



The Standards People

# ETSI Research Conference 2023

Maximizing the Impact of European 6G  
Research through Standardization

## Holistic, Omnipresent, Resilient Services for Future 6G Wireless and Computing Ecosystems (HORSE)

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**6G SNS**



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# 1. Project Overview



- **Project Name:** Holistic, Omnipresent, Resilient Services for Future 6G Wireless and Computing Ecosystems (HORSE)
  - **Project website:** [horse-6g.eu](http://horse-6g.eu)
- **Stream:** SNS Phase 1 (2022) Stream B
- **Members:** CNIT, ATOS, Ericsson, UPC, TUBS, Telefonica, NKUA, Suite5, EFACEC, ZORTE, 8-BELLS, HOLO-LIGHT, STS, Martel
- **Other:** 6G infrastructure operation for smart connectivity and service management, 2 use cases: light transportation & extended reality



# 2. Technical Information

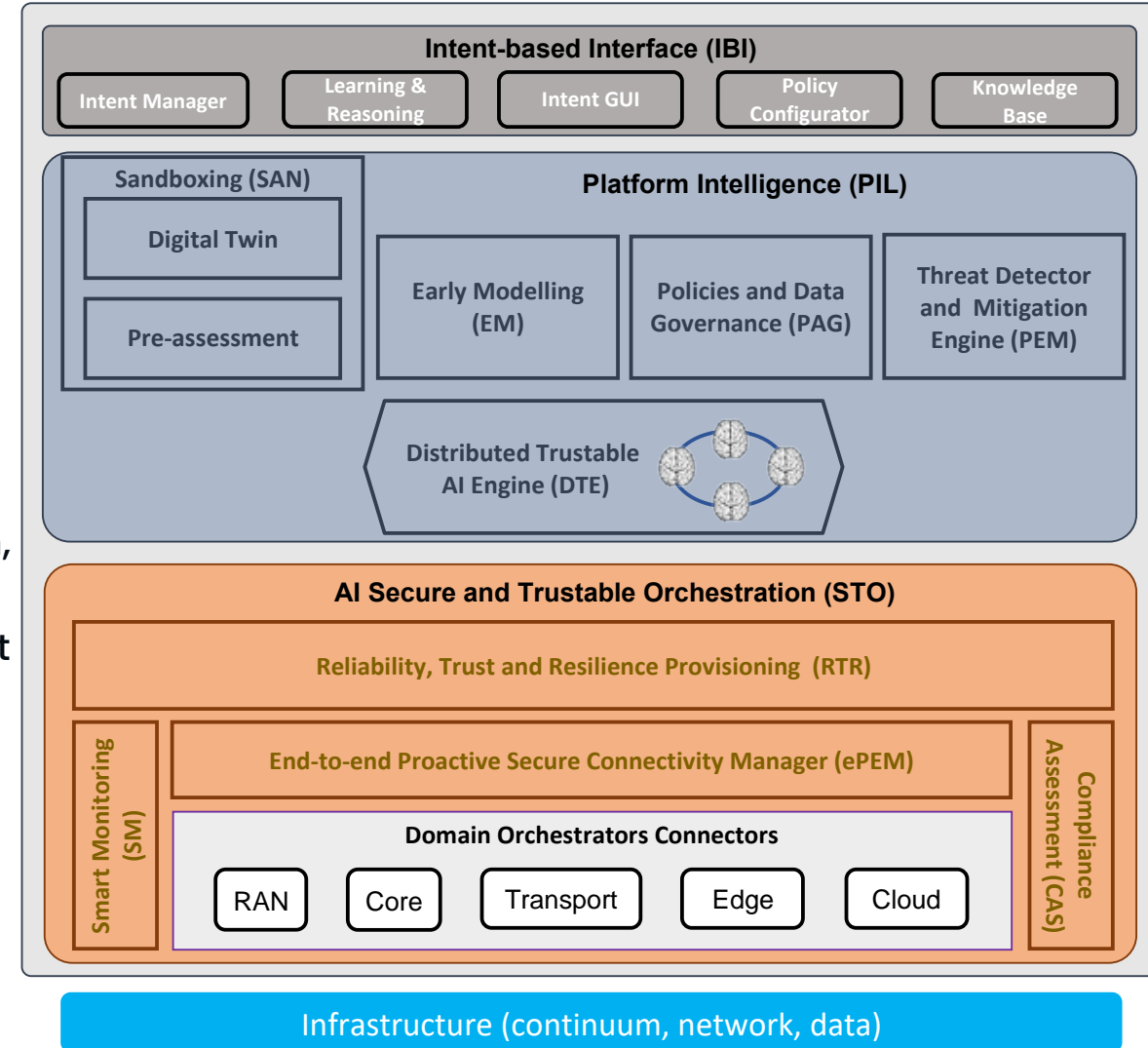


## Project Key Objectives:

- Comprehensive analysis of foreseeable 6G scenarios
- Designing the necessary end-to-end security solutions
- Development of a human-centric, holistic, omnipresent, and resilient smart services management and operation programmable platform
- Deploying AI technologies driving a completely predictive approach to security management, fully addressing high services, systems, risks, and threats dynamicity
- Characterize the user profile and the 6G system as a digital twin, to feed the AI distributed decision processes
- Designing the system interface to be intent-based to implement the role of the "Human-In-The-Loop"
- Deploy, demonstrate and validate HORSE in selected use cases
- Creating impact and promoting of open access to the HORSE platform for broad and sustainable exploitation of results

## Key technologies used/investigated:

Intent-based Interfaces, Platform Intelligence, Secure and Trustable Orchestration



# 3. Planned Standardization Activities

- **Standardization plans / objectives:**
  - The project will seek for all kinds of collaboration, from the direct contributions to specifications or code bases to applicability statements and proof-of-concept demonstrators to assess the viability of proposed solutions.
  - HORSE will take part in EC clustering initiatives and develop cooperative liaisons with related EC-funded projects, with special focus on those supported by the 6GIA (Pre-Standardization and Security groups) and the SNS JU.
- **Project activities / technologies that may lead to standardization:**
  - Smart open security management and monitoring
  - Edge technologies
  - NFV secure orchestration
  - AI-enabled network management techniques & Digital Twins
  - Network service total automation / Autonomous Networks
  - Security implications of applying AI

# 3. Planned Standardization Activities

- **Potential targeted standardization bodies / groups:**
- IETF WGs (I2NSF, SACM, ACME, PPM)
- ETSI MEC, NFV, ENI, ZSM, SAI
- 3GPP, SA3 (security) and SA5 (management aspects)
- ITU-T FGAN (Focus Group on Autonomous Networks)
- Open source: Linux Foundation ONAP, Akraino, Anuket, ETSI OSM and TFS
- Open source / open specs: OpenConfig, O-RAN
- **Standardization planning and estimated time plan:**

