



WE JUST WANTED TO
WELCOME YOU
TO THE CONFIDENTIAL6G NEWSLETTER!

We are pleased to announce the publication of the first issue of the CONFIDENTIAL6G newsletter

CONFIDENTIAL6G is a 3-year Research and Innovation Action project funded under Horizon Europe Programme.

This distinctive consortium of experts with diverse skills, experience, and locations started in January 2023 and includes 13 partners from 10 countries.

- Cryptography**
Cryptographic enablers for confidential computing (FHE, SMPC, TEE) and post-quantum networking, DLP, privacy enablers (ZKP). Support for embedded edge devices and HW.
- Confidential Computing**
Confidential Computing via FHE, SMPC and HW TEEs, Collaborative AI/ML, Confidential Containers, Remote Attestations, Secure enclave abstractions, Secure key distribution.
- Confidential Networking**
Post-quantum secure network protocols, Secure data sharing and access control, Private Blockchain Smart Contracts, DIDs and VCs, Federated AI/ML orchestration.

Why CONFIDENTIAL6G?

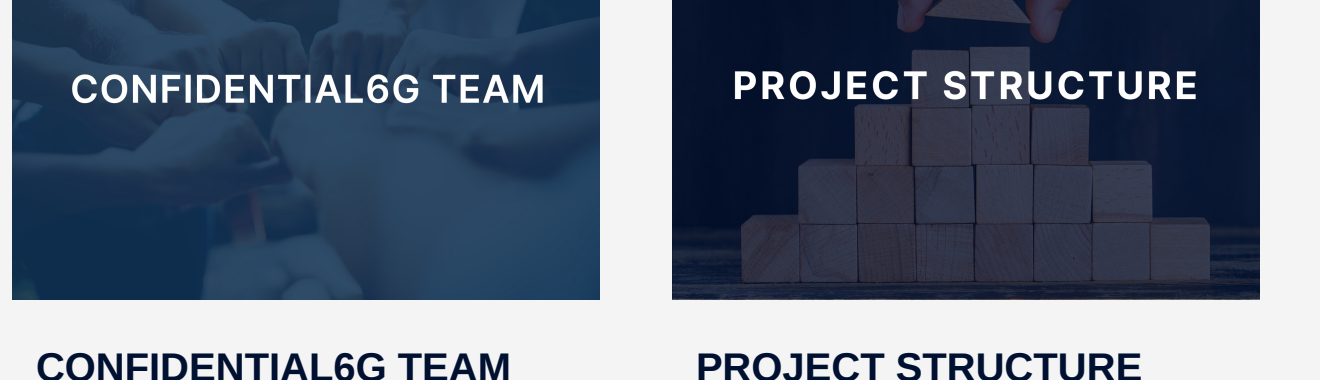
In our rapidly evolving digital landscape, it is crucial to establish a reliable, trustworthy, and resilient infrastructure for the next generation of wireless connectivity. CONFIDENTIAL6G aims to create an interconnected continuum of diverse environments, seamlessly integrating networks and IT systems on a global scale. The ultimate goal? Enabling the flourishing of new and transformative digital services that will shape our future.

CONFIDENTIAL6G recognizes that confidentiality is paramount in this interconnected world. It is dedicated to developing a comprehensive suite of tools, libraries, mechanisms, and architectural blueprints that prioritize confidentiality within the realm of 6G. These advancements will include cryptographic enablers, essential building blocks for constructing more sophisticated software components.

Furthermore, CONFIDENTIAL6G will pave the way for secure platforms and applications, ensuring the preservation of privacy during computation and network communication processes. This will encompass cutting-edge techniques such as secure multi-party computation and federated AI/ML orchestration.

To fortify the design of future systems, CONFIDENTIAL6G will harness state-of-the-art cryptographic protocols that are resistant to quantum computing threats. By conducting thorough research and providing formal security proofs, this initiative guarantees that confidentiality remains at the forefront of 6G development.

[Learn More](#)



CONFIDENTIAL6G TEAM

The CONFIDENTIAL6G consortium includes 13 partners from 10 countries: nine EU nations (Austria, Estonia, Germany, Greece, Ireland, France, Spain, Netherlands, Finland) and one non-EU nation (Serbia, as an associated country).

[Learn More](#)

PROJECT STRUCTURE

CONFIDENTIAL6G is structured around 6 WPs and has a duration of 36 months. Take a deeper look at the PERT chart which provides an overview of the main interactions and dependencies between the WPs.

[Learn More](#)

USE CASES

To ensure the effective integration of all components in the CONFIDENTIAL6G unified platform, a series of small-scale tests will be conducted in three specific use cases. These use cases represent real-life scenarios where the CONFIDENTIAL6G platform will be utilized. By testing the platform in these diverse use cases, potential issues or limitations can be identified and addressed.

