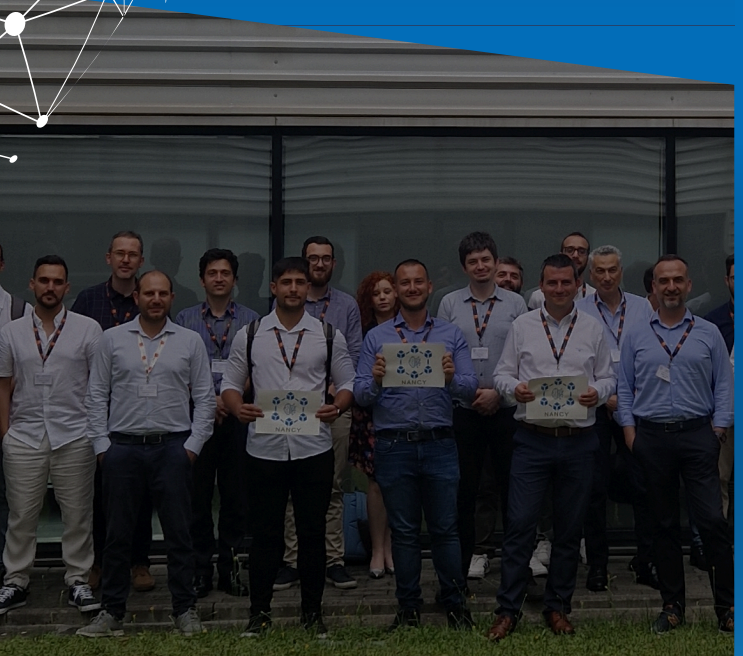
NANCY at a glance

24
Partners

36
Months

5.9
Million
EU Contribution



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https://nancy-project.eu/

NANCY SNS JU Project

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NANCY SNS JU Project

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Co-funded by the European Union

6GSNS

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NANCY

A SECURE AND INTELLIGENT ARCHITECTURE FOR BEYOND THE FIFTH GENERATION (B5G) WIRELESS NETWORKS

Our Vision

NANCY aims to introduce a secure and intelligent architecture for beyond the fifth generation (B5G) wireless networks. By leveraging Artificial Intelligence and Blockchain, NANCY aims to enable secure and intelligent resource management, flexible networking, and orchestration. In this direction, novel mechanisms and techniques will be integrated, including:

- device-to-device connectivity
- mesh networking
- relay-based communications
- medium access protocols
- mobility management schemes
- resource allocation methods

Our ambition is to meet the requirements of the B5G wireless networks by proposing an AI-based B-RAN architecture that is built upon SDN and MEC principles by:

- specifying the enabling technologies
- designing new technologies and concepts
- theoretically modeling and assessing the performance
- optimizing and validating the architecture through 5 testbeds

Our objectives

To design a novel Radio Access Network that supports dynamic scalability, high-security and privacy.

To transform networks beyond 5G to intelligent platforms integrating ultra-reliable connectivity and high-energy efficiency.

To provide "almost-zero latency" and high-computational capabilities at the edge.

Demonstration

NANCY will deploy 5 testbeds:

2 indoor lab testbeds that will be used for modelling B-RAN and experimentally verifying the theoretical framework. (Greece & Italy)

3 large-scale outdoor testbeds to assess and demonstrate the NANCY solution in diverse and challenging scenarios, as well as to verify the commercial feasibility of the project's technologies. (Spain, Greece, Italy)

Partners

UBITECH, tecnalia, NEC, i2cat, Italtel, netcompany intrasoft, EiGHTBELLS, THALES, DRAXIS, OTE GROUP OF COMPANIES, Virtual Open Systems, Institut "Jožef Stefan" Ljubljana, Slovenija, CRAT, ERICSSON, bi²S Ltd, InnoCube, iti Information Technologies Institute, SIDROCO, UNIVERSIDAD DE MURCIA, Sant'Anna School of Advanced Studies – Pisa, MINDS, UPV EHU, DREVEN