CONFIDENTIAL6G Concludes with Strong Results Advancing Trust, Privacy and Security for 6G Networks

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The EU-funded CONFIDENTIAL6G project has entered its final stage, concluding three years of intensive research and innovation focused on enabling confidential computing, privacy-preserving technologies, and quantum-resilient security for future 6G networks. The project leaves behind a substantial portfolio of scientific, technical and practical results that contribute to Europe's vision of trustworthy, secure and resilient next-generation communication infrastructures.

Launched in January 2023 under the Smart Networks and Services Joint Undertaking (SNS JU), CONFIDENTIAL6G addressed one of the most critical challenges for 6G: how to protect sensitive data not only in transit and at rest, but also while being processed in highly distributed cloud-to-edge environments. By combining advances in cryptography, confidential computing and secure communications, the project developed key building blocks for privacy-by-design 6G architectures.

Figure 1: CONFIDENTIAL6G Consortium, Dublin, Ireland 2024

Throughout its lifetime, CONFIDENTIAL6G delivered a wide range of scientific publications, technical deliverables and experimental results, many of which are openly accessible through the project website and Zenodo community. The project's research outcomes have been disseminated through leading international conferences and journals, contributing to the broader European and global dialogue on secure and trustworthy future networks.

A notable highlight in the project's final phase is the AI Security Webinar, organised by CONFIDENTIAL6G, alongside ELASTIC, PREDICT-6G, HARPOCRATES, and RIGOUROUS, with support from FAITH, CUSTODES, and 6G-Cloud, to explore emerging challenges at the intersection of artificial intelligence, confidentiality and 6G systems. The presentations and full webinar recording are now publicly available, providing valuable insights into secure AI processing, privacy-preserving analytics and trusted execution in future networks. This material serves as a lasting knowledge resource for researchers, industry stakeholders and policy makers interested in secure AI-enabled communication systems.

👉 https://confidential6g.eu/ai-security-webinar-presentations-and-recording-now-available/

In parallel, CONFIDENTIAL6G has reinforced its commitment to openness and long-term impact by releasing datasets and experimental artefacts via its website and public repositories. These datasets enable further experimentation, benchmarking and validation of privacy-preserving and security-enhancing technologies beyond the project's lifetime.

The project has also actively engaged with the wider ecosystem through newsletters, public events, workshops and cross-project collaboration within the SNS JU portfolio, strengthening alignment and knowledge exchange across Europe's 6G research landscape.

As CONFIDENTIAL6G reaches completion, its outcomes provide a solid technological and conceptual foundation for future research, innovation and standardisation efforts in 6G security and trust. The consortium remains committed to ensuring that the project's results continue to support the development of secure, privacy-preserving and user-centric communication systems in Europe and beyond.

About CONFIDENTIAL6G

CONFIDENTIAL6G is a Horizon Europe project funded by the European Union under the Smart Networks and Services Joint Undertaking (SNS JU). The project focuses on confidential computing and privacy-preserving technologies to enable secure and trustworthy 6G networks.

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