Sec Awareness Truss

A Dynamic Training programme based on Cyber-Ranges Leveraging IT Security, Privacy and Data Protection Culture and Awareness of Critical Information Infrastructures

Project Walkthrough

Co-funded by the European Union

This project has received funding from the European Union's Horizon Europe research and innovation programme under Grant Agreement No 101128049.

Overview

- SecAwarenessTruss is a DIGITAL programme (call: DIGITAL-ECCC-2022-CYBER-03) started on January 2024.

- SecAwarenessTruss will deliver a **customized federated cybersecurity range platform** with **systematic** and **innovative** training programs.

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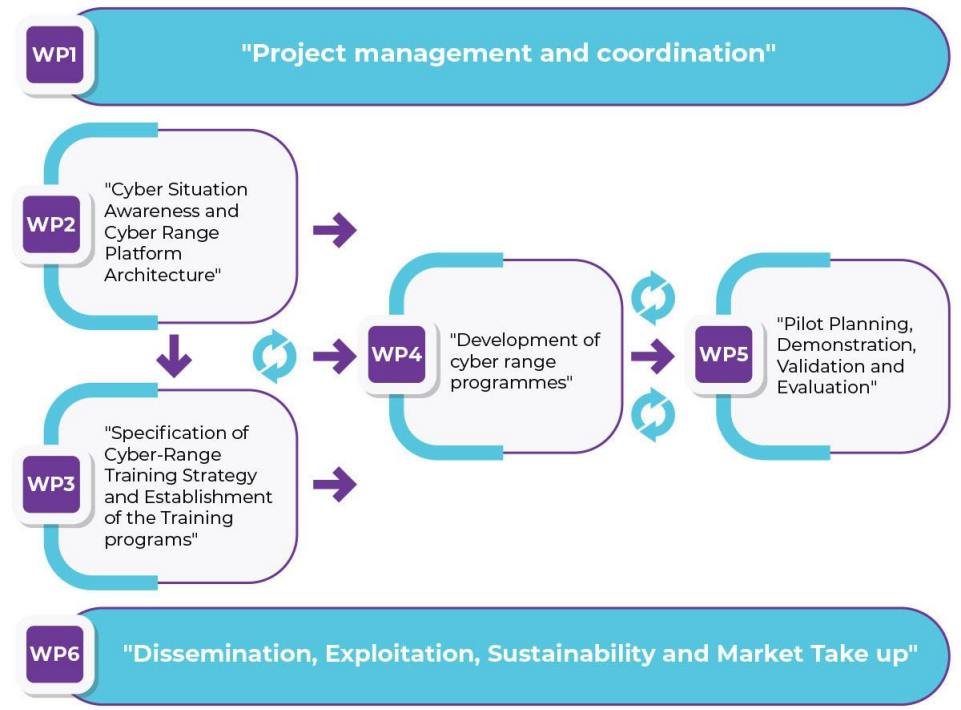
Overview

The platform targets **Critical Infrastructure organizations** to develop a skilled workforce for cyber defense and collaborative response.

The project will include:

- Cross-sector complex scenarios
- Gamification-based exercises
- Knowledge-sharing capabilities
- Hands-on and interactive learning facilities



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Consortium

SecAwarenessTruss is a collaboration of 10 organizations from Greece and Cyprus, including:

- 4 industrial partners
- 4 critical infrastructure organizations from telecom, energy, health, and maritime sectors
- 2 SMEs

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Objectives

Deliver a state-of-the-art platform	Extend capabilities of existing cybersecurity ranges
	Structure training frameworks for effective cyber defence
Develop and deliver training curricul	Innovative and hands-on approach
	Sustainable programs for critical infrastructure
Develop realistic scenario	Large-scale, cross-sector
	Incorporate gaming exercises
Share threat intelligence	Knowledge sharing among cybersecurity ranges
	Coordinated cyber-incident response
	Create common data repository
Evaluate and strengthen ranges	Develop best practices
	Guidelines for wider adoption across Europe

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Pilots

- The **four** pilot application scenarios will actively **engage stakeholders** coming from **four critical infrastructure** sectors and featuring different **characteristics**, **services**, **infrastructures** and **training** needs.

Telecom

Energy

HealthCare

Maritime

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Pilot Case 1 - Telecom

The Hellenic Telecommunications Organisation S.A. (OTE) manages a large digital infrastructure for ICT services, featuring a 3-tier architecture with presentation, application, and data layers. The scalable virtual infrastructure supports services such as mediation and customer relationship management.

Attack scenarios involve:

- Planning mitigation actions
- Re-training models for infrastructure changes

Training scenarios cover:

- Train response teams
- Enhance situational awareness
- Identify vulnerable systems
- Simulate attack and response scenarios, including ransomware and DDoS attacks

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Pilot Case 2 - Energy

Public Power Corporation (PPC) operates a significant energy infrastructure, including the PPC Innovation Hub, offering services like laboratory tests, NDT inspections, and R&D activities. The pilot infrastructure exchanges data for diagnostics and maintenance, focusing on network traffic, electrical measurements, and incident reports.

Attack scenarios involve:

- Planning mitigation actions
- Re-training models for infrastructure changes
- Addressing zero-day threats and Advanced Persistent Threats (APTs)

Training scenarios cover:

- Detection, prevention, simulation, and analysis
- Policies and automation
- Knowledge enhancement

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Pilot Case 3 - Healthcare

PAGNI, the largest hospital in Crete, operates an integrated information system connecting medical care, pharmacy, and patient records.

Attack scenarios involve:

- Ransomware
- Phishing
- Insider threats
- Data breaches
- Malicious software
- Denial-of-service attacks

Training scenarios cover:

- Critical system simulation
- Cyber attack detection and prevention
- Real-time network operations management
- Phishing simulation
- Malware detection exercises
- Training healthcare personnel on securing medical devices

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Pilot Case 4 - Maritime

DSA will organize a pilot scenario focused on the maritime sector, covering both ashore and ship domains. This scenario will:

- Examine the onboard infrastructure of a specific ship type and its interconnected ashore infrastructure.
- Provide live reaction and planning of cyber defense.
- Improve monitoring and analysis of attacks.
- Optimize information analysis to validate business continuity plans.

Attack scenarios include:

- Ransomware
- Denial of service
- Spoofing attacks
- Sophisticated attacks altering ship behavior

Training scenarios cover:

- Complex cyber threats relevant to maritime ICT infrastructure
- AIS message manipulation
- Navigation system spoofing
- Ransomware attacks on critical systems
- Scenarios tailored to different user profiles

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Thank you

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