field trials beyond 5G

FIDAL Project Overview

General Presentation

Co-funded by the European Union

6GSNS

FIDAL

FIDAL – Field Trials Beyond 5G

D-01-01 - SNS Large Scale Trials and Pilots with Verticals

Consortium:

WHY FIDAL?

BACKGROUND

FIDAL builds on the success of past 5G-PPP projects, which aim to deliver advanced, multi-domain experimentation infrastructures that will be made attractive to vertical industry players and SMEs

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 large-scale validation of advanced, forward-looking applications.

HOW?

This is achieved via streamlined experimentation frameworks and workflows that leverage common industry practices as well as via reusable, vertical-specific Network Applications. Those are considered as a key enabler by 5G-PPP Software Networks WG.

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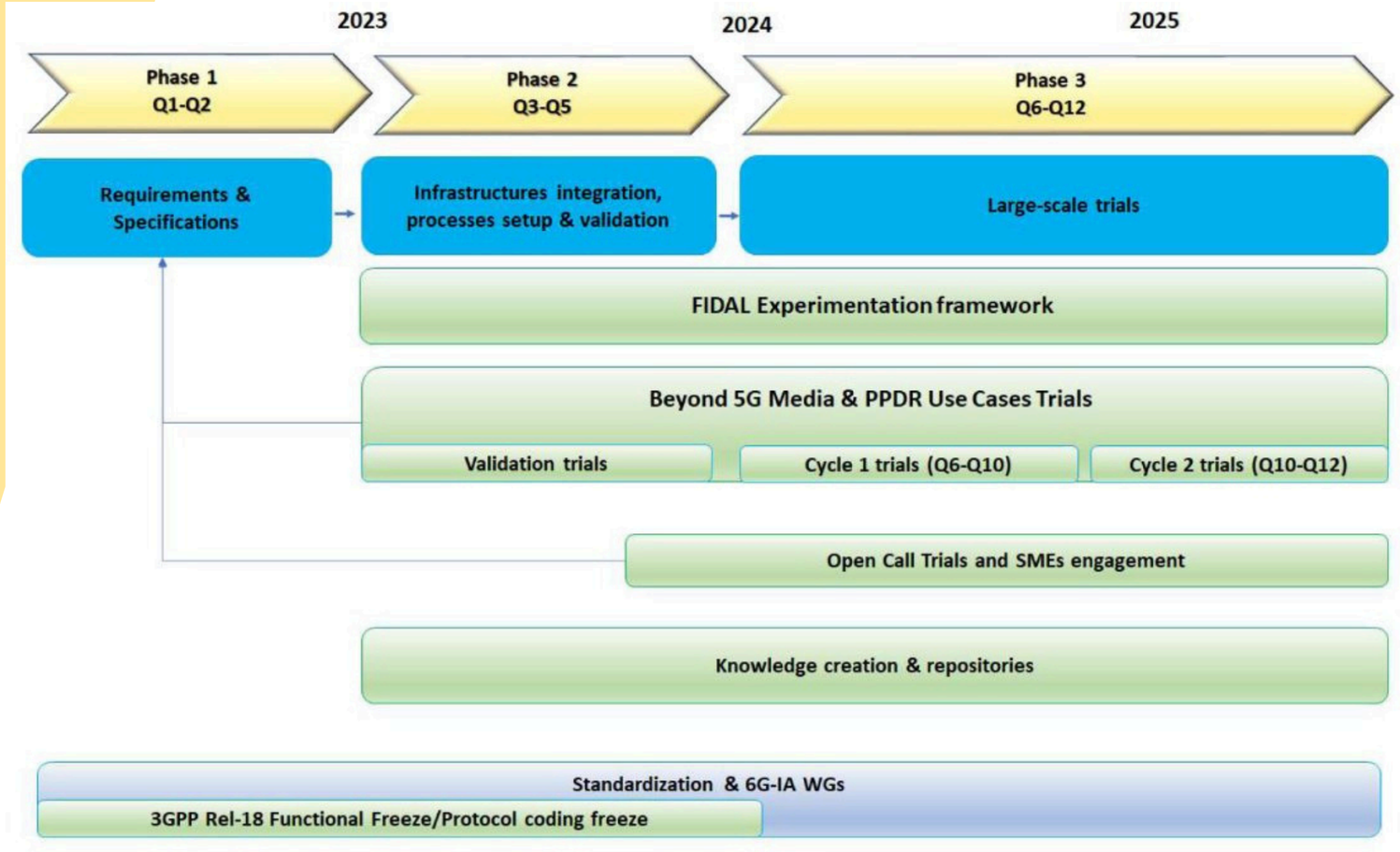
FIDAL PHASES