After the validation process, we will proceed to deploy and demonstrate the platform at pilot sites. During this phase, we will evaluate the platform's performance and effectiveness based on the expected results. We will carefully assess how well it functions in various scenarios and under different conditions. This evaluation will help us understand the positive results that the platform delivers, as well as any limitations or malfunctions that may occur. We will actively work to address and mitigate any faults that we encounter.

USE CASE 1

The first use case implements a platform for secure and trackable data sharing between aviation companies, manufacturers, regulation bodies and other organizations. The main goal is to enable predictive maintenance, driven by AI/ML, on the top of shared data.

[Learn More](#)

USE CASE 2

The second use-case will provide enablement for confidential computing in the form of a defined platform that can be applied in the telecom clouds.

[Learn More](#)

USE CASE 3

The third use case will provide mission-critical services in the context of secure Vehicle to Infrastructure (V2I) communications, and OTA (over-the-air) vehicle system updates, with distributed learning.

[Learn More](#)



Project vision

6G infrastructure must ensure reliability, trust and resilience on a globally connected continuum of heterogeneous environments supported by the convergence of networks and IT systems. CONFIDENTIAL6G will develop leading-edge research mechanisms and architectural blueprints for confidentiality in 6G. This will include cryptographic enablers, which are the primary for building more sophisticated software components. Followed by platforms and applications that will further secure and preserve sensitive compute and communication (network) processes, including secure multi-party computation and federated AI/ML orchestration. The benefit of future systems will be supported by in-depth, state-of-the-art cryptographic research-resistant protocols and formal security proofs.

CONFIDENTIAL6G project presentation on SNS Luncheon Webinar

The European Smart Networks and Services Joint Undertaking (SNS JU) is a Public-Private Partnership focused on fostering industrial leadership in Europe in 5G and 6G networks and services. Its primary objective is to support and establish projects that contribute to research and innovation (R&I) in this field and develop a roadmap for deployment. By involving European stakeholders and facilitating international cooperation, the SNS JU aims to drive advancements in 6G initiatives.

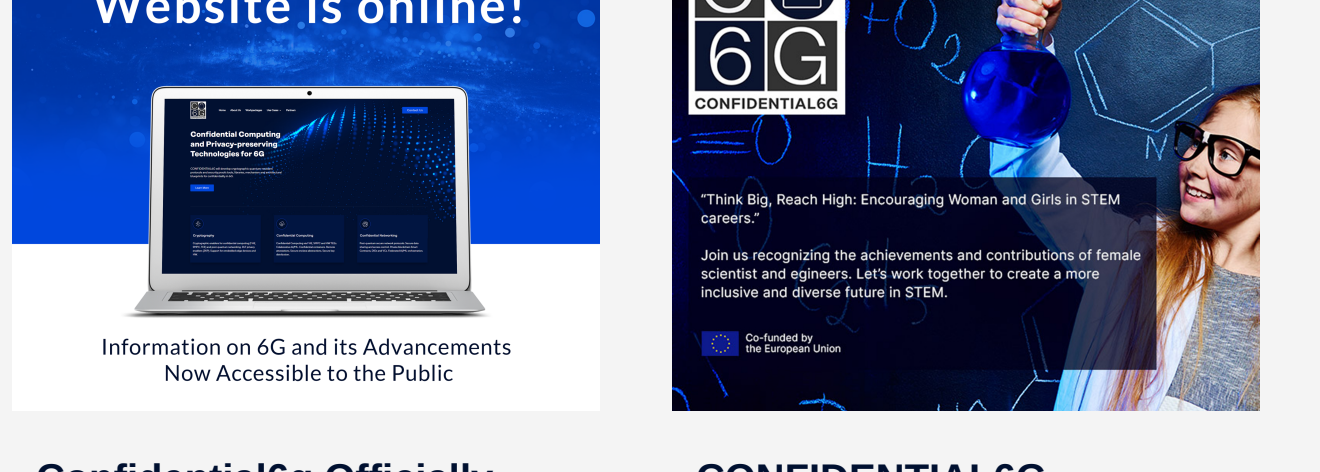
In January 2023, the SNS JU initiated the first phase of its 6G projects, including CONFIDENTIAL6G. The project was presented by projects coordinator Vera Slavovska during a series of webinars called Luncheon Webinars organized by the SNS JU. To access the presentation, please refer to the links below.



KICK-OFF MEETING

The partners of the CONFIDENTIAL6G Project met in Madrid on January 30th and 31st for their kick-off meeting, hosted by IMDEA Software Institute. The goal of the meeting was to discuss the project's objectives, which include developing a secure framework for 6G cloud and edge technology and improving communication security through scientific breakthroughs in post-quantum cryptography, confidential computing, and confidential communication.

