6GSNS

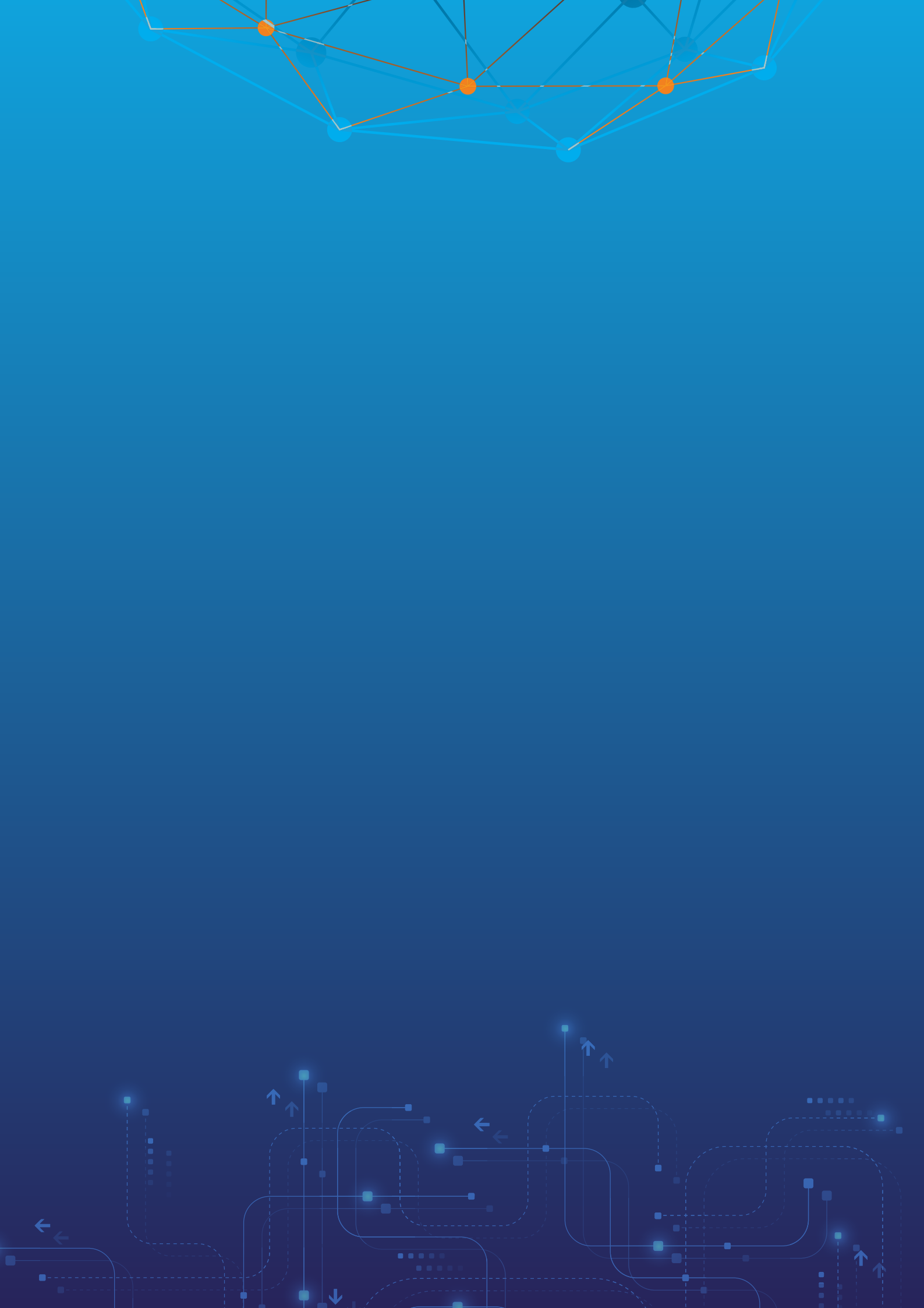
Smart Networks and Services

SNS TRIALS & PILOTS

BROCHURE No.1

June 2025

smart-networks.europa.eu



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Introduction

The 6G Smart Networks and Services (SNS) JU currently comprises 79 contractual projects organized as of today in two distinctive phases, namely Phase 1 "Exploration/Specification" including SNS Call1 / 2022 with 35 projects and Phase 2 "Development/Test" including (i) SNS Call 2 / 2023 with 28 projects, (ii) Call 3 / 2024 with 16 projects and (iii) Call 4 / 2025 being currently open with expected 21 projects. Phase 3 "Experimentation/Pilots" is not defined yet (expected Calls 5 and 6 – after 2025). The SNS projects are also organised under specific Streams and Strands, including Stream A (only in Call 1) "Smart communication components, systems and networks for 5G mid-term Evolution systems", Stream B "Research for revolutionary technology advancement towards 6G" / "6G Enabling Technologies", Stream C "SNS experimental infrastructures", Stream D "Large-Scale SNS Trials and Pilots" and Coordination and Support Actions (CSAs).

The first SNS Call 1 project started in January 2023, and some of these early projects have already reached their contractual end in Q2 2025. To build on this early progress, the decision was made to launch the first edition of the SNS Trials & Pilots (T&Ps) Brochure at an early stage. This initiative draws on the very successful experience of the EC H2020 5G Infrastructure Public Private Partnership (PPP), which produced a series of impactful T&Ps Brochures.

As a reminder, the 5G Infrastructure PPP encompassed 93 contractual projects that achieved outstanding results and impact, consistently highlighted through the PPP Programme[1] updates and the dedicated project websites. Over the course of the 5G Infrastructure PPP, five T&Ps Brochures were released. Four of these, released in September 2019[2] , December 2020[3] , August 2021[4] and November 2023[5] featured 40 of the most impactful T&Ps from Phase 2 and Phase 3 projects, selected via open calls for input and assessed by a panel of experts based on predefined criteria, including impact of 5G networks, achieved KPIs, technological and market readiness, societal value and impact, and 5G empowerment. Given the vast amount of work conducted across the PPP project portfolio, the PPP Projects T&Ps Summary Brochure[6] released in April 2024 compiled the comprehensive overview of the 322 T&Ps implemented during Phase 2 and Phase 3. The information in this PPP Summary Brochure was fully aligned with the PPP Verticals Cartography[7], which captured project level information. The PPP Brochures focused on T&Ps (TRLs 5-6-7) and did not include detailed information on Projects PoCs, Prototypes or Demonstrations. For further insights into these areas, interested readers were encouraged to consult the PPP Verticals Cartography, which offered complementary information. The PPP Phase 2 and Phase 3 projects successfully validated 5G technologies across many vertical sectors including Automotive, Industry, Media & Entertainment, Public Safety, Health, Energy, Smart Cities, and Transport & Logistics.

As mentioned above, the decision was made to launch the first SNS Trials & Pilots (T&Ps) Brochure No.1 at early stage, with the process definition in Fall 2024 and the call for inputs initiated in January 2025, two years after the contractual start of the first SNS projects. In contrast, during the PPP programme, Phase 1 projects started in Spring 2015 and the first PPP T&Ps Brochure process was launched 3.5 years later.

In the SNS context, Stream D, dedicated to T&Ps with Verticals, was initiated as early as Call 1, mostly 5G networks and first 6G enablers. Stream D projects also launched Open Calls to extend additional/complementary vertical use-cases. In parallel, leveraging the PPP Verticals Cartography experience, SNS developed the Verticals Engagement Tracker[8] (VET) to monitor vertical sector activities.

When the SNS Brochure No.1 process was launched in November 2024, 72 T&Ps had already been reported by SNS projects (see further details in Section 3 on "Highlights on the vertical sectors addressed by SNS JU Trials & Pilots"). This first SNS T&Ps Brochure includes 8 selected T&Ps. Each contributing project prepared a two-page flyer (as detailed in Section 2), presenting an overview of its T&P, including network architecture, deployment details, key results obtained and innovative features enabled by 5G, 5G Advanced and emerging 6G technologies. These flyers emphasise the benefits and value brought by 5G Advanced and 6G networks, technologies and enablers, that previous generations of mobile networks cannot provide (i.e., their 5G, 5G Advanced and 6G empowerment).

Importantly, the featured T&Ps illustrate strong social relevance, economic potential, or the validation of ground-breaking services and applications, demonstrating how 5G, 5G-Advanced and 6G are driving innovation and impact.

1. https://5g-ppp.eu
2. https://5g-ppp.eu/the-5g-ppp-infrastructure-trials-and-pilots-brochure-is-out
3. https://5g-ppp.eu/the-5g-ppp-infrastructure-trials-and-pilots-brochure-n2-is-out
4. https://5g-ppp.eu/the-5g-ppp-infrastructure-trials-and-pilots-brochure-3-is-out
5. https://5g-ppp.eu/the-5g-ppp-infrastructure-trials-and-pilots-brochure-4-is-out
6. https://5g-ppp.eu/5g-ppp-trials-and-pilots-summary-brochure-2024
7. https://verticals-cartography.5g-ppp.eu
8. https://verticals-tracker.sns-ju.eu/vertical-engagement-tracker

The selected T&Ps are listed below:

- **FIDAL: 5G for Public Protection and Desister Relief (PPDR).**
- **HEXA-X-II: Industrial Cobots leveraging beyond Communication Aspects.**
- **IMAGINE B5G: Situational Awareness Framework Enabling Robust Emergency Response for Urban Flood Warnings (SAFER-FLOW).**
- **6G-SANDBOX: Validation of FR2 Reconfigurable Intelligence Surfaces (RIS) in the City of Málaga.**
- **TARGET-X: Robotic Deconstruction Prototype System.**
- **TrialsNet: Smart Traffic & Crowd Management.**
- **TrialsNet (Open Call): Next-gen Gaming and Training Platform for Everyone and Everywhere.**
- **6GREEN: Critical Infrastructure Operation during Energy-Constraint Disaster Scenarios.**

The broader context and panoramic perspective of the progress and achievements of the 6G SNS JU Programme can be explored through the SNS VET, a range of specific White Papers[9] and via the many webinars organised by the SNS JU at the programme and projects levels[10].

Given the scale and diversity of ongoing work across the SNS JU projects portfolio, this T&Ps Brochure No.1 represents just a snapshot of recent developments. We sincerely hope that you find it as insightful and engaging to read as we did in compiling it.

Didier Bourse, Kostas Trichias, Alexandros Kaloxylos, Carles Antón-Haro, Mikael Fallgren, Carole Manero, Valeriya Fetisova and Veronica Vuotto (SNS Brochure Editorial Core Team)

9. https://smart-networks.europa.eu/sns-publications
10. https://smart-networks.europa.eu/event

Overview

Public Protection and Disaster Relief (PPDR) trials leveraged advanced 5G capabilities, such as Quality of Service (QoS) and network slicing, to prioritise PPDR communications during large-scale events with thousands of attendees. This trial focused on demonstrating reliable communications and video transmission, even under mobile network congestion. It aimed to show how 5G enhances public safety communications by ensuring dedicated network resources for emergency services in critical situations.

