6G eXperimental Research

www.6g-xr.eu

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VTT

EMETA Co-Operation Workshop

29 August 2023

6GSNS

Project Overview*

Full name: 6G eXperimental Research infrastructure to enable next-generation XR services

Stream: HORIZON-JU-SNS-2022-STREAM-C-01-01

Project Coordinator (PC): Dr. Jussi Haapola, *University of Oulu, FI*
Technical Manager (TM): Dr. Mohammed Al-Rawi, *IT Aveiro, PT*

Main objective: To strengthen the European leadership in 6G technologies by enabling next-generation Extended Reality (XR) services and infrastructures that will provide beyond-state-of-the-art capabilities towards the 6G era.

15 *partners*

8 *countries*

36 *months*

* More information: https://doi.org/10.3030/101096838

Consortium


Capgemini engineering


i2cat


instituto de
telecomunicações


ERICSSON


imec


intel


interdigital


MARTEL
innovate


MATSUKO
HOLOGRAPHIC
COMMUNICATION


NOKIA


raytrix


Telefónica


UNIVERSITY
OF OULU


vicomtech


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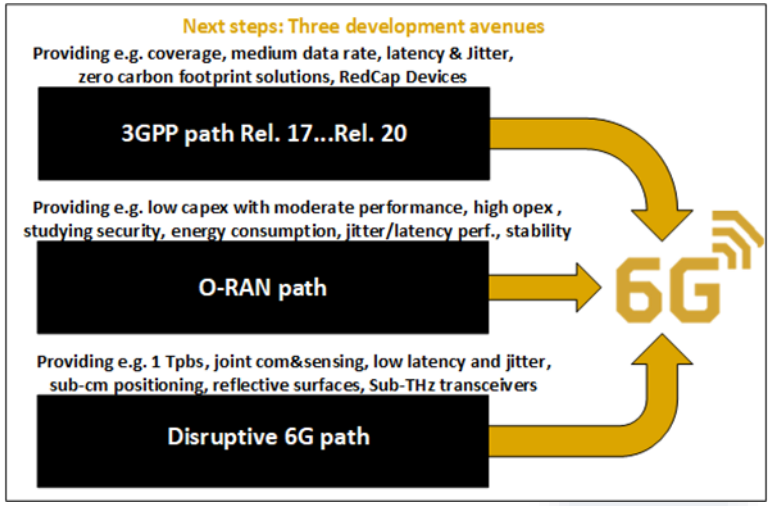
Technical Objectives

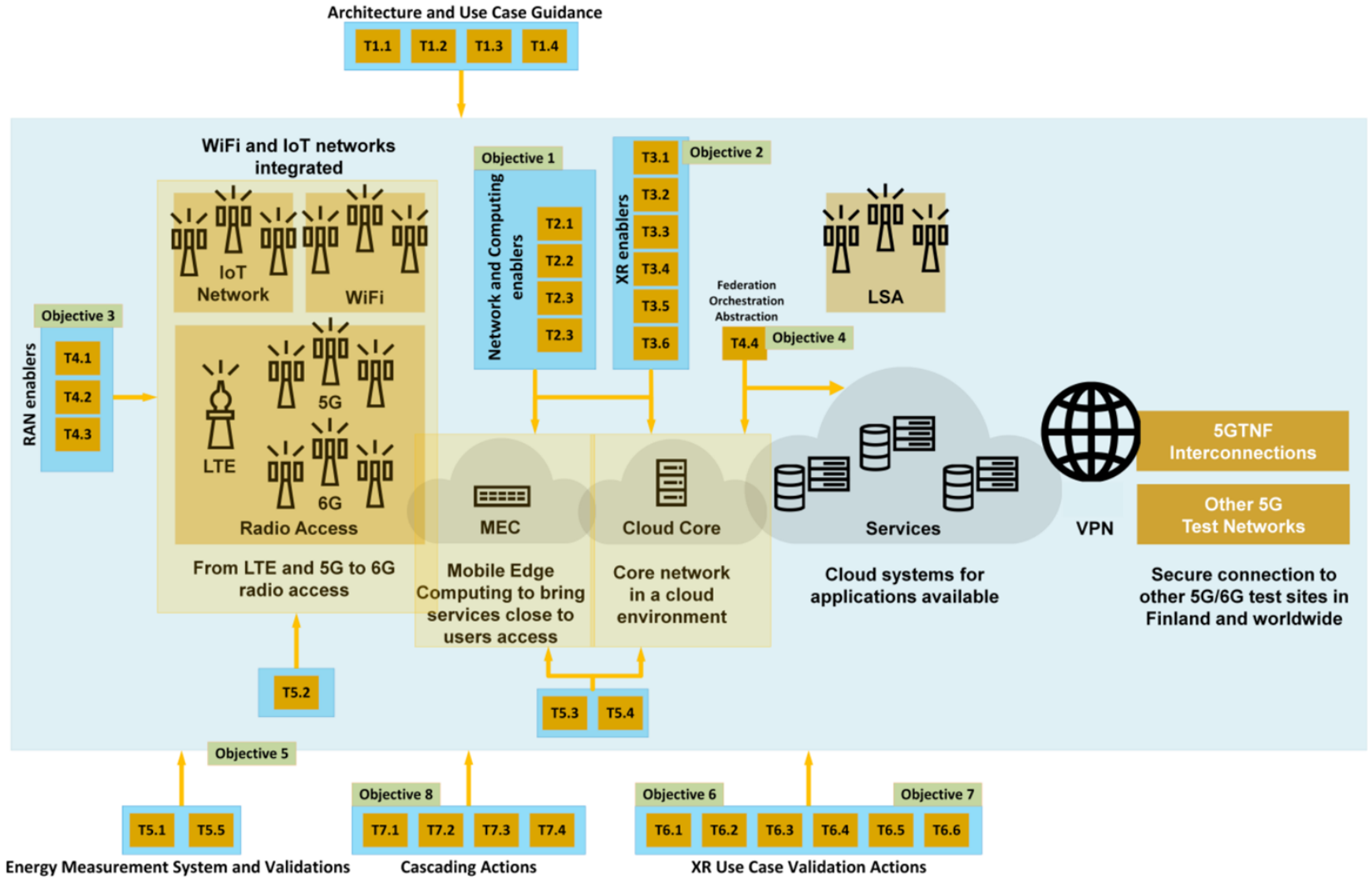
- **Build a multisite Research Infrastructure (RI)** that can provide validation platform for multitude of foreseen (extreme) 6G use cases by developing enablers for networking and computing, radio access technologies beyond 5G, enablers for XR services with in-build federation, trial management, abstraction tools as well as energy measurement framework.