PHASE 1

The requirements, specification, and adaptation of the experimentation framework

PHASE 2

- setup of the labs and large-scale infrastructures
- evaluation and/or re-design/upgrade improvements to ensure a smooth and aligned evolution of the lab validations

PHASE 3

Cycles of iterative large-scale trials and third-party SME trials through open calls

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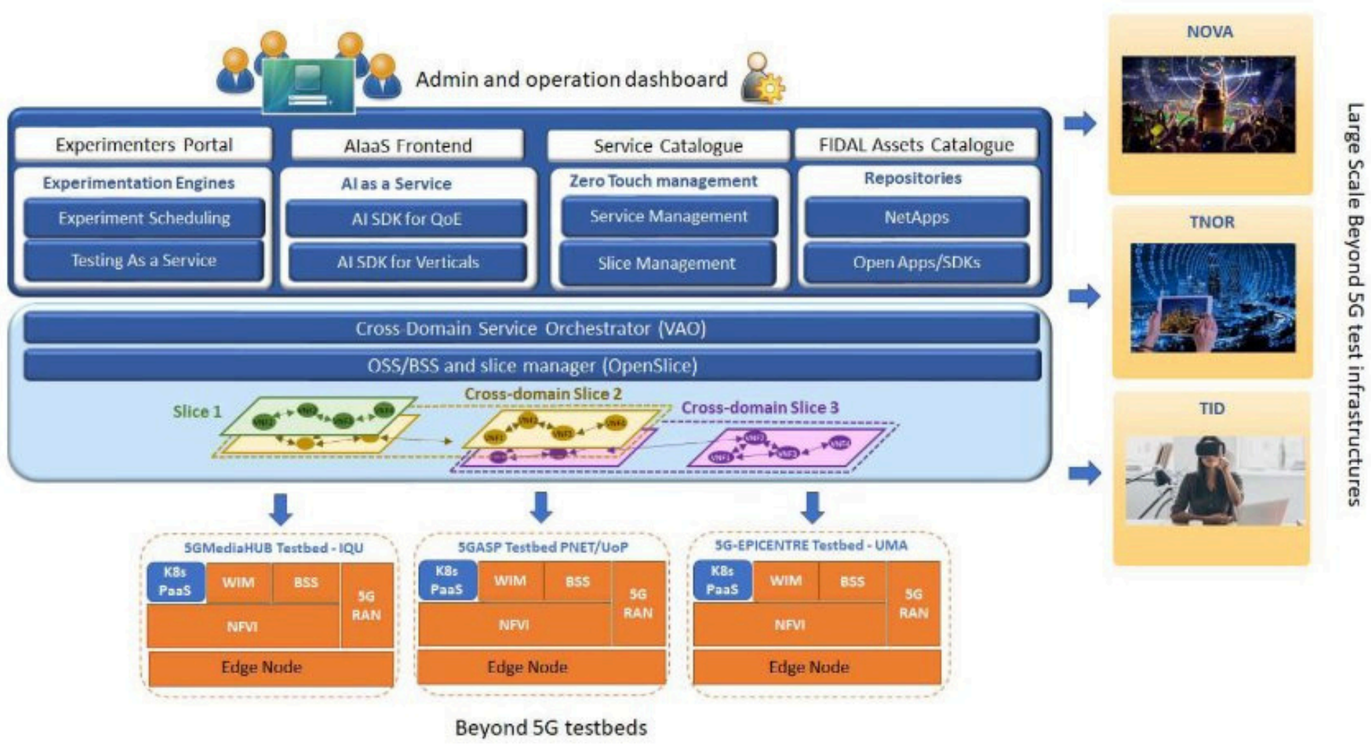
FIDAL'S ARCHITECTURE



Key technologies investigated:

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

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FIDAL USE CASES

Media & Entertainment

Internet of Senses / Haptic sensing

Advanced sports area media services

Virtual Reality Networked Music Performance

Smart village engagement services

PPDR

Digital twins for First Responders

City security event/ Incident

XR-assisted services for public safety

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 aspects and KVIs

FIDAL USE CASES - LST

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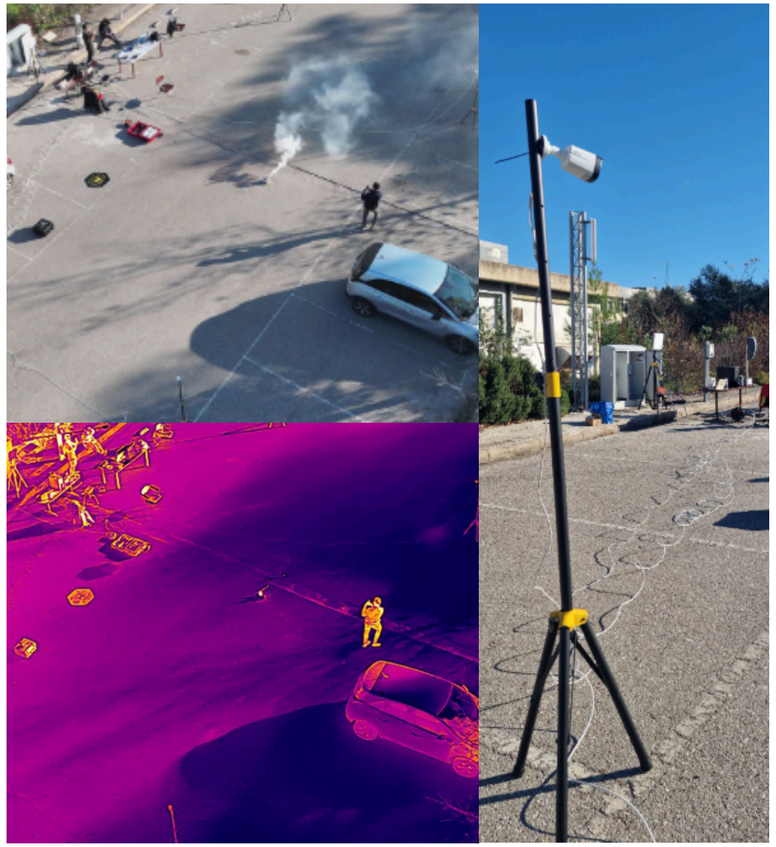
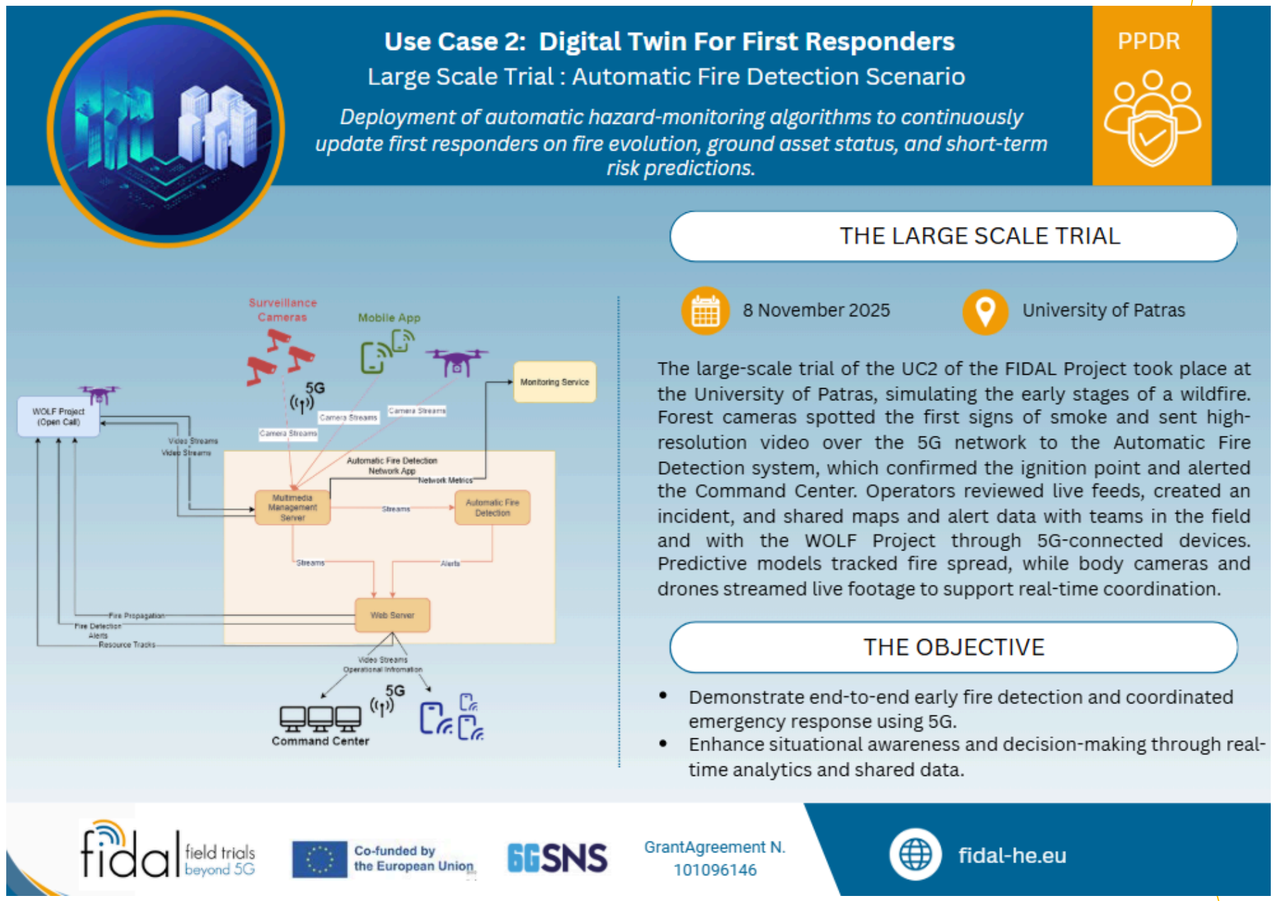
The purpose of the advanced FIDAL Use Cases (UCs) is to assess the capabilities of beyond 5G technology for the Media and PPDR vertical industries to enable their commercial exploitation considering all respective societal aspects and KVIs