Network slicing and dynamic QoS management were successfully tested on Telefónica's commercial 5G Standalone network, enabling prioritisation of police communications in real-life conditions. Figure 1.1 shows a video captured by a drone and streamed over 5G to the command-and-control centre, supporting police surveillance during major public events.

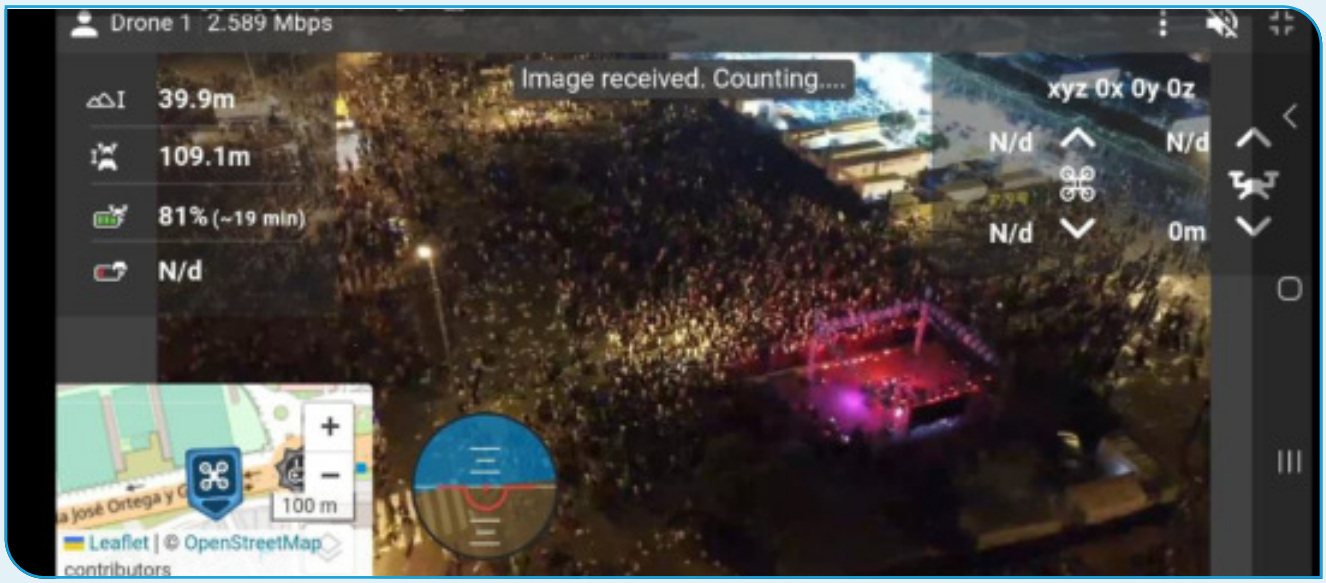


Figure 1.1: One of the trials organised to support Police surveillance activities during the summer festive in the City of Malaga

Architecture

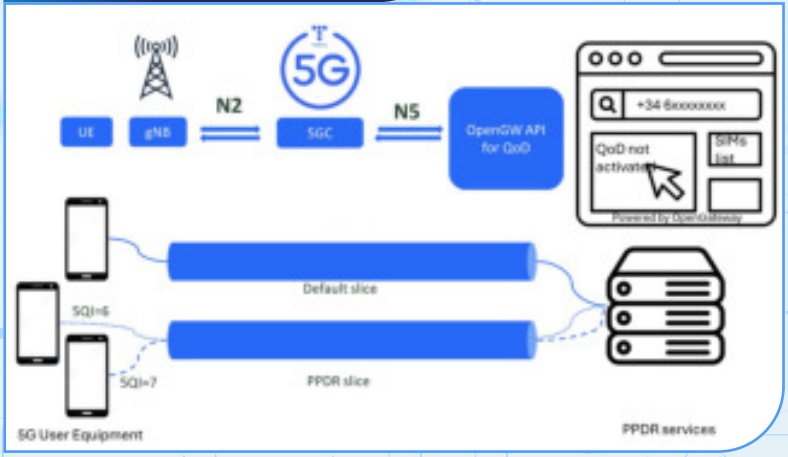


Figure 1.2: Network architecture for the PPDR trials

The trials used the Telefónica Public Network, with specific SIM cards providing access to Quality on Demand (QoD) and slicing services, combined to prioritise PPDR traffic. One default slice and one prioritised slice were configured in the network. The PPDR slice was assigned to SIMs used by Police User Equipment, while the QoD service was dynamically managed via Telefónica's QoD Mobile API, part of the GSMA Open Gateway initiative. This allowed different 5G Quality Indicators (5QIs) to be configured for specific SIM cards in the PPDR slice, enabling prioritisation of command control centre (CCC) communications over those from other agents.

Deployment

Figure 1.3: MCPTT App

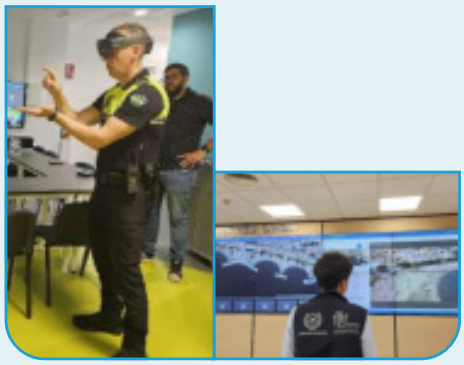


Figure 1.4: Police agent training and 5G Command-and-Control Centre

The PPDR trials were conducted as part of the FIDAL project, through collaboration between Málaga Local Police, Telefónica, Airbus, OneSource, and the University of Málaga. This initiative builds on the 5G-EPICENTRE project, the 5G Infrastructure PPP project focused on 5G infrastructure, further advancing for mission-critical communications using cutting-edge 5G technologies.

Airbus and Onesource provided the PPDR services. Airbus' solution includes Mission Critical Push to Talk (MCPTT) and Mission Critical Video applications (see Figure 1.3). Onesource's Mobitrust solution features wearable devices, augmented reality glasses, drones, and real-time video feeds from fixed and mobile cameras, continuously transmitting data to CCC, shown in the Figure 1.4.

Results

The trial successfully achieved key results:

- Mout-to-ear latency: defined by 3GPP, this KPI measures the time between the transmitting user speaking and the playback of the utterance through the receiving user's speaker. The latency remained consistently below 300 ms on the PPDR slice, as required by the MCPTT service while it exceeded 300 ms for 60% of the MCPTT calls on the default slice.
- Throughput: the test results conducted during the summer festival in Málaga, the "prioritised" device achieved nearly double the bit rate, both in downlink (172 Mbps) and uplink (43.6 Mbps), compared to the non-prioritised device (97 Mbps downlink/23.2 Mbps uplink).

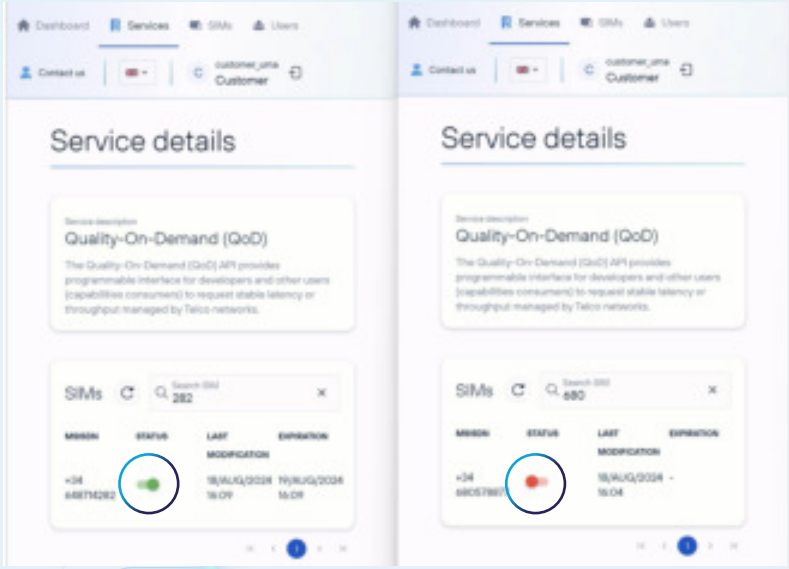


Figure 1.5: 5QI performance measurements

The QoS activation process is shown on figure 1.5 through the OpenGateway Portal for the mobile phone. After activation, a speed test was conducted on the device with activated QoS and compared to another device using default QoS settings.

5G Advanced/6G Empowerment

These trials successfully demonstrated the use of network slicing on a 5G commercial network, ensuring the prioritisation of police communications in real-world scenarios. Additionally, the trials validated the use of OpenGateway QoD APIs to dynamically request on-demand traffic prioritisation for a specific 5G terminal within a slice. This capability alllows emergency services to adjust network resources based on operational needs, enhancing the reliability and efficiency of communications in high-demand situations.

Project website: fidal-he.eu

Overview

This HEXA-X-II T&P represents the project's system validation and demonstrates a resilient, autonomous warehouse inventory management system powered by collaborative robots (cobots), autonomous mobile robots (AMRs), and unmanned aerial vehicles (UAVs/drones), all orchestrated over 6G-ready infrastructures. By leveraging trustworthy, flexible network topologies and integrating advanced capabilities beyond communication, such as sensing, positioning, and compute-as-a-service—the system enables adaptive, secure, and energy-efficient logistics operations.

The pilot is carried out in realistic- "emulated" warehouse settings across multiple partner sites, including a facility in Athens, Greece. It has been showcased at EuCNC 2023 and 2024, with additional demonstrations planned for EuCNC 2025. The trial involves WINGS ICT, VTT, Nextworks, ICCS, CTTC, Telefonica, and 10+ logistics and manufacturing companies in Greece and other countries.

