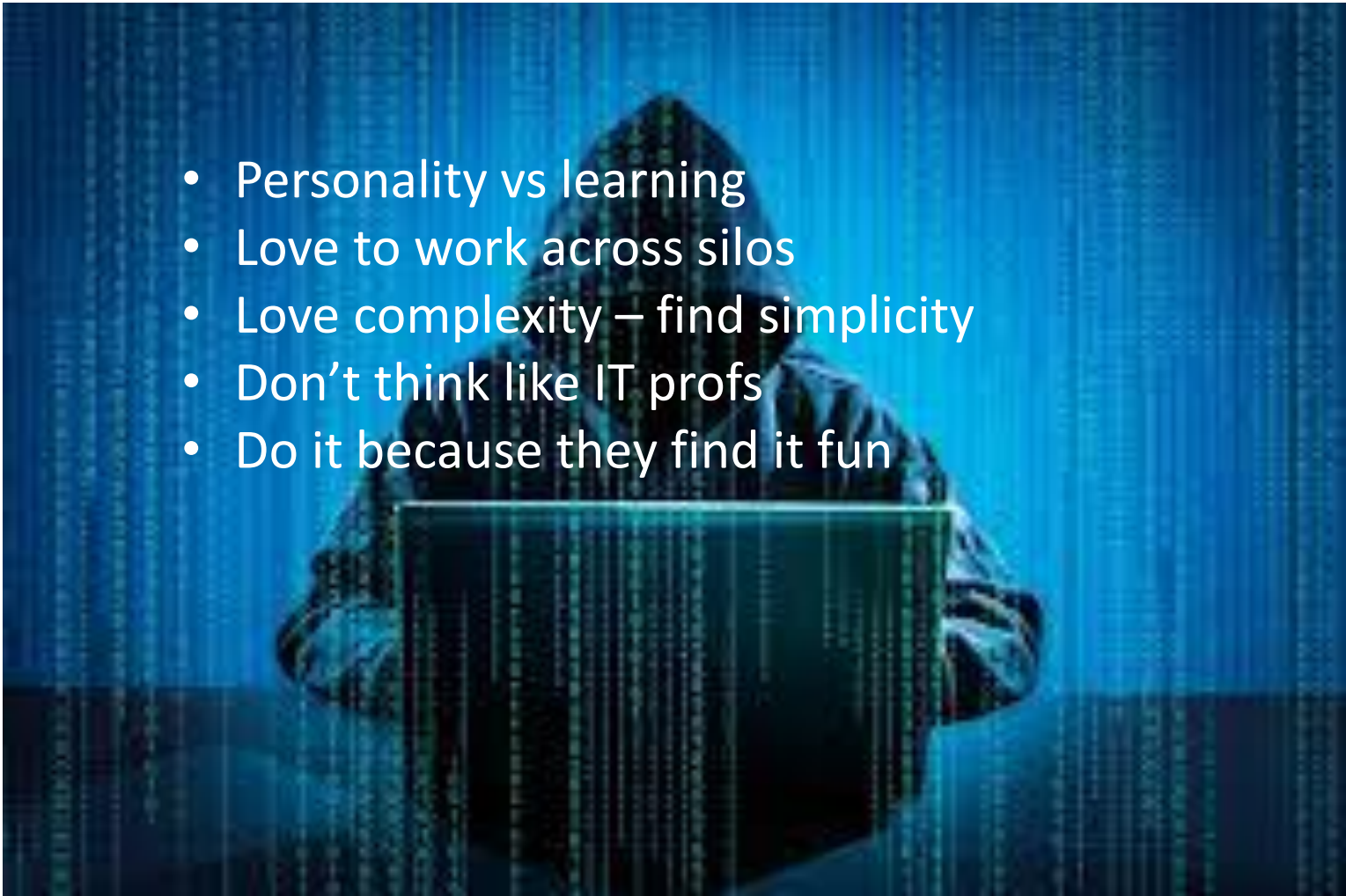
Cyber-MAR takes advantage of cyber range environment and adopts a three-tiered approach targeting at:

- **People:** Continuous training through involvement in pilots, training sessions and familiarised with Cyber-MAR platform
- **Technologies:** Test technologies and identify complex vulnerabilities
- **Procedures:** Uncover areas for improvement and deficiencies in current procedures followed





# Responding to new kind of threats

- 
- A person wearing a dark hoodie is sitting in front of a laptop. The background is a dark blue screen filled with vertical lines of green and white code, resembling a digital rain or matrix effect.
- Personality vs learning
  - Love to work across silos
  - Love complexity – find simplicity
  - Don't think like IT pros
  - Do it because they find it fun

## Short Term

1. Response time metrics, including mean time to incident discovery and mean time to patch improved by at least 5%.
2. Cyber-MAR platform is security-vendor agnostic
3. Increased interconnection and interoperability
4. Standardisation and dissemination to the CSIRTs network
5. Use of available historical data (evidence-based) of cyber-security attacks and data privacy breaches
6. Econometric model for quantifying the impact from cyber-attack of ports.
7. Flexible hybrid solution for mixing virtual and physical (real) IT components of an organisation and assessing their joint/integrated response and resilience to cyber-attacks and privacy breaches

1. Decision Makers / Public Authorities
2. Port Authorities / Shipping operators / Freight transport / Logistics actors
3. CERT/CSIRTs network
4. European and international organizations for cyber security
5. Insurance companies
6. Academic and scientific actors
7. EU Cyber security Projects

## CYMO TIVE T E C H N O L O G I E S

Assets	Data	People & Environment
Threats	Availability Confidentiality Integrity	Resilience Privacy Safety
Goal	Liability	Growth
Orientation	Compliance	Trust
Approach	Reactive (preventive)	Proactive (event driven)
Players	Local	Across lines of Business
Change	Technology	Process/Culture Change



- O1. Enhance capabilities of cybersecurity professionals and raise awareness on cyber-risks
- O2. Assess cyber-risks for operational technologies (OT)
- O3. Quantify the economic impact of cyber-attacks across different industries with a focus on port disruption
- O4. Promote cyber-insurance market maturity in the maritime logistics sector (adaptable to other transport sectors as well)
- O5. Establish and extend CERTs/CSIRTs, competent authorities and relevant actors collaboration and engagement

# Cyber-MAR Facts & Figures

**Name:** **Cyber** preparedness actions for a holistic approach and awareness raising in the **MAR**itime logistics supply

**Project ID:** 833389

**Funded under:** H2020

**Funding scheme:** IA - Innovation action

**Duration:** From 2019-09-01 to 2022-08-31,

**Total cost:** EUR 7 154 505.00

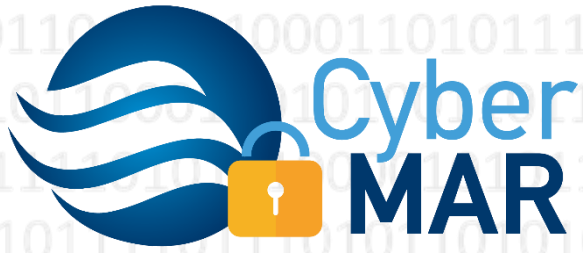
**EU contribution:** EUR 6 018 367.507

**Call for proposal:** H2020-SU-DS-2018

**Topic:** SU-DS01-2018 – Cybersecurity preparedness-cyber range, simulation and economics

**Coordinated by:** Institute of Communication and Computer Systems (ICCS), Greece





[www.Cyber-MAR.eu](http://www.Cyber-MAR.eu)



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# THANK YOU FOR YOUR ATTENTION



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