

CS-AWARE CYBERSECURITY

A 2017-2020 EU H2020 Project. Funding received under the EU 3.7.4 Innovation Action # 740723

Problem

Cybersecurity is one of today's most challenging societal security problems, affecting large commercial companies, SMEs, NGOs or governmental institutions. Deliberate or accidental threats and attacks threaten digitally administered data and digitally handled processes.

Ambition

- CS-AWARE H2020 project aims to provide a cybersecurity situational awareness solution for small to medium sized IT infrastructures.

Project Overview

- The CS-AWARE project approach will be a big step towards automation of cyber incident detection, classification and visualisation, and will be based on mature big data analysis tools and methodologies provided by consortium partners.
- This solution enables detect, classify and visualise cybersecurity incidents in real-time, supporting the prevention or mitigation of cyber attacks.
- However, cyber situational awareness will never be a fully automatic process that only requires to install a tool that, without any configuration, will be able to monitor the different setups and configurations of different organisational IT infrastructures.

Proposed Solution

Situational Awareness

- Enables the end user to counteract cybersecurity incidents. Full control is retained by the user over his / her actions and receives recommendations for counter actions if available.

Information Sharing

- While providing automated mechanisms for information sharing, the user stays in control over which data will be shared, especially when confidentiality or privacy matters have to be taken into account.

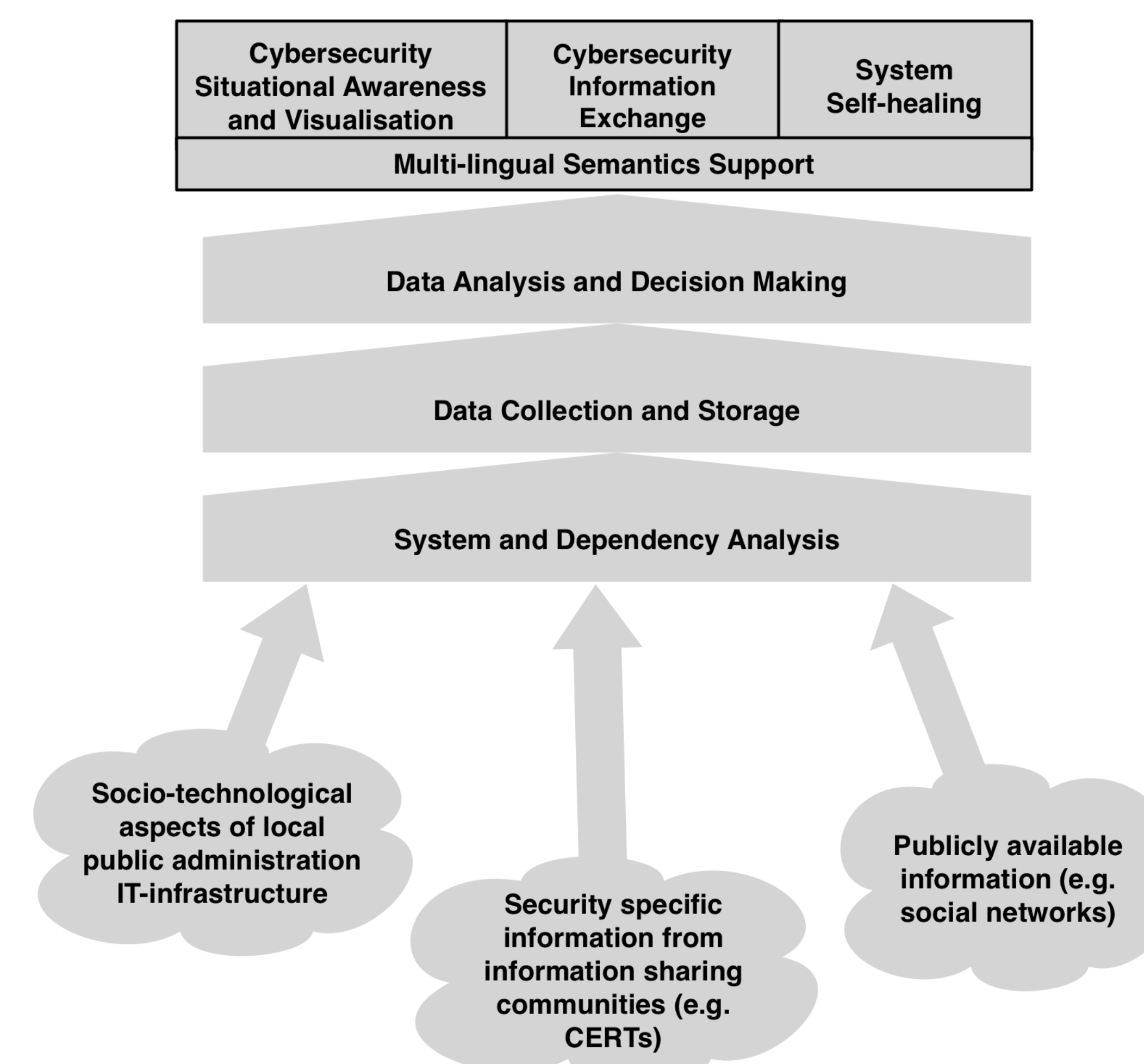
Self-healing

- While providing cybersecurity strategies that can be invoked automatically to mitigate incidents or attacks, the user should retain the control about which strategies will be invoked in which situation, and/or if they should be invoked without user interaction.