Architecture

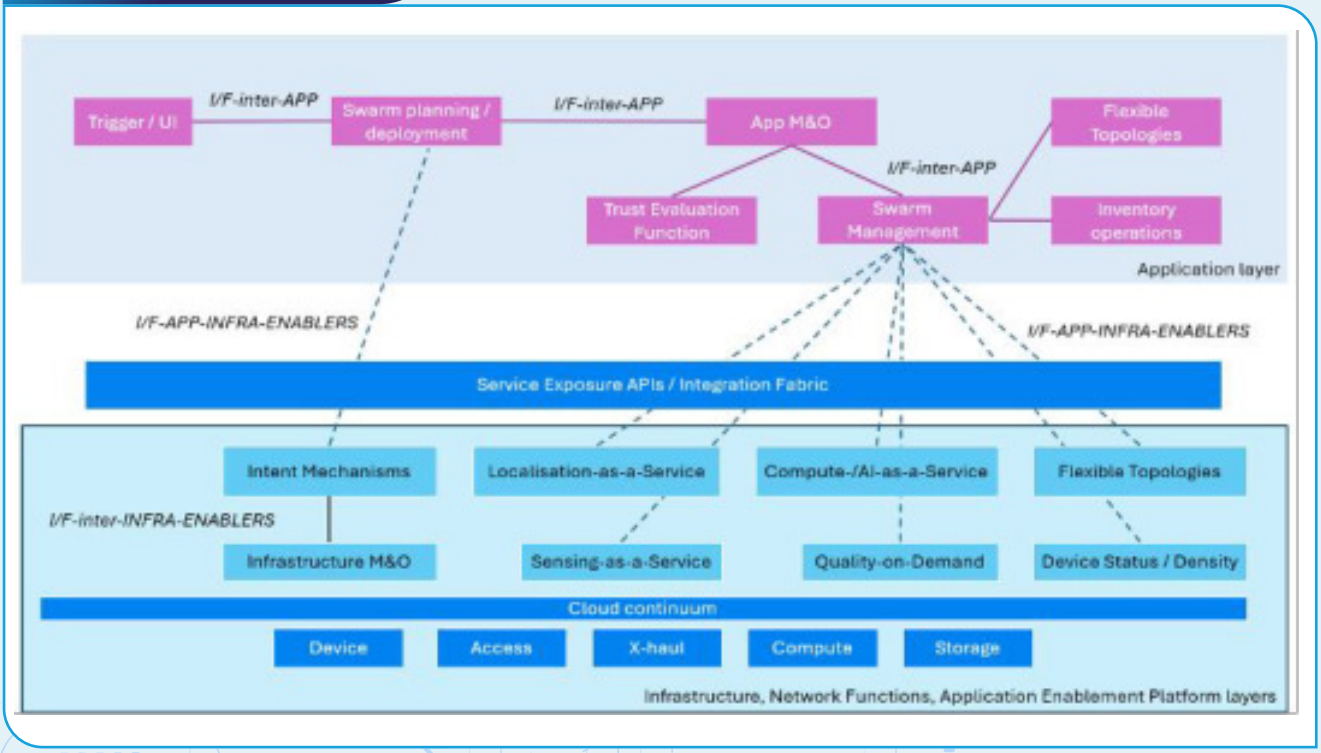


Figure 2.1: Exposure of Infrastructure and Network Functions and capabilities towards the Application Layer

The solution introduces advanced orchestration and automation mechanisms, including intent-based service provisioning, trust-aware reconfiguration, and cross-layer exposure of management and network capabilities. These innovations drive greater operational efficiency, enhance inventory tracking accuracy, and support the sustainable deployment of systems in industrial and logistics environments.

The high-level architectural diagram (Figure 2.1) illustrates the exposure of both communication and "beyond communication" functions and capabilities to third-party (vertical) applications and services. Those beyond communication functions include Compute and AI resources, raw and pre-processed sensing data, Quality-on-Demand network capabilities, device status information, and more. They are made accessible through the Application Enablement Platform Layer of the end-to-end blueprint, via standardised Application Programming Interfaces (APIs) originating from the Network and Infrastructure Layers.

Deployment

Figure 2.2: In-lab testing (left side) and in relevant environment (right side, Warehouse in Athens, Greece) testing of primary application components

The cobot-powered warehouse inventory system has been deployed in laboratory environments across partner facilities and tested in real-warehouse settings at customer sites in Athens, Greece. The left image illustrates in-lab validation of robot perception and AI-driven coordination, while the right image captures real-world testing of multi-agent fleet management and network-assisted cobot operations.

Results

Key outcomes of the pilot included evaluation results across various network, compute and application layer KPIs. The pilot highlighted the importance of flexible allocation of communication and compute resources, such as offloading between end devices (UAVs, AMRs), and edge/cloud infrastructure (Figure 2.3). It also demonstrated the strong interdependence between application configuration and performance, and the availability and exposure of underlying network and infrastructure resources. Figure 2.4 illustrates the correlation between available bandwidth in an indoor private beyond 5G warehouse deployment, the video stream quality of cobots, the size of the cobot fleet, and their operational durations, with associated implications on Operational Expenditures (OPEX) and Capital Expenditures (CAPEX). This analysis is part of the wider Key Value Indicators'- (KVI) framework of HEXA-X-II, towards environmental, social, and economic sustainability.

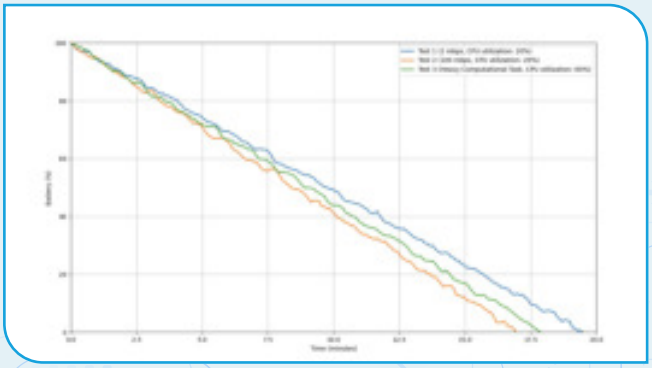


Figure 2.3: Flexible UAV-powered communication / compute node energy consumption evaluations for various set-ups

Figure 2.4: Performance- and Economic Sustainability-driven for beyond 5G deployments in industrial environments

5G Advanced/6G Empowerment

This T&P aimed to demonstrate resilient, trustworthy and sustainable operations in challenging environments through novel 5G Advanced/6G enablers. These include intent-based networking, exposure of management, network and infrastructure data and capabilities, and beyond communication services such as sensing, compute, and AI-as-a-service. The pilot also showcased flexible topologies, and AI-powered resource allocation, illustrating how these innovations contribute to long-term environmental, social and economic sustainability, far surpassing the capabilities of previous generations. The demonstrated system delivers measurable improvements in energy efficiency, OPEX/CAPEX reduction, and overall system trustworthiness, making it highly applicable and readily exploitable by verticals such as logistics and manufacturing.

Project website: hexa-x-ii.eu

Imagine B5G

IMAGINE B5G
Situational Awareness Framework Enabling Robust Emergency Response for Urban Flood Warnings (SAFER-FLOW)

Overview

Imagine-B5G develops an advanced, accessible, secure, and programmable end-to-end Beyond 5G platform for large-scale trials and pilots in Europe.

The SAFER-FLOW Vertical Experiment aims to enhance Public Protection and Disaster Relief (PPDR) by integrating advanced Beyond 5G technologies to address complex challenging flooding scenarios. The trial took place in Aveiro, Portugal, using Imagine-B5G's local facility, comprising IT-Aveiro, Altice Labs, Capgemini and Ubiwhere, for integration and demonstration. The city's vulnerability to urban flooding made it an ideal testbed to validate the platform's disaster response capabilities.

SAFER-FLOW tackles key emergency response challenges through real-time data collection and smarter decision-making, aiming to enable. fast, informed, coordinated disaster response.

Architecture

SAFER-FLOW uses IoT sensors to enhance PPDR. It monitors flood levels, issues early warnings, and aids evacuation. Drones provide aerial views, while AI and Machine Learning (ML) map watercourses and assess severity. Even without network access, drones and BodyKits continue gathering data, for situational awareness.

The platform priorises not just ultra-low latency communication but also visibility, condition assessment and effective response.

To meet operational needs, two network slices were deployed: one for BodyCams and drones, the other for water sensors. First responders use wearables to monitor health, gas levels, video and GPS. Augmented Reality (AR) navigation supports search and rescue, with all data is centralised in the SAFER-FLOW Command Control Centre (CCC).

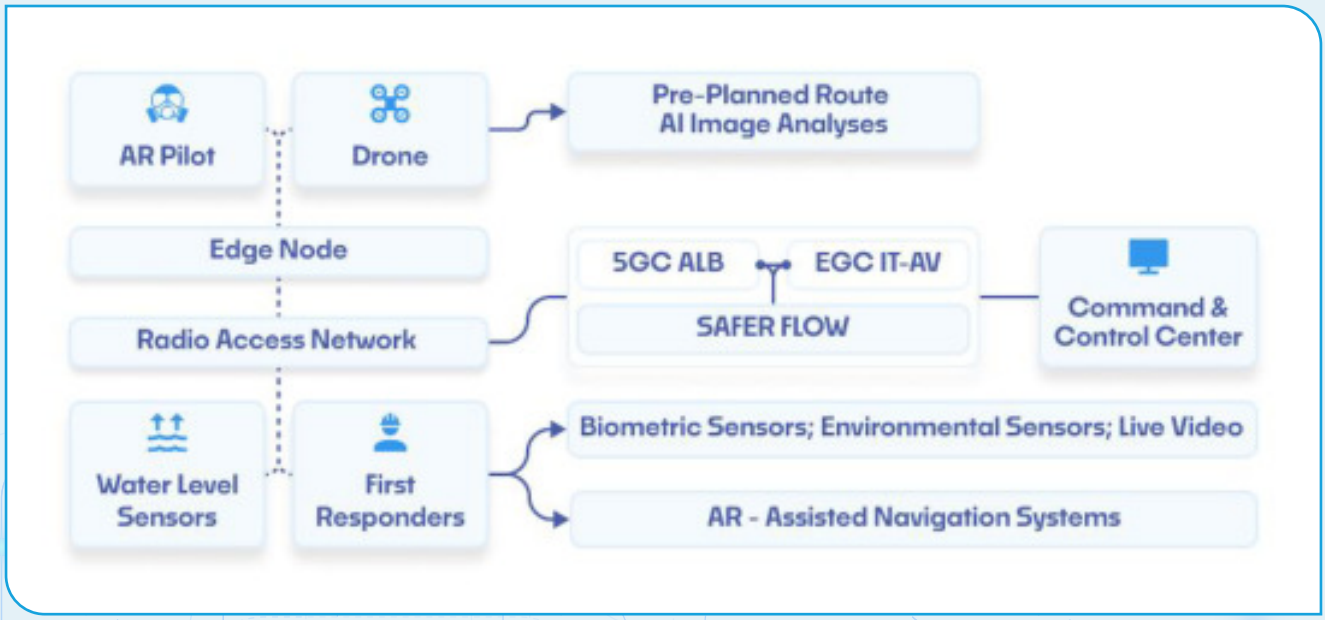


Figure 3.1: The SAFER-FLOW architecture

Deployment

The final public SAFER-FLOW trial, in Aveiro, Portugal, demonstrated advanced real-time monitoring, drone operations, and IoT sensors within a 5G-enabled environment. The trial was organised into three zones: the first showcased water sensors for flood detection; the second featured drones with AR for situational awareness; and the third presented 5G-enabled BodyKits for first responders.

