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PRESS RELEASE

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COP-PILOT HORIZON PROJECT LAUNCHED TO DRIVE CROSS-SECTOR INNOVATION THROUGH COLLABORATIVE OPEN PLATFORM

Athens, February 17th, 2025 — The COP-PILOT Horizon Europe project has officially launched, with the aim of establishing a Collaborative Open Platform (COP) that will connect data, technology, and resources across sectors, helping industries work together more efficiently, share insights, and develop smarter solutions to everyday challenges.

The platform will leverage AI-driven tools and SLA-preserving (Service Levels Agreement) automation to boost performance across manufacturing, smart cities, agriculture, energy, and healthcare domains. COP-PILOT introduces five key innovations:

- **A-aware IoT device and data management across collaborative domains** - COP-PILOT will provide a scalable platform for IoT data storage, federation, and standardized connections across diverse IoT devices and systems.

- **Secure and programmable exposure of cross-domain resources and data services** - COP-PILOT will use software-defined zero-trust networking (OpenZiti) to create a Secure Integration Fabric (SIF) for seamless authentication and dynamic policy management, eliminating VPNs while securing IoT devices and data with end-to-end encryption.

- **Ultra-scalable end-to-end orchestration of services and infrastructure in multi-tenant IoT-Edge-Core environments** – the platform will use a hierarchical approach with a cloud-managed service orchestrator (ServOrch) and domain-specific InfraOrch, enabling service slicing and consistent orchestration.

- **Intelligent automation tools for high-TRL vertical service onboarding and preservation** - COP-PILOT integrates AI-driven zero-touch solutions, featuring an LLM-based UI for easy onboarding and AI-driven SLA enforcement for compliance.

- **Innovative cross-sector vertical services through large-scale pilots** - deployed, tested, and refined in real-world conditions, the platform will ensure its practical relevance and value.

The project is structured around four piloting clusters across key sectors. The goal is to showcase how these sectors can cooperate and interact, demonstrating the practical use of the COP platform to optimize supply chains, improve industrial processes, and drive innovation across industries.

1. **Sweden – Business Integration in Mining**, focusing on real-time logistics monitoring, seismic data analysis, and machinery maintenance tracking.

2. **Spain – Smart Sustainable IoT Solutions in Valencia**, piloted across the city, the port, the Polytechnic University of Valencia, and the Almussafes industrial park.

3. **Greece** – Sub-pilots in **Energy** and **Agriculture**, behind **Edge Intelligence for Enhancing Grid Reliability in RES-rich Distribution Grids**, and the **AgriTech Transformation and Sustainability Initiative (ATSI)**.

4. **Germany and Spain – Integrated IoT Solutions for Enhancing Sustainability and Efficiency in Agriculture, Healthcare, Recycling,** and **Winery Manufacturing.**

"With the rise of edge computing and 5G connectivity, we witness a new era in industrial innovation. Our vision for COP-PILOT is to establish a collaborative platform that not only supports advanced AI and automation but also enables seamless interaction across industries and service domains. This framework will empower sectors to unlock new opportunities, drive growth, and create meaningful societal impact by creating a cohesive, standards-aligned computing environment capable of evolving with market demands. Through the integration of cutting-edge technologies, COP-PILOT aims to deliver enhanced services that tackle real-world challenges across multiple industries.", said Ioanna Drigkopoulou, Project Coordinator of COP-PILOT.

COP-PILOT represents a strategic step toward fully realizing the potential of edge intelligence, and its collaborative approach is expected to deliver substantial benefits across multiple sectors, helping industries tackle complex challenges while driving digital transformation. As an *Innovation Action* funded under the EU HORIZON, the project unites 45 partners from industry, academia, research, and SMEs.

For more information about COP-PILOT and its achievements, follow the LinkedIn and Mastodon accounts and subscribe to the newsletter.

ABOUT COP-PILOT

The rise of edge computing, combined with advanced 5G connectivity, has enabled large-scale deployments of private edge systems, driving innovation across various industries and advancing market digitization. As infrastructure technologies mature, services and platform software are expected to lead in delivering added value through automation and intelligence at the network's edge. Fully exploiting the potential of edge intelligence requires more than enhanced IoT processing and low-latency services; it demands the development of collaborative platform environments that enable advanced services and inspire growth across the value chain.

As an Innovation Action funded under the EU HORIZON program, COP-PILOT aims to develop a Collaborative Open Platform (COP) piloting framework that enables end-to-end orchestration across service domains. The platform looks to integrate novel AI-driven tools, SLA-preserving automation, and secure infrastructure while piloting diverse real-world applications across sectors like energy, smart cities, agriculture, and manufacturing to drive cross-sector collaboration, innovation, and societal impact.

For more information, please visit:

- https://cop-pilot.eu

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