UC2 Large Scale Trial Example





FIDAL OPEN CALLS : THE VISION

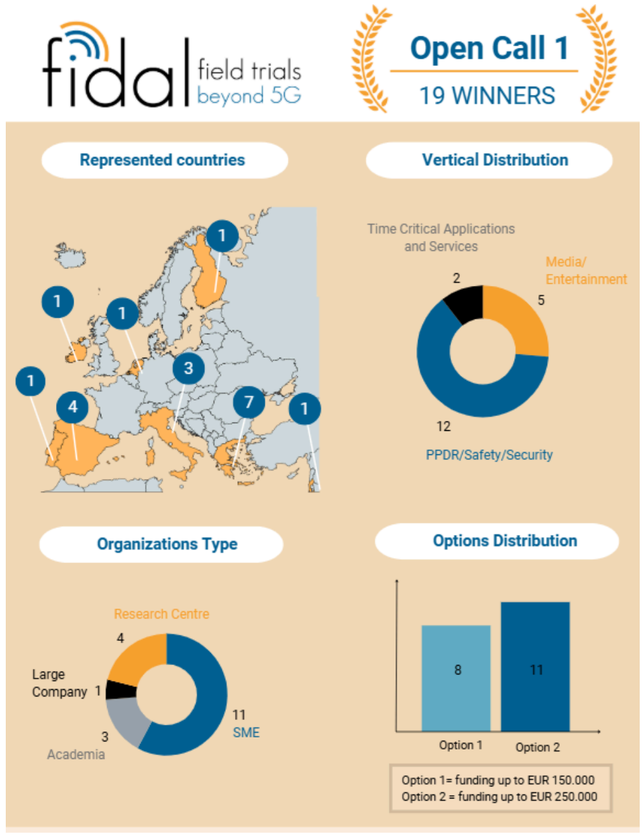
The overall goal of **FIDAL Open Call** is to reach two main added values of the project:

Involving new key actors committed to perform beyond 5G field trials for diversified and heterogeneous vertical use cases covering key industrial and societal sectors.

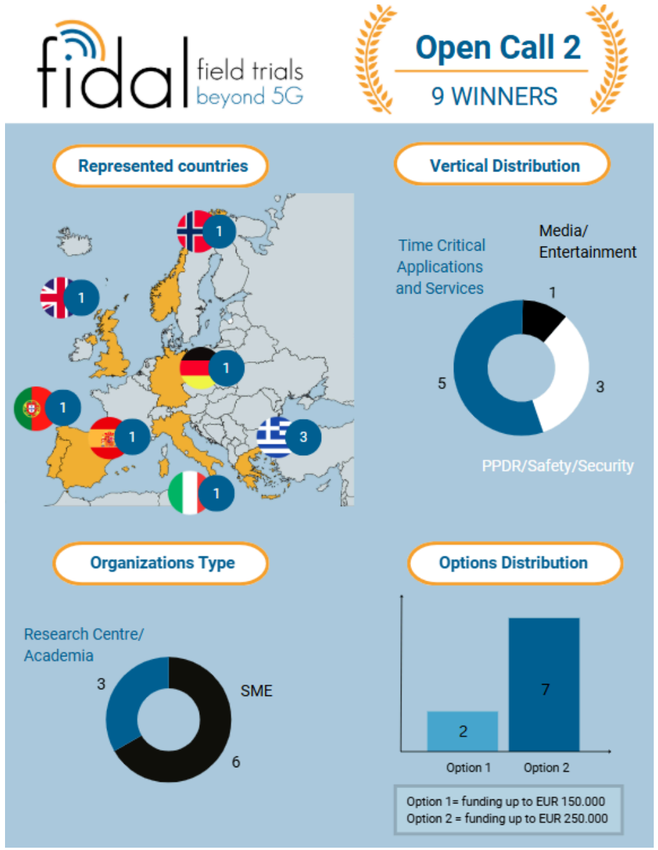
Ensuring the support of the needed infrastructure to deploy the proposed field trials.