Attendees were able to engage directly with the technologies, exploring their deployment and functionality in real-world disaster response scenarios.

Figure 3.2: *5G Bodykit showcase (Up), Water Level Sensor and CCC's water level page (Down)*

Results

The trial successfully achieved all major objectives.

- RTT (Real-Time Text) dropped from 54.28 milliseconds (ms) to 24.16 ms.
- Message delay decreased from 55.71 ms to 25.59 ms.
- AI KPIs improved by over 20% in accuracy and inference speed.
- Watercourse detection model accuracy rose from 70% to 91%.
- Model processing time was cut by 24%, to 24.5 seconds.

Using satellite and drone imagery, AI models demonstrated how machine learning enables fast, accurate identification of water flow paths and flood zones, improving risk assessment and real-time decision-making.

SAFER-FLOW delivers ultra-reliable, low-latency connectivity, reducing response times and minimising impact on lives and infrastructure, surpassing standard 5G performance.

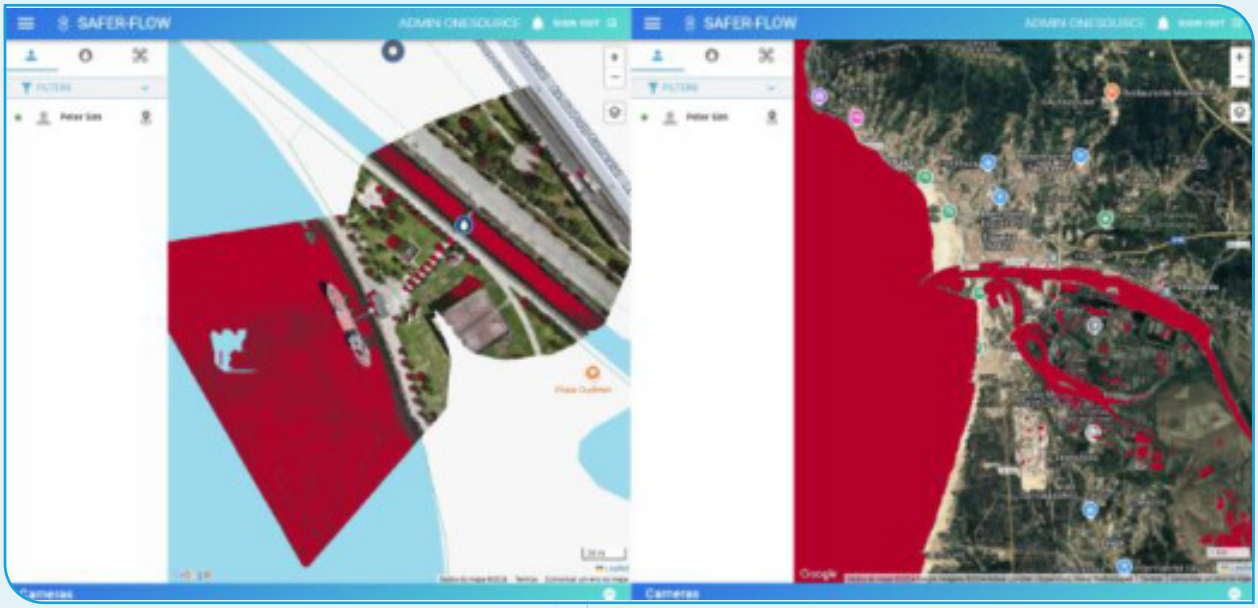


Figure 3.3: *Watercourse Detection Using Drone (Left) and Satellite Imagery (Right) in the SAFER-FLOW CCC*

5G Advanced/6G Empowerment

5G Advanced technologies significantly enhance the performance of the SAFER-FLOW platform in disaster response scenarios. With ultra-low latency and high reliability, 5G enables real-time data transmission from IoT sensors, drones, and first responders supporting faster, more informed decision-making.

Advanced network slicing and edge computing optimise data processing and dynamic resource allocation, ensuring more efficient and adaptive responses.

SAFER-FLOW's architecture combines cloud and edge computing to enable distributed data management and processing.

These advancements go beyond the capabilities of previous generations, delivering unprecedented situational awareness and responsiveness in complex environments, such as flood management.

Project website: imagineb5g.eu

Overview

On 13 February 2025 and later during the week 5-9 of May, Keysight Technologies and the University of Málaga carried out a pioneering work to validate 10 different Devices Under Test (DUTs), including Reconfigurable Intelligent Surfaces (RIS) and reflectors for millimetre wave (FR2) communication in a real environment: the central square of Málaga. The RIS units were supplied by 10 different vendors, primarily from Taiwan, under the RISFORCE experiment proposed by ITRI as part of the 6G-SANDBOX project's open calls. This trial forms a key component of the RISFORCE experiment, which was selected through the 6G-SANDBOX open call initiative.

Architecture

The trial architecture positioned the gNB, RIS and User Equipment (UE) locate in a triangle to avoid blockage from buildings. The RIS received signals from the gNB and reflected beams to UEs 2 and 3. The validation involved deploying a NOKIA FR2 gNode operating in the 26 GHz - 27.3 GHz band, a Quectel FR2 Standalone modem, and testing each RIS at different locations and angles relative to the gNB and the RIS and UE. The UE was placed in a corridor with poor direct coverage related from the gNB. Keysight's Nemo measurement equipment, connected to the UE, collected data with and without RIS to evaluate their impact and the UE's behaviour under multi beam conditions. This real-world experiment provided valuable insights for optimising RIS placement in FR2 deployments.

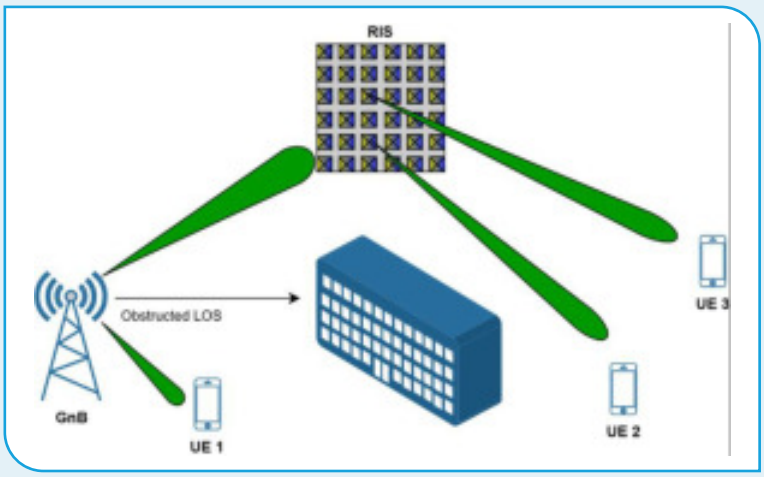


Figure 4.1: Architecture of the trial

Deployment

The initial deployment campaign in February 2025 involved setting up the gNB, RIS (reflectors), and UE. A platform (see figure 4.2 on the left) was used to mount each RIS at the same position, ensuring a consistent scenario for comparison. The UE and Keysight measurement equipment were placed in a corridor with limited coverage. A portable NOKIA Airscale gNode was also deployed in the area as part of the setup (Figure 4.2 on the right).

Figure 4.2: Pictures of Deployment in Malaga city centre

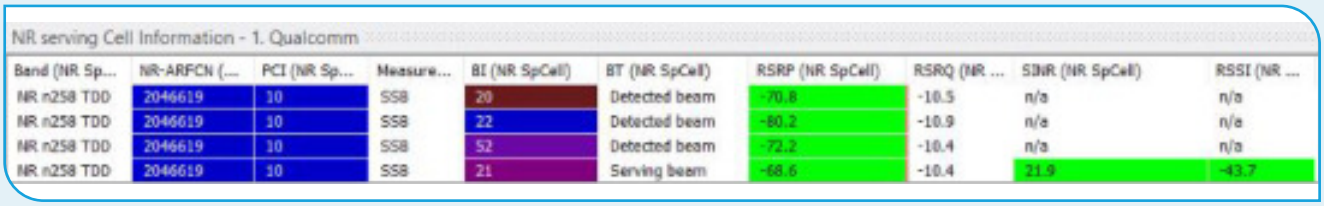
Results

6G-SANDBOX is one of the first SNS projects to move RIS from theory and lab conditions to real-world experimentation.

The key outcome of the trial was the characterisation of each RIS based on KPIs such as Received Signal Power (RSRP), Throughput, Peak Data Rate, Signal-to-Interference-plus-Noise Ratio (SINR), gNb transmission Power, and Selected beam index. Measurements using Nemo Outdoor revealed detailed levels per beam. When a RIS was positioned in front of the gNB, it successfully redirected the signal into the corridor, achieving strong RSRP values around -60 dBm at the UE. The signal primarily came from the gNB's central beams (e.g. Beams 20 or 21), highlighting the RIS's ability to enhance targeted coverage.

The trial, recently completed, is still undergoing analysis. Tests covered both multipath-rich and low multipath environments. In both, signal improvement was observed. However, in a city centre street canyon, no major coverage gain was detected, likely due to existing environmental scattering that already reflects signals. Small alignment issues, such as minor codebook mismatches, can also reduce RIS effectiveness due to narrow beamwidths. Initial results suggest that, in dense urban areas, without precise alignment and control RIS performance may be limited.

This trial, along with upcoming RIS testing activities in the 6G-SANDBOX project, will contribute to establishing a clear evaluation methodology for RIS and offer insights into the scenarios where technology delivers the most benefit.



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Band (NR Sp...	NR-ARFCN (...	PCI (NR Sp...	Measure...	BI (NR SpCell)	BT (NR SpCell)	RSRP (NR SpCell)	RSRQ (NR ...	SINR (NR SpCell)	RSSI (NR ...
NR n258 TDD	2046619	10	SSB	20	Detected beam	-70.8	-10.5	n/a	n/a
NR n258 TDD	2046619	10	SSB	22	Detected beam	-80.2	-10.9	n/a	n/a
NR n258 TDD	2046619	10	SSB	52	Detected beam	-72.2	-10.4	n/a	n/a
NR n258 TDD	2046619	10	SSB	21	Serving beam	-68.6	-10.4	21.9	-43.7

Figure 4.3: Characterisation of the beams at the UE

5G Advanced/6G Empowerment

RIS aim to enhance coverage, spectral efficiency, and signal reliability by dynamically controlling radio propagation, especially in challenging non-line-of-sight (N-LOS) scenarios. These technologies drive the digital transformation of autonomous systems, smart cities, and next-gen IoT, fostering innovation and sustainable growth.

Project website: 6g-sandbox.eu

Overview

The TARGET-X project explores the application of 5G technology across various industries, including construction. This trial focuses on a robotic deconstruction prototype that integrates Extended Reality (XR) technology for adaptive planning and execution.