- **Validate multi access edge computing scenarios** and their integration into a complete cloud continuum, support innovative use cases with vertical actors, beyond 5G capabilities, and support showcasing events.

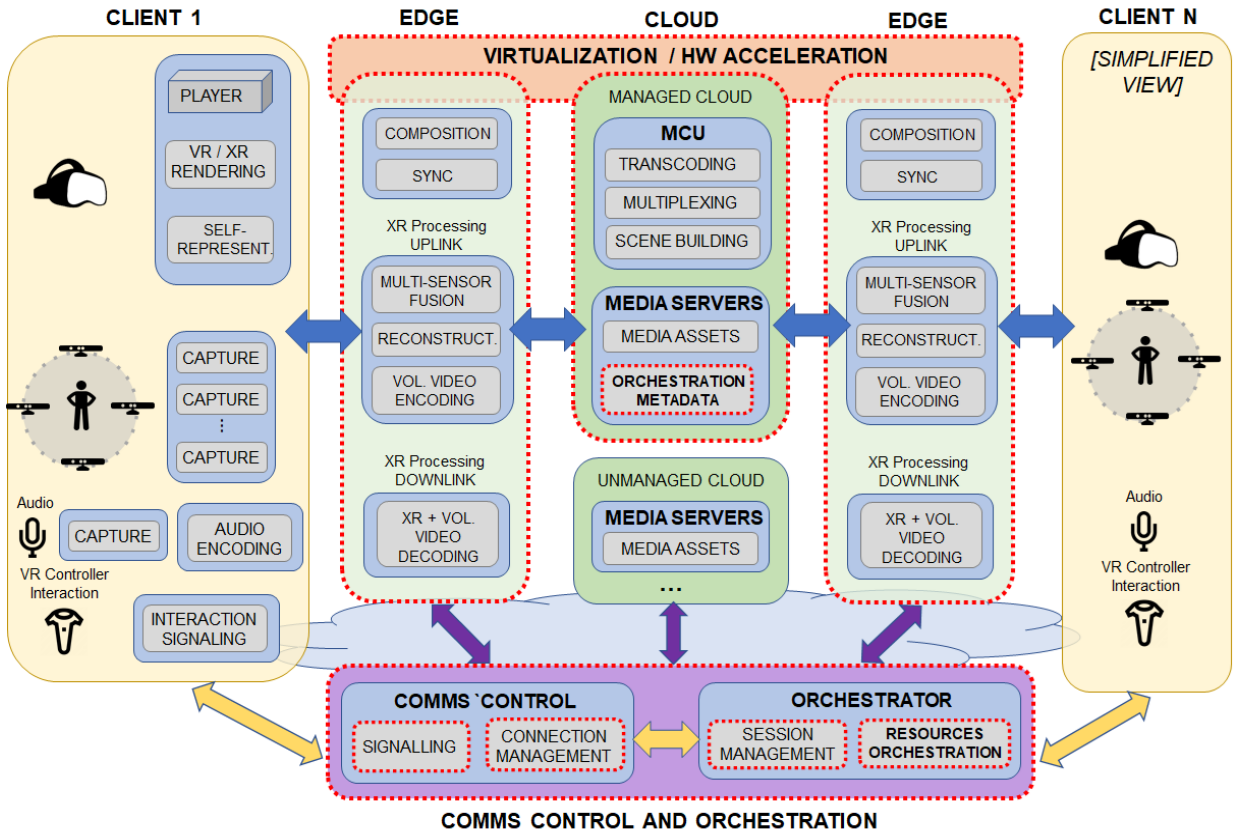
- **Demonstrate and validate performance of innovative 6G applications** with a focus on demanding immersive applications such as holographics, digital twins and XR/VR.

