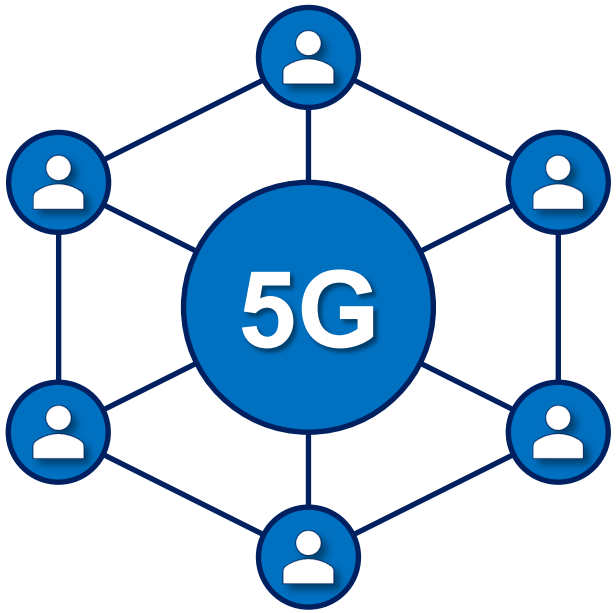


FIDAL

FIELD TRIALS BEYOND 5G

SNS Lunchtime Webinar 1

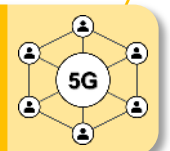
15/2/2023

Christos Tranoris, Technical Manager

P-NET, GREECE

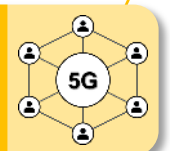
This project has received funding from the European Union's Horizon Europe research and innovation programme under the Grant Agreement No xxxxxxxxxx

Project Overview



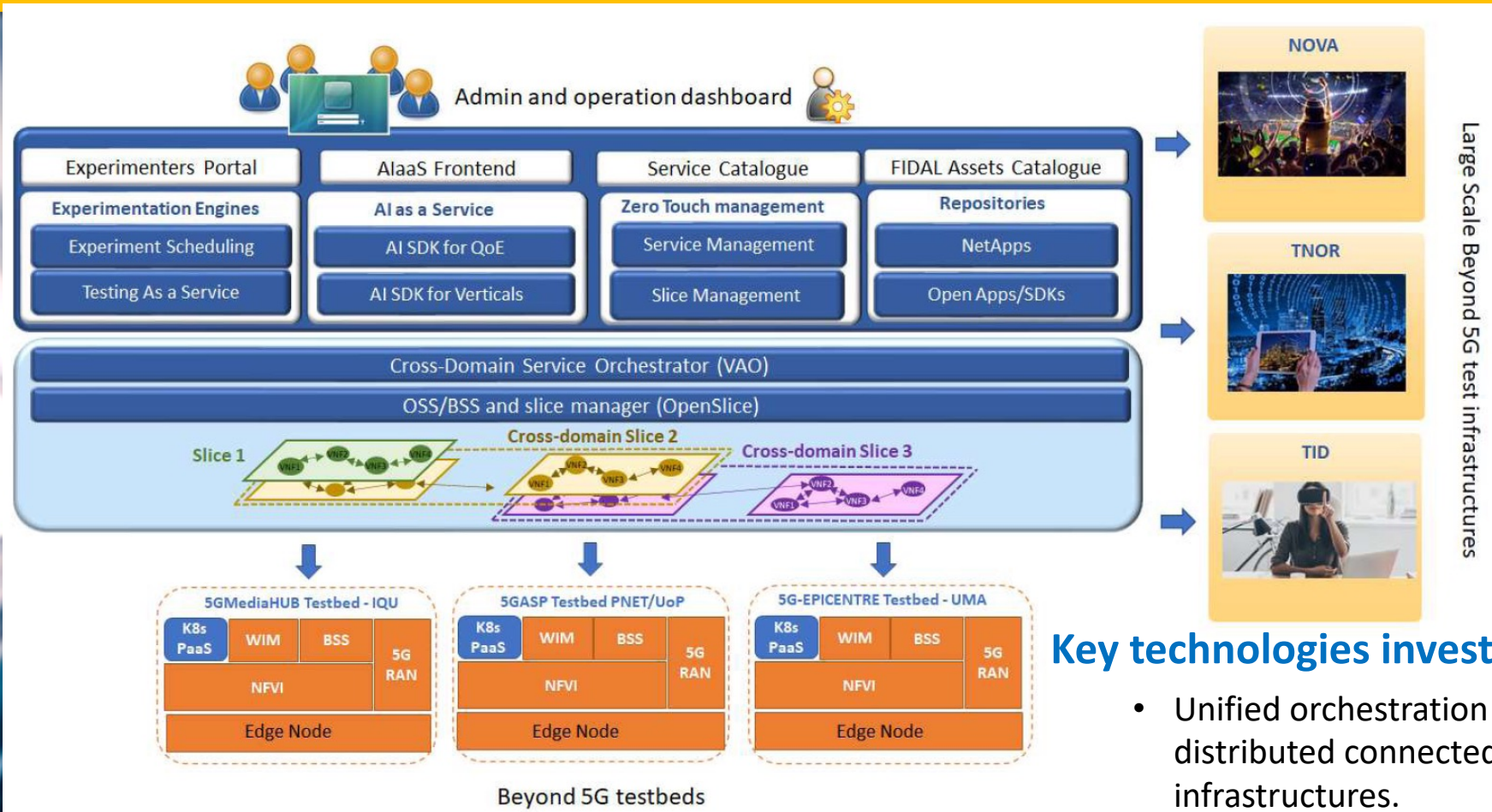
- **Project Name: FIDAL - Field Trials beyond 5G**
- **Project website: fidal-he.eu**
- **Stream:** D-01-01
- **Members:** **NOVA** | EBOS | ISI | PIIU | IQU | FORTH | TNOR | EKT | ADS |PSCE | PNET | UOP | UBI | TID | UMA | APART | STWS | OWO | ORAMA |
- **Key objective:** FIDAL key objective is to extend and deliver advanced future proof Evolved 5G test infrastructures anticipating evolution into next SNS phase, open & accessible to support 3rd party vertical experiments, and environments for rapid prototyping and largescale validation of advanced, forward-looking applications.