The aim is to show how 5G-enabled robotic deconstruction can boost efficiency, precision, and safety in deconstruction building structures, thus promoting a circular economy. By reducing human exposure to hazardous environments and proximity to heavy machinery, the risk of accidents is greatly minimised. Plans are also in place to apply the developed technologies to other construction site processes.

The trial took place at the Reference Construction Site in Aachen, Germany, using the ReStage Structure, a multi-material demonstrator. Mobile robots from KUKA and INNOK carried out the deconstruction, supported by 5G URLLC communication for real-time coordination between machines, operators, and edge servers.

Architecture

The TARGET-X trial architecture (see Figure 5.1) integrates 5G, robotics, and XR technologies to improve the efficiency and safety of deconstruction. A 5G Non Standalone network connects all components, enabling real-time data exchange. A customised KUKA KR 70 R2100 robot, equipped with a specialised end effector, carries out the deconstruction through machine-to-machine (M2M) communication. Communication between the user device, the robot and the edge server is facilitated using Robot Operating System (ROS) and Message Queuing Telemetry Transport (MQTT) protocols. Exchanged data includes the robot's joint states and force-torque sensors readings, trajectory planning inputs from the user device, and additional exteroceptive sensor data for environment perception.

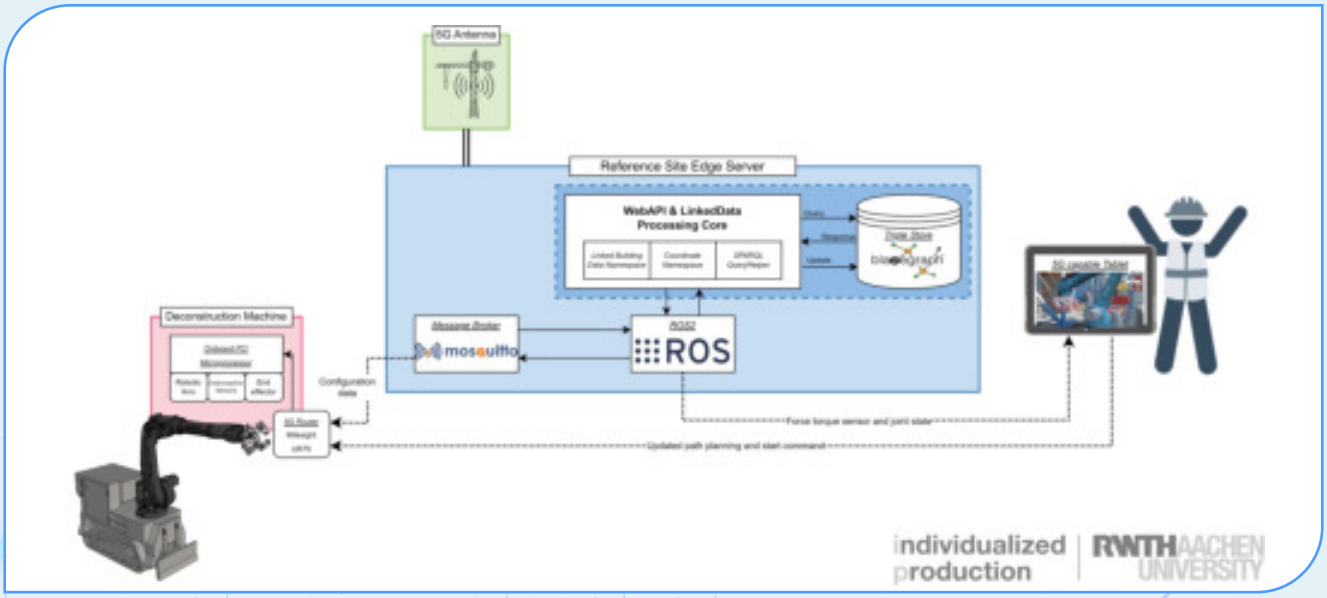
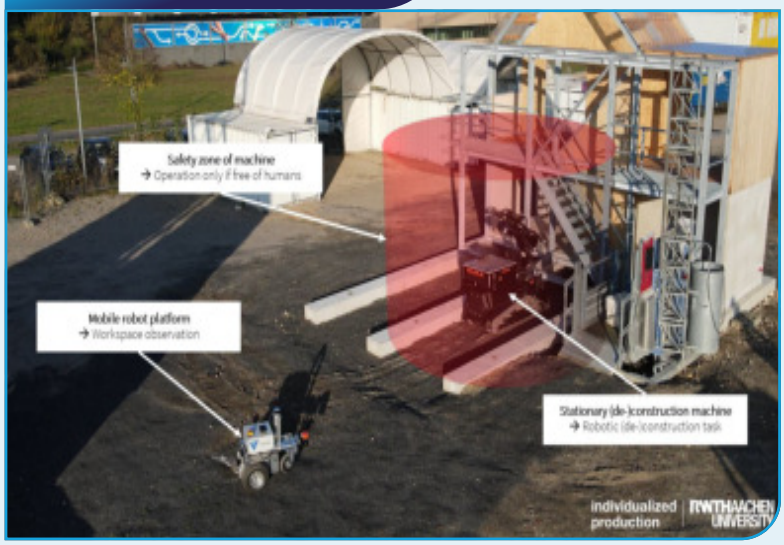


Figure 5.1: Overview showing the data exchange between the devices and edge server (https://doi.org/10.5281/zenodo.14615798)

Deployment



The trial was conducted at the Reference Construction Site, operated by Construction Robotics GmbH, where a 5G network was established using antennas mounted on a tower crane. The KUKA robot was configured with XR-based positioning, while a mobile safety robot, equipped with LiDAR and AI detection, ensuring secure operations (see figure 5.2). An edge server handled data, processing, and command execution, enhancing automation, precision, and real-time monitoring.

Figure 5.2: Overall deconstruction setup on the Reference Construction Site, Aachen (https://doi.org/10.5281/zenodo.14755973)

Results

This trial successfully demonstrated the feasibility and benefits of 5G-enabled robotic deconstruction.

- Remote-controlled deconstruction via 5G reduces accident risk by allowing operators to work at a safe distance from heavy machinery. This directly addresses a key safety concern, with 96,153 workplace accidents, including 76 fatalities reported in Germany in 2023 (source: BG Bau, https://bauportal.bgbau.de/bauportal-32024/rund-um-die-bg-bau/jahreszahlen-2023-bauwirtschaft).
- 5G is the core enabler, ensuring reliable two-way communication, transmitting control commands to machines and returning environmental and operational data for real-time monitoring and evaluation.
- The project's "Financial Support to Third Parties" programme supported early 5G trials by industry partners across diverse construction use cases. In total, companies received funding, 7 in the first open call and 20 in the second.

Video: https://doi.org/10.5281/zenodo.14755973

5G Advanced/6G Empowerment

5G offers several key advantages to the trial by delivering the bandwidth required to stream point cloud data for real-time safety analysis, enabling detailed monitoring of the deconstruction area. Its low latency ensures fast, precise robot control, supporting smooth operation of robotic systems. In addition, low-latency machine-to-machine (M2M) communication enhances coordination among all components, ensuring efficient and safe task execution with minimal delay.

Looking ahead, 5G Advanced and 6G are expected to introduce greater flexibility through support for multiple Quality of Service (QoS) flows. Moreover, integrated localisation and in future Integrated Sensing and Communication (ISAC) capabilities could replace some of the scanning equipment currently used for construction digitalisation.

Project website: target-x.eu

Overview

In 2024, Smart Traffic & Crowd Management trials took place in Iași, Romania, focusing on two key urban areas. At the Podu Roș intersection, AI-through powered traffic monitoring over 5G/5G Advanced improved road safety and reduced congestion through real-time video analytics and edge computing. On Ștefan cel Mare Boulevard, crowd monitoring using similar technologyenhanced public safety and emergency response through real-time AI video analytics over 5G. The trials showed how 5G and AI can provide faster emergency response, seamless 5G integration and support scalable smart city solutions. Partners included Orange Romania (ORO), Technical University Gheorghe Asachi (TUIASI), IMEC, NEXTWORKS, and Iași City Hall.

This work aligns with SNS goals and complements other urban safety and AI- monitoring trials.

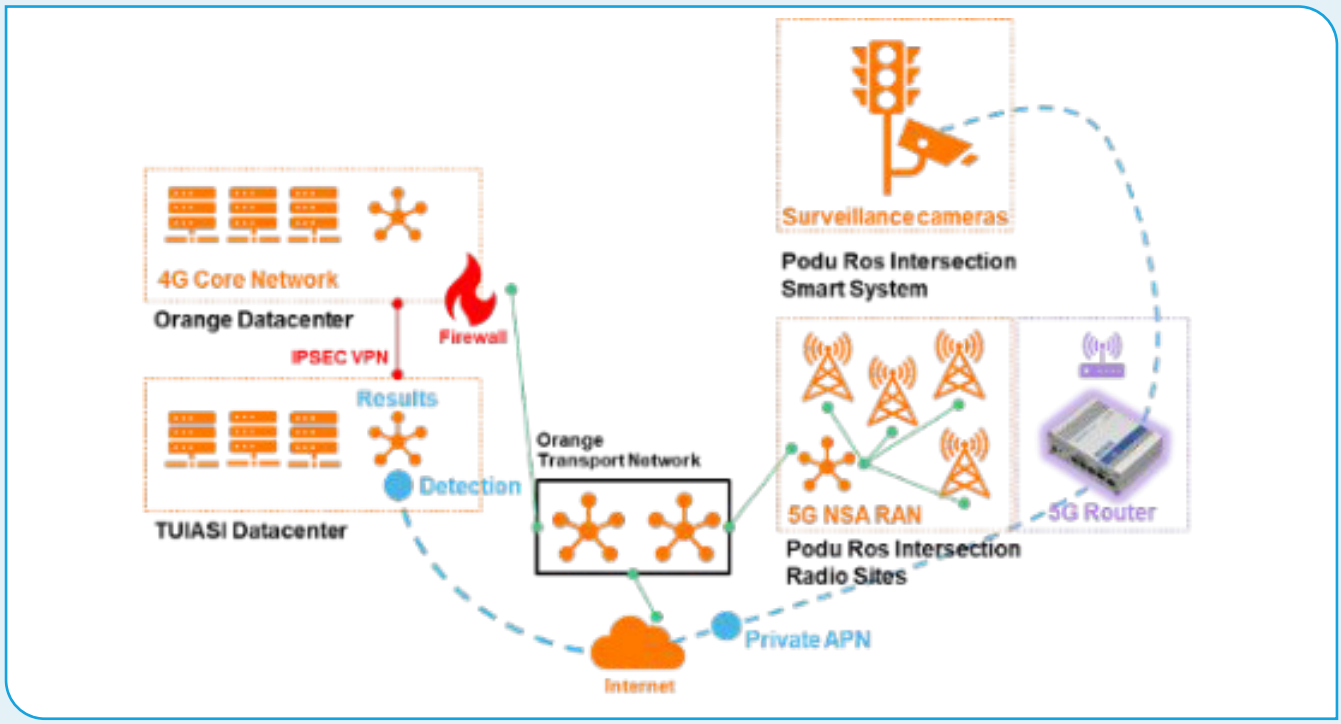


Figure 6.1: Smart Traffic & Crowd Management 5G and Edge-Compute solution overview

Architecture

The Smart Traffic Management trial at the Podu Roș Intersection enhances traffic flow and safety using advanced video analytics over 5G Advanced networks. Cameras monitor congestion and detect risks involving Vulnerable Road Users (VRUs), sending alerts to the Security Operations Centre (SOC). Inference is performed in real-time on TUIASI servers, with data streamed with Kafka for continuous tracking. Reliable transmission is ensured by 5G Non Standalone, and YOLOv7 models were evaluated for scalability. The related trial on Ștefan cel Mare Boulevard used AI-powered video analytics and 5G connectivity for real-time public safety monitoring, with privacy protected through video blurring. Together, these trials demonstrate the transformative role of AI in enabling smart mobility.