Methodology



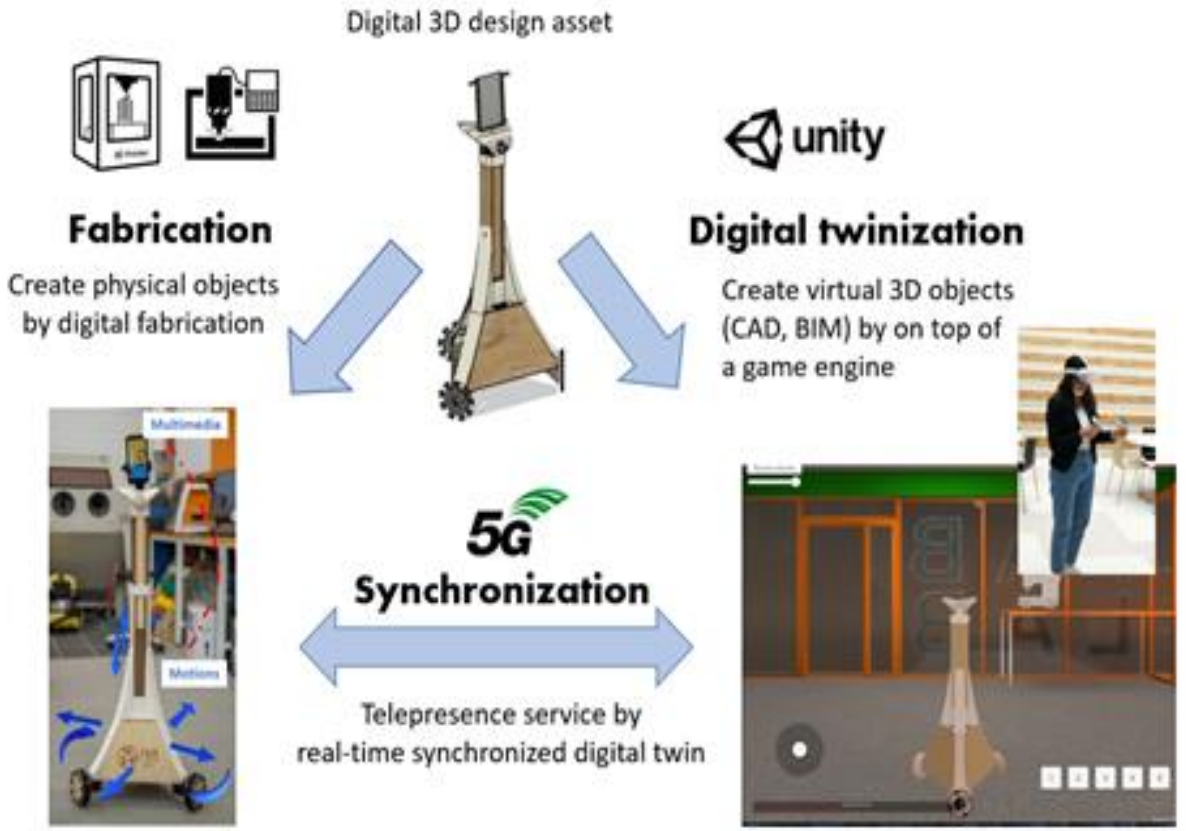
Initial Use Case #1

Holographic Communications



Initial Use Case #2

Virtual Remote Control in 3D Digital Twins



Open Calls and Cascading Grants

Budget: 1.845.000 EUR for Financial Support to Third Parties (FSTP)

- **6G-XR OC1:** 6G-XR platform and network enablers targeting development and extension of the 4 research infrastructures: i) Networking and Computing enablers; ii) XR enablers; iii) RAN enablers; iv) Sustainability enablers. **(@M9 – Sept 2023)**

- **6G-XR OC2:** Stream B enablers targeting the accepted Stream B projects with potential topics related to system architecture, wireless communication technologies, signal processing, communication infrastructure technologies and devices. **(@M17 – May 2024)**

- **6G-XR OC3:** Vertical replicability enablers to allow third-party agents to leverage 6G-XR's enablers, infrastructure facilities and testbeds to deploy, replicate and validate the verticals of their interest. **(@M27 – Mar 2025)**

Thanks

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6G-XR project has received funding from the Smart Networks and Services Joint Undertaking (SNS JU) under the European Union's Horizon Europe research and innovation programme under Grant Agreement No 101096838.