Programmable, Modular and Disaggregated Security Plane for 6G Ecosystems

SECURENET 2026

A reliable 6G services provisioning platform through the definition of a novel security plane

#MARE6G_EU

CONCEPT

MARE aims to address 6G security and privacy challenges with an open, programmable security plane, ensuring ultra-low latency protection, proactive threat mitigation, and multi-domain security for a reliable 6G services platform.

GOAL

MARE enhances 6G security by developing a programmable Security Plane, a smart threat analysis environment, and an Attacks Modelling Reference Framework, ensuring compliance with European and international 6G architectures.

INNOVATION

MARE introduces modular security functions built from reconfigurable atomic components,enabling flexible, expandable solutions.It includes a pre-assessment environment for testing security solutions and contributes to 6G architecture and standardization for secure performance .

USE CASES

MARE will focus on verifying and testing its solution across diverse 6G scenarios through Proof of Concepts (PoCs). These will cover various attacks in different thematic areas, including:

- ***Network critical attacks***
- ***AI/ML-driven threat protection, detection, and response for 6G core network***
- ***Internal attacks on network control elements***
- ***AI and models***
- ***Data and intent tampering detection***
- ***Zero-touch mitigation of tampered data ingestion***
- ***Secure Network Digital Twin: DDoS attacks from X-Edge***
- ***Secure exposure of network capabilities***
- ***Attestations and shared security in different network infrastructures***

PARTNERS

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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 Smart Networks and Services Joint Undertaking(SNS JU). Neither the European Union nor the SNS JU can be held responsible for them.Project has received funding from the SNS JU under the European Union's Horizon Europe research and innovation programme under Grant Agreement No 101191436.

6GSNS EUROPEAN PARTNERSHIP — Co-funded by the European Union