



Press Release

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REWIRE - A new project to advance Trust Computing

[REWIRE](#) envisions a holistic framework for **continuous security assessment of open-source and open-specification hardware and software for IoT devices** and the development of **cybersecurity certification** in accordance with the requirements and guidelines of recent EU Cybersecurity Act.

In particular, REWIRE proposes a scalable and multifunctional cybersecurity platform that will ensure the security throughout the life of the IoT devices with continuous security auditing, trust computing and theorem proofs for defining a hardware-based microarchitecture for enhanced protection targeting to open-hardware/software vulnerabilities. A certification procedure of the audited software and hardware components will propose new software security metrics and establish a layer of trust between stakeholders, utilizing Blockchain and smart contracts.

REWIRE will expand traditional cyber insurance models to account for both open-source hardware and software assets, by ingesting security auditing results for estimating premium costs. REWIRE will exploit a Knowledge Plane of metadata generated from application behavioral patterns and operations to determine appropriate security policies and properties to enforce on open-source HW/SW to block potentially harmful instructions.

REWIRE has invested in three carefully selected pilots (Smart Cities, Automotive, Smart Satellites), which can address the ambitious objectives of the project, i.e., **a customizable Trusted Execution Environment (TEE) based on RISC-V, and micro benchmarking for quick and automated assessment of H/W vulnerability**. Thus, REWIRE aims to **safeguard the entire workflow of secure processing**; from the Deployment and Operation of software-based System of Systems to their patch management when new exploits have been identified during run-time, by providing new trust management mechanisms towards the auditability and certification of SW/HW open-source specifications.

[REWIRE](#) is a 3-year Research and Innovation action (RIA), running from 2022 to 2025, funded under Horizon Europe. REWIRE brings together 13 partners from 8 European countries, providing all the required expertise for achieving the set objectives, consisting of 3 Industrial Partners, 3 Service Providers, 4 Academic and Research representatives, as well as three 3 SMEs. For more information please visit: <https://www.rewire-he.eu/>.



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