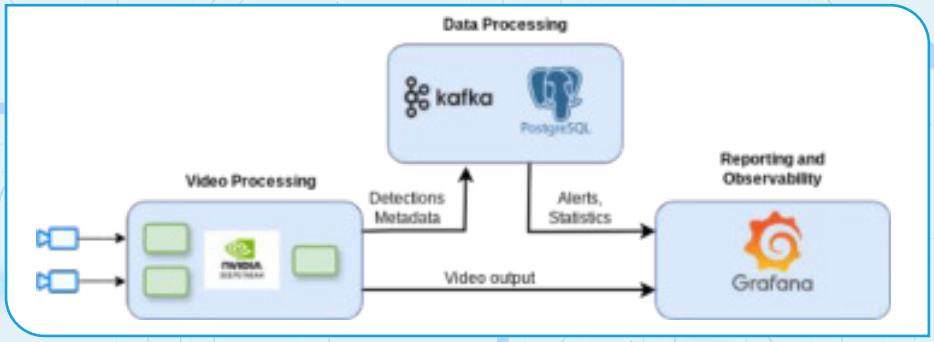


Figure 6.2: Smart Traffic & Crowd Management application architecture.

Deployment

In field trials performed in 2024, application-level tests analysed real-time traffic monitoring,by detecting crowd density, vehicle flow, and restricted-area violations. TUIASI and ORO led the assessments, starting with single-camera monitoring and gradually scaling up to six cameras. Similar trials on Stefan cel Mare Boulevard, validated AI-driven crowd estimation and anomaly detection, with increasing test complexity used to assess the system's scalability and efficiency.

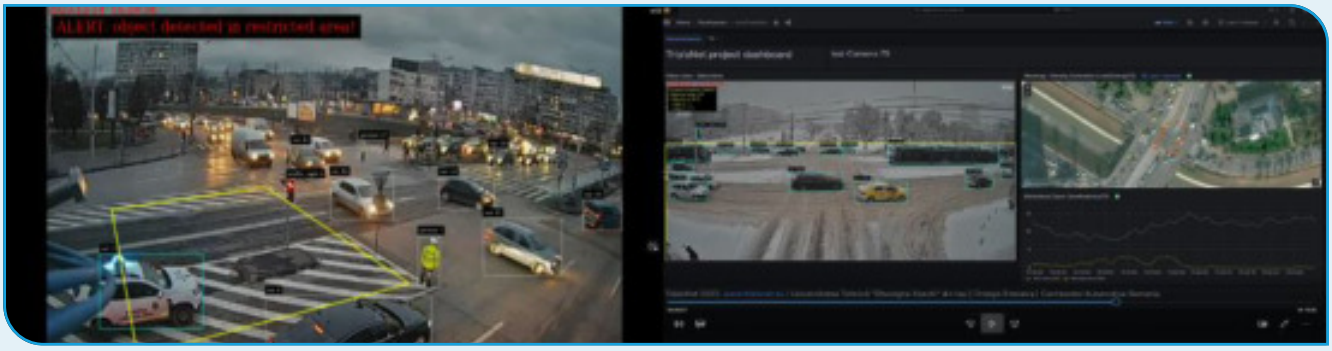


Figure 6.3: Application dashboard

Results

Performance KPIs, including latency, throughput, and system scalability, were evaluated using tools such as IPerf3 and Speed Test. The results demonstrated the system's capability to handle multiple video streams while maintaining low latency and stable connectivity:

- High-Accuracy Detection with YOLOv7X: Achieved reliable identification of vehicles, pedestrians, and intrusions with minimal false positives. Real-time object detection was maintained at 25 Frame per second (FPS) input, with latency measured at 49 milliseconds (ms).
- Latency Optimisation: One-way latency remained consistently below 50 ms across all tests scenarios, with a minimum of 25 ms.
- Round-trip latency: Ranged between 197 and 305 ms. GPU-accelerated detection operated efficiently with a decoding rate of 2–3 FPS and an additional ~50 ms for object detection.
- 5G Non Standalone results: Achieved a downlink throughput of 512 Mbps, uplink throughput of 58.6 Mbps, and latency of 25 ms during live urban deployment.

5G Advanced/6G Empowerment

5G Advanced and emerging 6G technologies introduce transformative capabilities, such as ultra-reliable low-latency communication, AI-driven network optimisation, and integrated sensing and detection features. These advancements support real-time applications, including autonomous driving, rapid response to traffic incidents, and efficient urban traffic management. Current and future trials leveraging 5G Non Standalone and Standalone benefit from high data rates, while energy-efficient architectures promote sustainability. Unlike previous generations, 5G Advanced and 6G offer sub-millisecond latency, seamless global connectivity, and massive IoT support, paving the way for intelligent automation and hyper-connected smart environments that go far beyond today's technological limits.

Project website: trialsnet.eu

TrialsNet

TrialsNet
Turin5Games
Next-gen Gaming and Training Platform for Everyone and Everywhere

Overview

The Turin5Games Trial explores the technology and user potential of 5G Cloud Gaming by making high-quality gaming and e-sports more accessible and sustainable through disruptive cost reductions.

Turin5Games demonstrates one of the key consumer-facing advantages of 5G in a realistic environment, while also showcasing its value in enhancing Business-to-Business services, particularly within the training sector and its broader potential to the Beyond 5G (B5G) landscape.

The trials, now completed, were conducted throughout 2024 and early 2025 in Turin and other Italian and international locations. They involved real users on 5G commercial Non Standalone networks, assessing both technical and user experience Key Performance Indicators and exploring ways to better integrate with current and future 5G infrastructures.

Led by Domethics, a Consumer Electronics Show award-winning startup, Turin5Games brings together a consortium of domestic and international partners including the City of Turin, organisers of the Association of Tennis Professionals (ATP) finals, Amazon Web Services, AKSys/Innopia and OnePlay.

The project aligns with SNS research priorities, particularly in the areas of edge cloud computing and ultra-low latency applications.

Architecture

Turin5Games is built on a scalable cloud infrastructure that powers a gaming platform featuring AAA games, e-sports and simulators, delivering a near-commercial 5G cloud gaming experience. It leverages a commercial 5G Non Standalone network, affordable 5G-enabled devices, and innovative low-latency connected hardware (see figure 7.1).

The setup replicates a realistic high-demand usage environment and supports digital user enrolment for trials, along with feedback collection on Key Value Indicators and tracking of Key Performance Indicators to ensure scalability.

The technological ecosystem includes entry-level 5G smartphones and modems, low-latency Bluetooth controllers, 5G laser beam projectors, connected set-top boxes, and extended reality (xR) headsets—enabling immersive, and high-performance gaming experiences.

The project evaluated network load management including hot spot usage latency, scalability, and overall user experience, establishing a robust testbed for future 5G and 6G-enabled gaming and simulation applications.

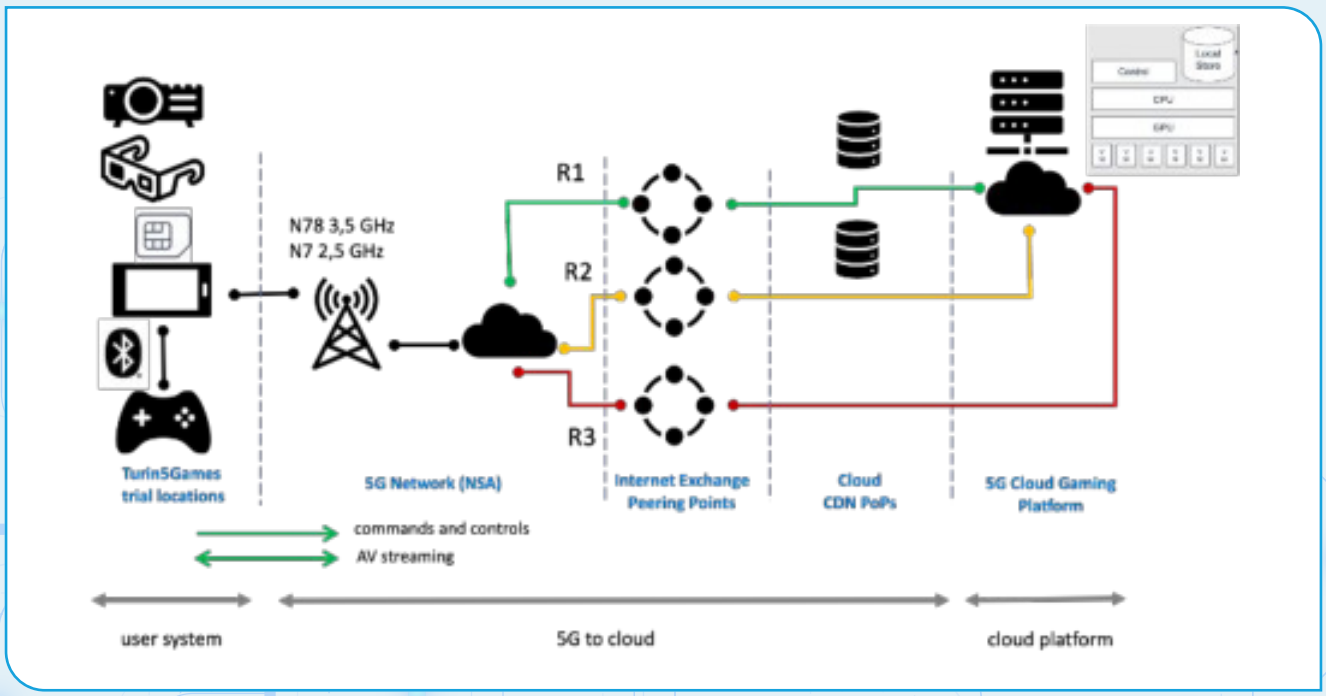


Figure 7.1: System architecture

Deployment

Turin5Games was deployed across Central and Northern Italy, featuring public trial areas at the Le Gru shopping mall and demonstrations at major events such as Mobile World Congress 2025, the Torino Film Festival and the ATP Finals.

