



Three Months to the Finish Line

Dear COCOON Community,

With just three months remaining until the COCOON Final Event in Cyprus on 9 September, the project has entered its closing phase. The focus has now shifted from building the technology to demonstrating it in real operational environments.

Over the past weeks, COCOON pilots have moved closer to TRL7, with final preparations underway for full-scale demonstrations across all four pilot sites.

The Greek Pilots Enter Their Final Stage

A key milestone was a two-day visit by Project Coordinator Prof. Angelos Marnierides to the Greek partners, aimed at reviewing progress and aligning the final steps toward demonstration.

Partners from Aristotle University of Thessaloniki, HEDNO, SELeNe-CC, and I&K jointly assessed the status of the two Greek pilots. The sessions focused on confirming readiness and closing the remaining gaps before final validation.

On-site activities at the SELeNe-CC and HEDNO facilities, including the I&K photovoltaic plants, demonstrated the COCOON Programmable Node (CPN) and the COCOON Toolset Dashboard (CTD) operating together on live infrastructure.

The system is now actively generating real-time alerts, enhancing situational awareness, and supporting grid stability under cyber-physical stress conditions. What began as architectural

concepts and algorithms is now a working system providing operators with a clearer and more accurate view of grid behavior and security.

COCOON on Europe's Stages

With technical validation advancing, the consortium has focused on presenting results to key European audiences.

At AI+ 2026 in Halden, Norway, COCOON joined the eFORT and BeFlexible projects in a panel on trust, safety, and real-world AI adoption in critical infrastructure. The team showcased the COCOON Programmable Node and the validated False Data Injection Identification (FDII) algorithm as practical examples of data-driven and AI-based methods applied to energy systems.

The project also gained visibility through inclusion in the official Enlit Europe resource library, following its presentation at Enlit 2025 in Bilbao.

Closer to education and outreach, COCOON was presented at Energy Talks 2026 in Thessaloniki, where undergraduate students engaged with discussions on cybersecurity and resilience in modern power systems.

Inside the Spanish and Dutch Pilots

Strong progress is also visible in the remaining two pilots.

In Spain, the University of Seville and Ingelectus have advanced the False Data Injection Identification (FDII) algorithm from laboratory validation to deployment on a real photovoltaic power plant provided by Cuerva. The system now detects and mitigates false data injection attacks in operational solar generation environments.

In the Netherlands, Delft University of Technology is developing a “substation of the future” concept. This includes real-time digital twins, hardware-in-the-loop testing, and intrusion detection mechanisms based on IEC 61850 and IEC 62351 standards. Together, these components strengthen the resilience of modern grid architectures.

Both teams recently discussed their work in the COCOON Podcast, with new episodes available on Spotify.

The Road to September

Attention now turns to the COCOON Final Event in Cyprus on 9 September, where the consortium will present the full project outcomes and live demonstrations from all pilot sites.

Between now and then, final demonstrations across Greece, Spain, and the Netherlands will bring the complete COCOON framework into operational conditions.

This final phase marks the transition from development to real-world validation of a system designed to strengthen the cybersecurity and resilience of Europe's power grids.

We look forward to sharing these results with you.

Thank you for following the COCOON journey.

Stay connected on LinkedIn, explore more at <https://www.cyber-cocoon.eu>, and listen to the COCOON Podcast on Spotify for the latest updates.

Warm regards,
The COCOON Team