Project objectives

- Objective 1: Provide a cybersecurity situational awareness solution for local public administrations.
- Objective 2: Advance the automation of cyber incident detection, classification and visualisation to provide situational awareness.
- Objective 3: Include a cybersecurity information exchange framework that embraces the collaboration and cooperation initiatives of EU.
- Objective 4: Illustrate that cyber situational awareness is a key technology in cybersecurity by building advanced features like system self-healing on top of the situational awareness capabilities.
- Objective 5: Evaluate and validate the user needs through end-user involvement and pilot testing.

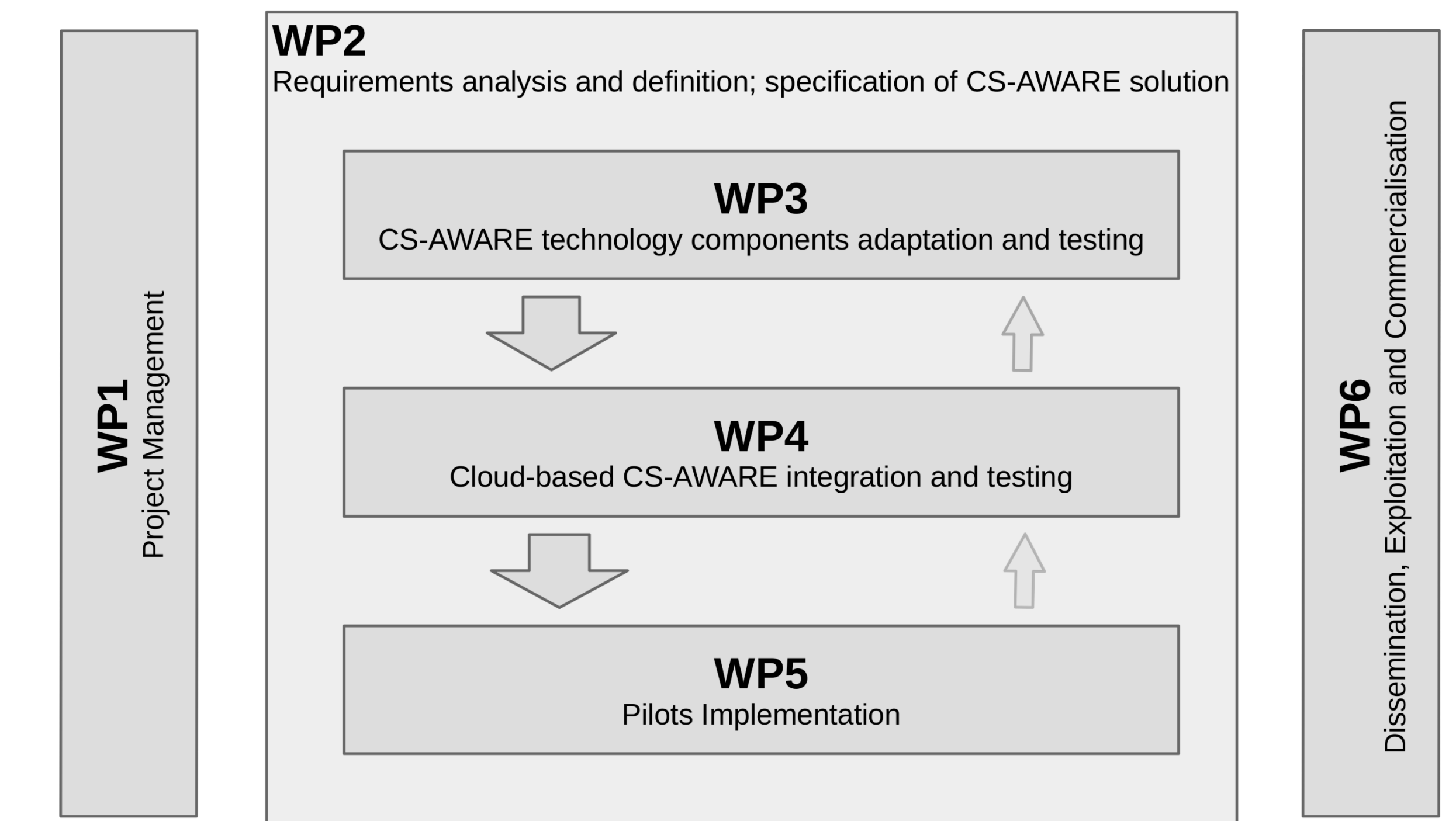
CS-AWARE Concept



Consortium Partners



Work Packages



- WP1 Project management
- WP2 Requirements analysis and definition
- WP3 Technology components adaptation and testing
- WP4 Cloud based integration and testing
- WP5 Pilots implementation
- WP6 Dissemination, exploitation and commercialization

Expected Impacts

- Increased competitiveness of European ICT security products and services catering to the needs of SMEs, local public administrations and individuals.
- Increased resilience against widespread cybersecurity threats facing SMEs, local public administrations and individuals.
- Increased effectiveness of cybersecurity solutions through usability advancements and increased automation.

Contact us

cs-aware.eu
Prof. Juha Roning
Juha.Roning@oulu.fi
tel:+358294482612