The user experience is enhanced through a dedicated “Shaks.eu” brand and an innovative Bring Your Own Game model, which allows users to play their own AAA titles, requiring frame rates, memory, and performance- via a 5G-enabled cloud gaming platform paired with low-latency controllers.

More than 800 trial sessions were conducted, accompanied by user questionnaires to evaluate and optimise performance and overall experience. Figure 7.2 illustrates a trial session using the handheld trial kit.

Figure 7.2: Handheld user kit including a portable low-latency telescopic controller and 5G smartphone.

Results

Turin5Games validated the 5G Cloud Gaming model, demonstrating its scalability and commercial potential for both 5G and Beyond 5G networks. Key results (rated on a 1 to 5 scale) include:

- 10x cost reduction for user device costs
- 4.12 overall user experience rating for high profile games and e-sports on commercial Non Standalone networks
- 3.99 rating compared to traditional platforms
- 79% of users interested in subscribing to a Turin5Games-style service
- 4.3 rating for perceived inclusivity
- 4.26 rating for perceived sustainability
- Strong scores across key user experience areas (see figure 7.3).

The project also addresses e-waste and energy efficiency through the use of multi-purpose devices and cloud solutions.

Figure 7.3: Measured user rating for specific user experience aspects (3 = neutral, 4.5 =positive)

5G Advanced/6G Empowerment

5G Advanced and 6G enable ultra-low latency, greater bandwidth, and real-time cloud processing, transforming the future of cloud gaming. Compared to ealier generations, 5G Advanced reduces latency to below 10 milliseconds, enabling smooth and responsive interactions. Looking ahead, 6G will incorporate AI-driven network optimisation, enhancing adaptability in high-demand environments.

These advancements make possible immersive AR/VR experiences, real-time multiplayer gaming, and high-resolution cloud streaming, capabilities that were previously out or reach.

Project website: trialsnet.eu **Trial service:** turin5games.com

Overview

The "Critical Infrastructure Operation during Energy-Constraint Disaster Scenarios" trial, part of the innovative 6Green project, aims to evaluate the resilience of critical infrastructure during energy-constrained disasters and identify strategies to minimise both societal and economic disruption. 6Green aims to build a sustainable, interconnected ecosystem that extends communication infrastructure into a greener end-to-end intercompute system.

By leveraging cutting-edge cloud-native technologies and the Beyond 5G (B5G) Service-Based Architecture (SBA), the project drives energy efficiency throughout the B5G value chain, with the goal of achieving a tenfold reduction in carbon emissions. This critical infrastructure trial plays a key role in advancing resilient 6G networks that support decarbonisation objectives while maintaining operational continuity in times of crises.

Architecture

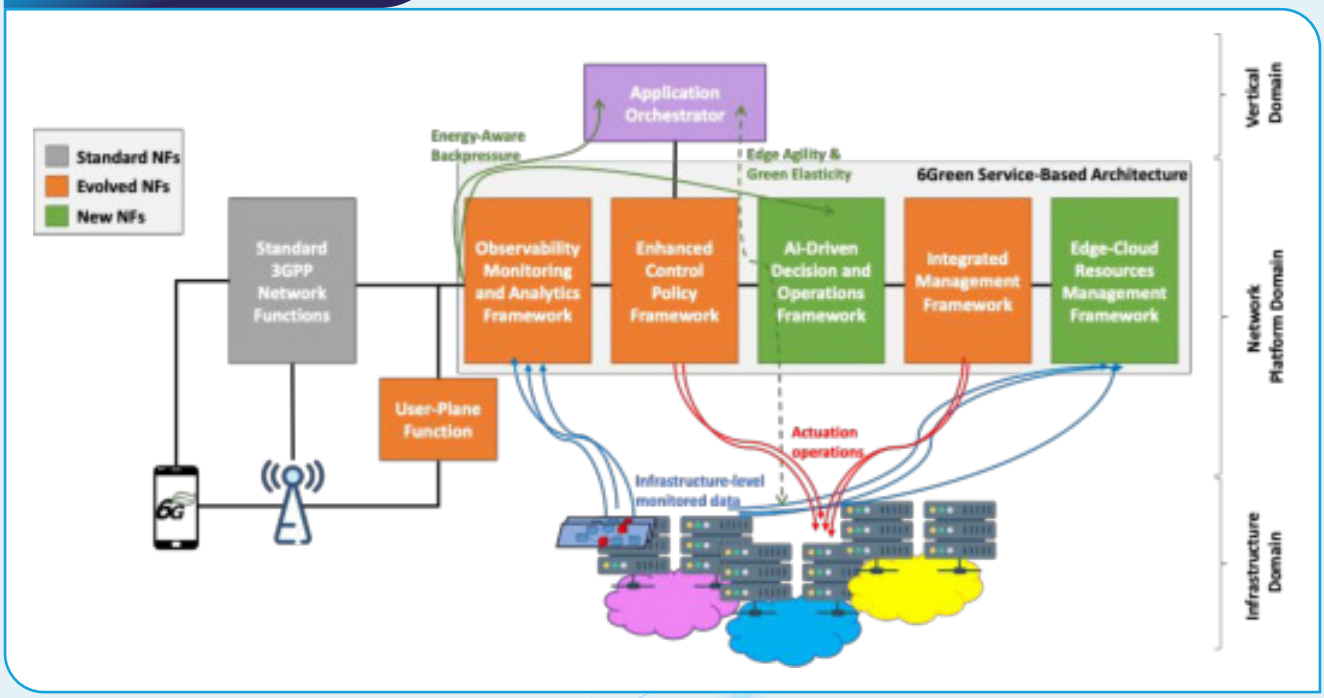


Figure 8.1: 6Green Architecture

The 6Green project is developing an innovative Service-Based Architecture (SBA) to enhance energy efficiency across the entire 5/6G value-chain. This SBA enables advanced cross-domain operations that facilitate the seamless and rapid reconfiguration of the ecosystem toward more energy- and carbon-efficient states (such as Edge Agility and Green Elasticity) while also enabling the evaluation of the energy and carbon footprint generated by stakeholders. This supports the adoption of more responsible and sustainable practices.

The network functions with the SBA are organised into frameworks that enable the collection of infrastructure metrics, execution of AI-driven decisions, and implementations of the above-mentioned operations in a fully zero-touch manner.

Deployment

The trial harnessed the combined strengths of the primary 6Green facility testbed in Genoa (CNIT) and satellite testbed in Ljubljana (INTERNET INSTITUTE) to establish a flexible B5G deployment environment. The Genoa testbed offered advanced capabilities for energy-efficient operations of the SBA core network, including an Observability Framework that monitors energy and resource consumption at the level of individual applications and network slice component. Meanwhile, the Ljubljana testbed enriched the disaster scenario setup with edge and far-edge cloud-based Radio Access Network (RAN) functionalities. This integrated environment enables comprehensive validation of 6Green innovations, supporting both service continuity and the sustainability of critical infrastructure.

Figure 8.2: Cloud RAN with Edge capabilities prepared for an outdoor trial in Ljubljana.

Results

The trial achieved several key milestones, mostly the energy consumption profiling of Cloud RAN components and the identification of correlations between mobile system energy usage, user behaviour, and application design. This was accomplished by deploying energy monitoring agents across Remote Radio Units (RRUs), Baseband Units (BBUs) and core network components to collect real-time energy metrics, which were then correlated with traffic patterns and user activity logs. Application workloads were analysed to assess their energy intensity under various network conditions (Figure 8.3). Building on these insights, the team substantially reduced B5G system power consumption through targeted optimisations in radio transmit power, bandwidth allocation, Multiple Input Multiple Output levels (MIMO), Time Division Duplexing (TDD) configurations, and User Equipment (UE) traffic shaping via slicing. These efforts enhanced energy efficiency, delivered measurable performance gains, and supported operational and business KPIs related to the resilience, sustainability, and cost-effectiveness of B5G mobile networks.

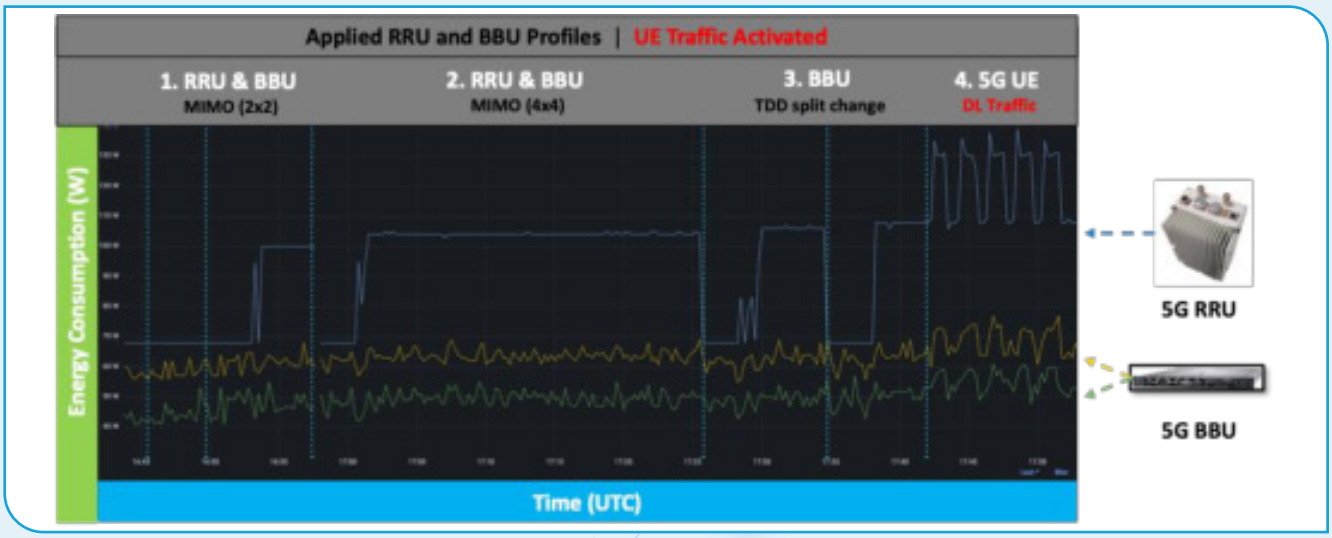


Figure 8.3: RRU and BBU Energy Consumption Profiling.