Targeted results



- **R1:** Deployment of 3 labs and 3 large-scale facilities demonstrating 5G evolution and 6G potential.
- **R2:** Mature 5G evolution Experimentation framework including AIaaS, Zero Touch management & Testing as a Service.
- **R3:** A repository with more than 10 Network Applications.
- **R4:** A repository for open applications & AI training data.
- **R5**: A repository for requirements, KPIs, KVIs repository and lessons learnt.
- **R6:** Holistic Security framework adapted to 5G evolution & 6G networks and services.
- **R7:** Successful trails of 7 Extreme Media & PPDR Use Cases proving in large scale the potential of 5G evolution & 6G networks.
- **R8:** Successful onboarding, trailing and analysis of approximately 28 Diverse Open Call Use Cases and related large-scale trials.
- **R9:** 3 Demonstrators targeting wide audience.

Technical Information



Key technologies investigated:

- Unified orchestration and service management for distributed connected edge-cloud continuum infrastructures.
- Zero Touch management for the 5G Evolution.
- Network Applications evolution towards 6G.
- AI tools and innovations for Verticals.
- Innovative Security Frameworks.

Testbeds & Large-Scale Trial facilities and General validation methodology

Lab validation tests:

Lab validation of all UCs will be performed in three testbeds i.e., PNET/UoP, UMA & IQU.Advanced 5G functionalities, such as 5G NR and extreme coverage in the testbeds will be performed.

Large-scale trials

Validate 5G evolution enabling technologies' features and capabilities in significant portions of stadia, city centra, etc. largescale trials supported by 5G evolution infrastructure as well as the FIDAL framework.

Open call trials

Onboard and perform trials with the selected open calls contractors.

The FIDAL facilities will leverage equipment, following the 3GPP standardization releases beyond R.16, i.e., R.17 and where possible R.18. These facilities will be evolved with advanced, beyond 5G functionalities, that will be designed and implemented in Phase 1 of the project.

Testbeds	Large scale infrastructures
PNET/UoP	NOVA
UMA	TID
IQU	TNOR

Dedicated Session later

FIDAL Use Cases

The purpose of the advanced FIDAL Use Cases (UCs) is to assess the capabilities of beyond 5G technology for the Media and PPDR vertical industries to enable their commercial exploitation considering all respective societal aspect and KVIs as well

UC #	UC title	Vertical	Key participants	Testbed/Large scale Infrastructure
UC1	Internet of Senses/Haptic sensing	Media	OWO, UMA, TID	UMA, TID
UC2	Digital Twin for first responders	PPDR	SAT, UoP, PNET, NOVA	UoP, PNET, NOVA
UC3	City security event / incident	PPDR	ADS, UMA, TID	UMA, TID
UC4	Advanced sports area media services	Media	NOVA, UoP, PNET	UoP, PNET, NOVA
UC5	Virtual Reality Networked music performance	Media	TNOR, EKTA, IQU	TNOR
UC6	XR-assisted services for public safety	PPDR	ORAMA, FORTH, UoP, PNET, NOVA	UoP, PNET, NOVA
UC7	Smart village engagement services	Media	TNOR	TNOR

FIDAL Open calls

The overall goal of FIDAL cascade/Open Call is to reach two main added values of the project:

- Involving key actors committed to perform beyond 5G field trials for diversified and heterogeneous vertical use cases covering key industrial and societal sectors.
- Ensuring the support of the needed infrastructure to deploy the proposed field trials.

FIDAL allocates **€6,000,000** (~40% of overall budget) to provide financial support to these 3rd parties. Each of the selected sub-projects will **run for a period of 3 months**, with **1 month allocated** to the training and setup and **2 months** for the trials and reporting of KPIs and lessons learnt

250-300 potential use cases reached and informed by promotional activities and events
- 60-80 applicants submitting proposals
- **26-28 proposals selected** – named sub-projects in the following

- The First Open Call cycle will be published by **M9 and run for 2 months**, with selection/contract signature deadline month M15.
- A Second Cycle of Open Calls will be launched in M19 with selection/contract signature in M24.

Challenges:

- **Experiments (e.g. ~5 experiments) might run in parallel in one testbed**
- **From past experience: experimenters need extensive support**

Thank you for listening!

Christos Tranoris

FIDAL Technical Manager

PNET

ctranoris@p-net.gr

This project has received funding from the European Union's Horizon Europe research and innovation programme under the Grant Agreement No 101096146