[Learn More](#)



Website is online!

Information on 6G and its Advancements Now Accessible to the Public

Confidential6g Officially Releases Website to the Public

Discover the latest updates regarding the CONFIDENTIAL6G project by visiting www.confidential6g.eu. This project has been in operation since January 15th and it provides comprehensive details about the projects goals, anticipated achievements, and collaborative partners, and other news about the project.

[Learn More](#)

CONFIDENTIAL6G CAMPAIGN: Empowering Women in STEM – Join the C6G Campaign

CONFIDENTIAL6G is actively working to address gender disparity. To amplify the voices of women within CONFIDENTIAL6G, a captivating weekly social media initiative has been launched, aiming to showcase and celebrate their invaluable contributions to the project.

[Learn More](#)

Events and Conferences - Around the Globe with Confidential6G



EUROPEAN BLOCKCHAIN CONVENTION BARCELONA | FEB 15-17, 2023

CONFIDENTIAL6G on The European Blockchain Convention

The European Blockchain Convention (EBC) held in Barcelona from FEB 15-17, 2023 and it is one of the biggest events for the blockchain industry. #CONFIDENTIAL6G was proud to have been represented by the Zenitrix Lab with a booth at the event.

[Learn More](#)

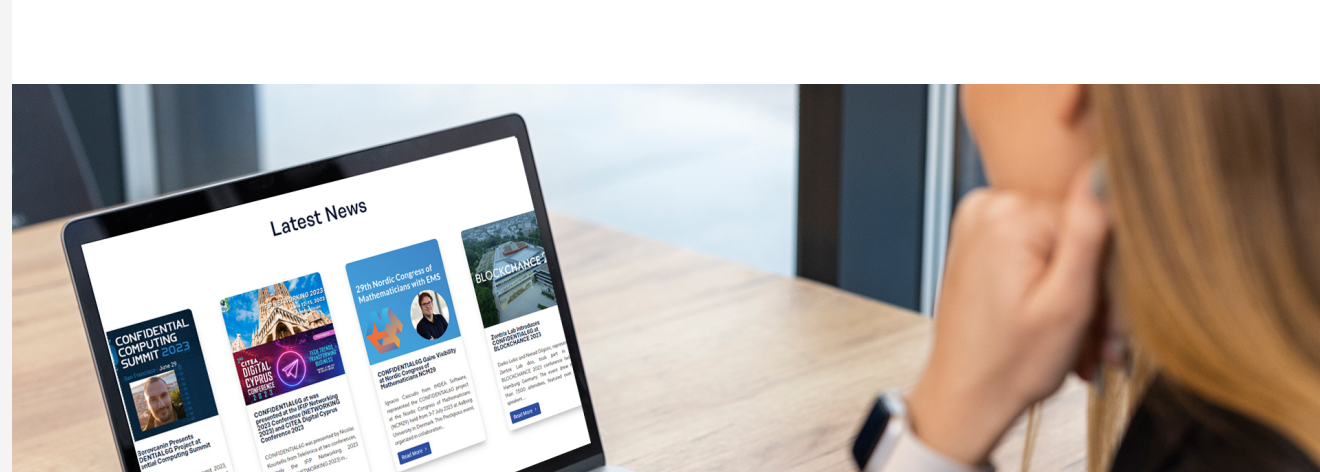


Dr Madhusanka Liyanage (University College Dublin)
Dr Nehad Gilgoric (Zenitrix Lab)
MF Drasko Draskovic (Nokia)

ETSI Workshop 2023

Nokia, Zenitrix, University College Dublin participated at the ETSI (European Telecommunications Standards Institute) Conference, which took place in Sophia Antipolis, France, in the beginning of February 2023.

[Learn More](#)



Dive into Our News Section on Confidential6G's Website!

Discover the forefront of 6G technology through Confidential6G's dedicated news section.

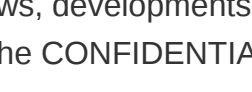
[Learn More](#)

Don't miss out on our upcoming second issue of the newsletter; subscribe now to stay in the loop with the latest developments in 6G technology!

[SUBSCRIBE](#)

Stay tuned!

Stay updated on all our latest news, developments, research and general information regarding the CONFIDENTIAL6G project.



Co-funded by the European Union

Co-funded by the European Union. Views and opinions expressed are however those of the author(s) only and do not necessarily reflect those of the European Union or European Commission. Neither the European Union nor the granting authority can be held responsible for them.



Copyright (C) "[CURRENT_YEAR]" "[LISTCOMPANY]". All rights reserved.
"[NOTARCHIVE_PAGE]" "[LISTDESCRIPTION]" "[END_IP]"

Want to change how you receive these emails?
You can [update your preferences](#) or [unsubscribe](#)