The objectives of the Open Calls is to maximize the impact and accelerate adoption of FIDAL demonstrating flexibility, user acceptance and technology transfer.

FIDAL OPEN CALLS



15 Sep - 30 Dec 2023
92 Application received



9 Sep -10 Dec 2024
73 Applications Received

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FIDAL OPEN CALLS - D&C Activities

Open Call Process Webinar

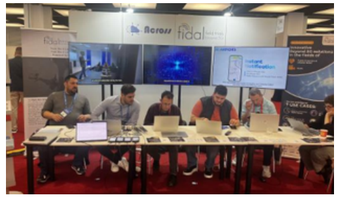
5th October 2023

PPDR Workshop

5th December 2024

Introduction to Open Call 2 Webinar

26th June 2025



EUCNC Demo 2025

3-6 June 2025

FIDAL OPEN CALLS - D&C Activities

Open Call 1 Winners

The first FIDAL Open Call took place from 15th September and 20th December 2023.

The Open Call provided applicants the opportunity to enter in the FIDAL project receiving up to 250.000 euros per application. The total available budget for the first Open Call was of **4 Million euros.**

Out of the 92 applications received, FIDAL has selected **19 winners**. Scroll through the table below to learn more about the 19 projects that have been selected.

PROJECTS	PARTNERS	PARTNERS WEBSITES	MULTIMEDIA
B5G-MOBITRUST - Enhancing Public Safety By Leveraging The Mobitrust Situational Awareness Ecosystem For Policing Large-Scale Events B5G-MOBITRUST trials will expand the FIDAL Málaga Testbed with edge nodes and mobile Command and Control Centres. These trials aim to test and demonstrate the FIDAL 5G and B5G infrastructures in five real-world events, involving over one million people, to validate and promote disaster response capabilities.	ONESOURCE POLICÍA LOCAL DE MÁLAGA	**ONE SOURCE** onesource.pt **Policia Local de Malaga** policialocal.malaga.eu	
FIDAL-VLC: 5G Robot Race The FIDAL-VLC project implements a beyond 5G testbed for remote driving applications, demonstrated by a use case that features an immersive race between two mobile robots with AI-based obstacle avoidance system, remotely driven through a 5G private network at UPV's outdoor velodrome, with cockpits located indoors at the Immersive Communications Lab displaying a cyber-physical twin-based user interface	Fivecomm UPV Robotnik	**Fivecomm** fivecomm.eu **UPV** Upv.es **Robotnik** Robotnik.eu	
SecurEye StreamSense: On-Demand AI For Real-Time Video Security The SecurEye StreamSense project, led by Secmotic, will be			

All Videos made availble

Open Call 2 Winners

The second FIDAL Open Call took place from 9th September and 10th December 2024.

The Open Call provided applicants the opportunity to enter in the FIDAL project receiving up to 250.000 euros per application.

FIDAL has selected **9 winners**. Scroll through the table below to learn more about the 9 projects that have been selected.

PROJECTS	PARTNERS	PARTNERS WEBSITES	MULTIMEDIA
ity eXCity proposal aims to enhance the safety of vulnerable road uch as pedestrians and cyclists, in urban areas by utilizing applications and services. This is achieved by utilizing ed Vehicles, Vehicle-to-Everything communication, and sensors, as well as Mixed Reality interfaces, to identify l hazards in real-time and immediately alert Vulnerable Road ensure their safety.	IPN it Instituto de telecomunicações	**Instituto de telecomunicações** https://www.it.pt/ **Instituto Pedro Nunes** https://www.ipn.pt/	
olution leverages Unmanned Aerial Vehicle (UAV) technology, ally drones equipped with AI-powered video analytics, ed within FIDAL's advanced 5G infrastructure to provide real- ection and tracking of humans and wildlife during hazardous situations. WOLF offers an AI-enabled PPDR (Public Protection aster Relief) system that incorporates cutting-edge deep computer vision models to detect civilians and animals from drone and camera footage, supporting first responders during nissions.	Pleg.ma Labs	**Pleg.ma Labs** https://pleg.ma/	
iG is a portable 5G network solution designed to restore			

THANK YOU!

THANK YOU!

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