5G Advanced/6G Empowerment

The trial showcased the unique added value of Beyond 5G networks in delivering reliable, intelligent, and adaptive service for critical infrastructure, especially under energy-constrained and disaster scenarios. B5G's native capabilities including low-latency communication, network slicing, and dynamic orchestration, enabled adaptive energy management across both radio and core network components, ensuring uninterrupted service and rapid system failover in adverse conditions.

Resilient connectivity and deterministic latency ensured that critical services remained operational even during severe disruptions.

The trial demonstrated how B5G networking capabilities directly enhance critical infrastructure resilience by validating end-to-end service reliability, monitoring energy consumption, and implementing adaptive energy management, and prioritised communication across the network.

The results lay the groundwork for real-world deployment of B5G-enabled infrastructure services that offer high availability, minimal downtime, and optimised performance. The validated features present strong potential for application in future commercial and public systems, particularly where continuous dependable operation is essential.

Project website: www.6green.eu

Highlights on the Vertical Sectors addressed by SNS JU Trials & Pilots

5G Advanced and 6G Empowerment Aspects and Projects Cooperation

The SNS JU Programme allocated significant efforts to develop innovative solutions for multiple vertical industries. As highlighted in the recent 6G-IA White Paper "European Vision for the 6G Ecosystem"[11], 6G-IA includes more than 360 members representing all the key players of the networking domain today and, additionally, key actors in the IT/cloud, microelectronics, and vertical sectors. It also has a very extensive basis of Academia, Research Centers, and SMEs from all over Europe. Besides the 6G/SNS JU technical aspects, 6G development efforts target sustainable solutions to address environmental, societal, and business aspects for the networking domain (i.e., "Sustainable 6G") as well as for a variety of the so-called "vertical" industries (i.e., "6G for sustainability") such as Industry 4.0/manufacturing, automotive, smart city, media, transportation/logistic, ehealth, etc...

6G-IA/SNS OPS Coordination and Support Action (CSA) led the development of the SNS Projects Portfolio Questionnaires, addressing, analysing in details and summarising the Technical, Vision and Market perspectives of the SNS Projects per SNS Call and globally at SNS programme level. The Verticals addressed by SNS Calls 1, 2 and 3 projects are summarised in figure 9.1 Industry 4.0 and Smart City sectors are the top preferences and there is globally broad coverage of vertical sectors with good overlap, ensuring cross-validation opportunities.

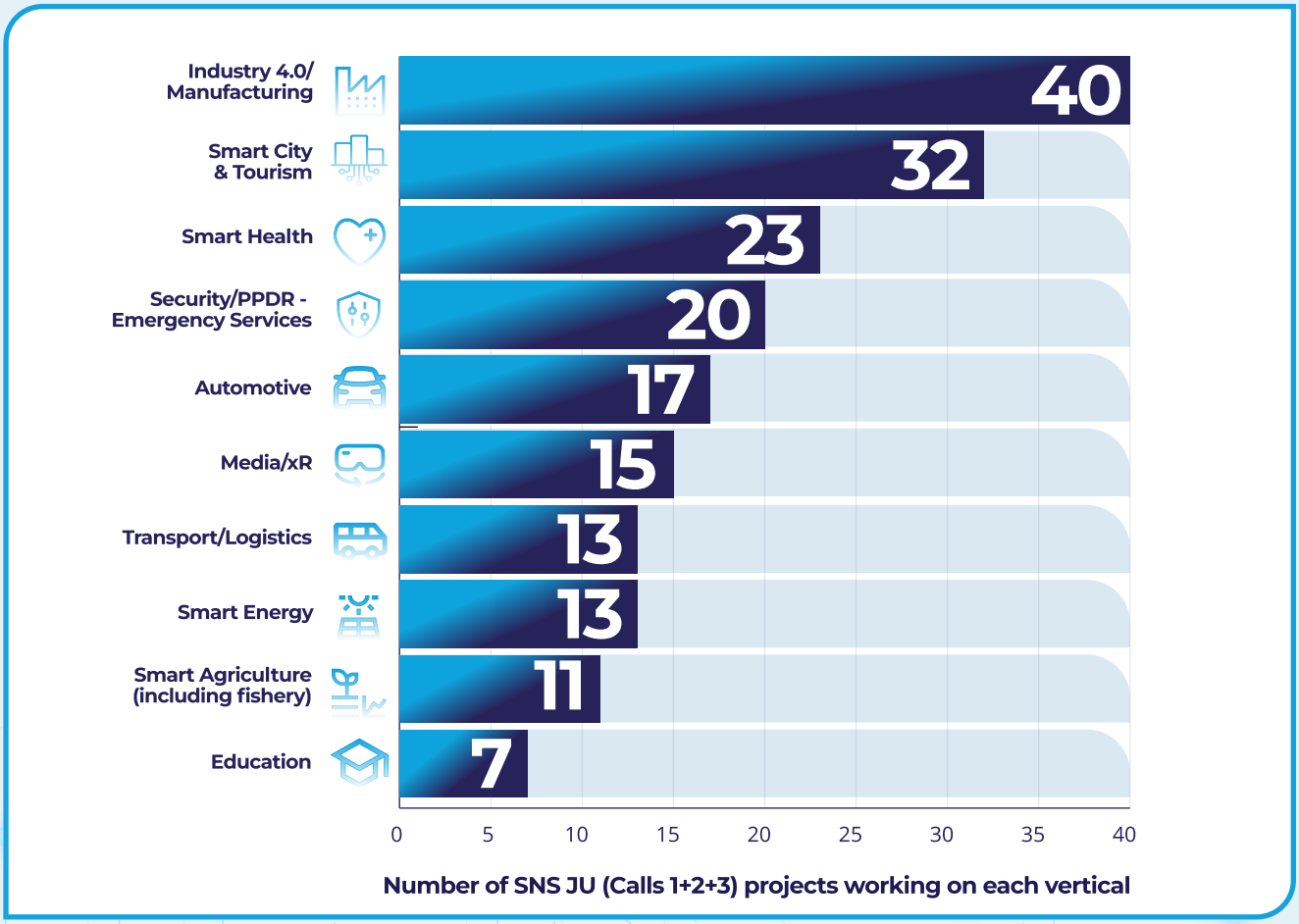


Figure 9.1: SNS OPS – Questionnaires Analysis - SNS Calls 1, 2 and 3 Targeted Verticals Sectors

The SNS JU T&Ps included in this Brochure No.1 address the following verticals: Industry 4.0, Public Safety, Smart City, Transportation, Media and Gaming.

11. https://6g-ia.eu/wp-content/uploads/2024/11/european-vision-for-the-6g-network-ecosystem.pdf

The methods planned to be used by the SNS Calls 2 and 3 projects to validate their technologies are summarised in the following figure 9.2, considering the maturity / TRL levels.

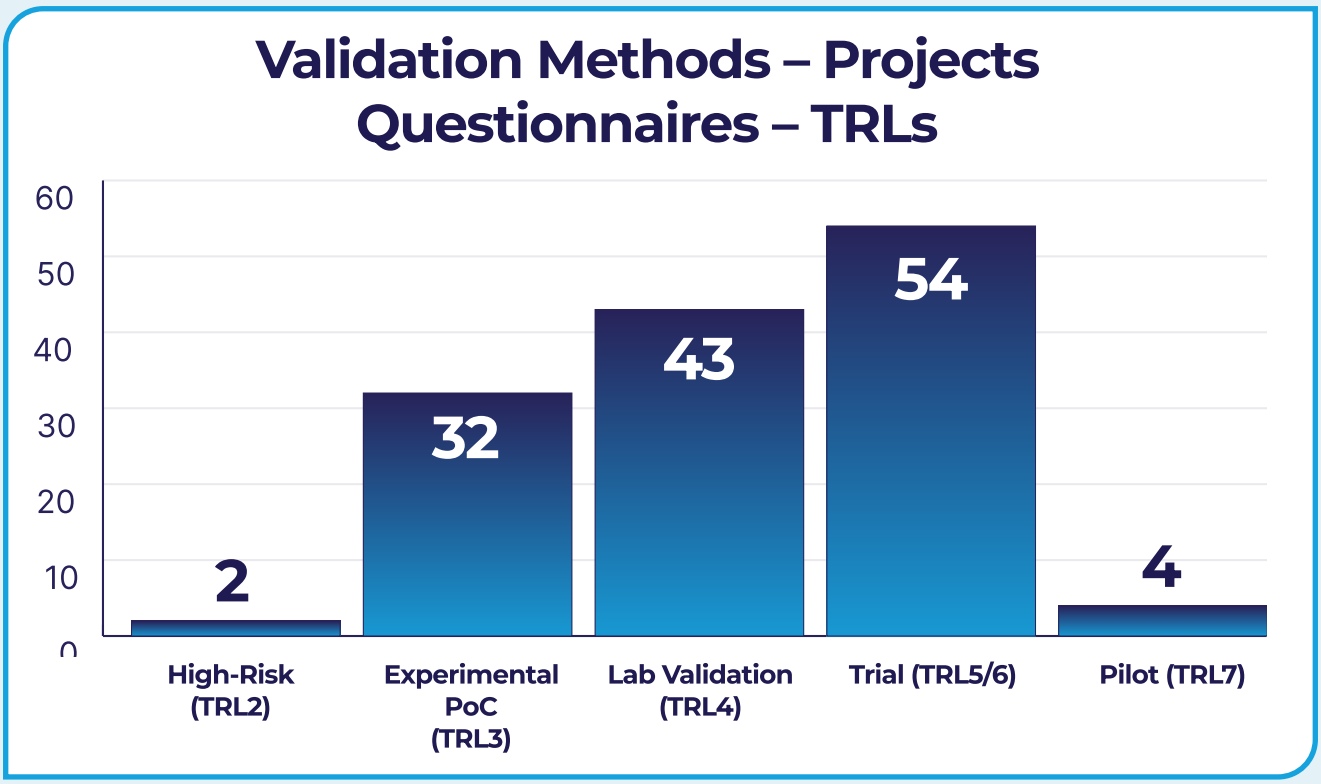


Figure 9.2: SNS Calls 2 and 3 Validation Methods / Maturity and TRLs

The detailed analysis of SNS Calls 2 and 3 projects answers (question not initially raised towards SNS Call 1 projects) led to the following conclusions:

- Trial (TRLs 5-6) is the most popular validation method (first method for Call 3 projects), followed by Lab validation (first method for Call 2 projects).
- Experimental Proof of concept (PoC) is ranked third method, equally targeted by both Call 2 and Call 3 projects.
- Very few limited "high-risk" experiments (TRL2) take place within Call 2 projects and few Pilots (TRL7) are targeted by both Call 2 and Call 3 projects.

As of May 2025, considering the SNS VET, the distribution of the VET inputs/forms over the TRLs is depicted in the following figure 9.3.

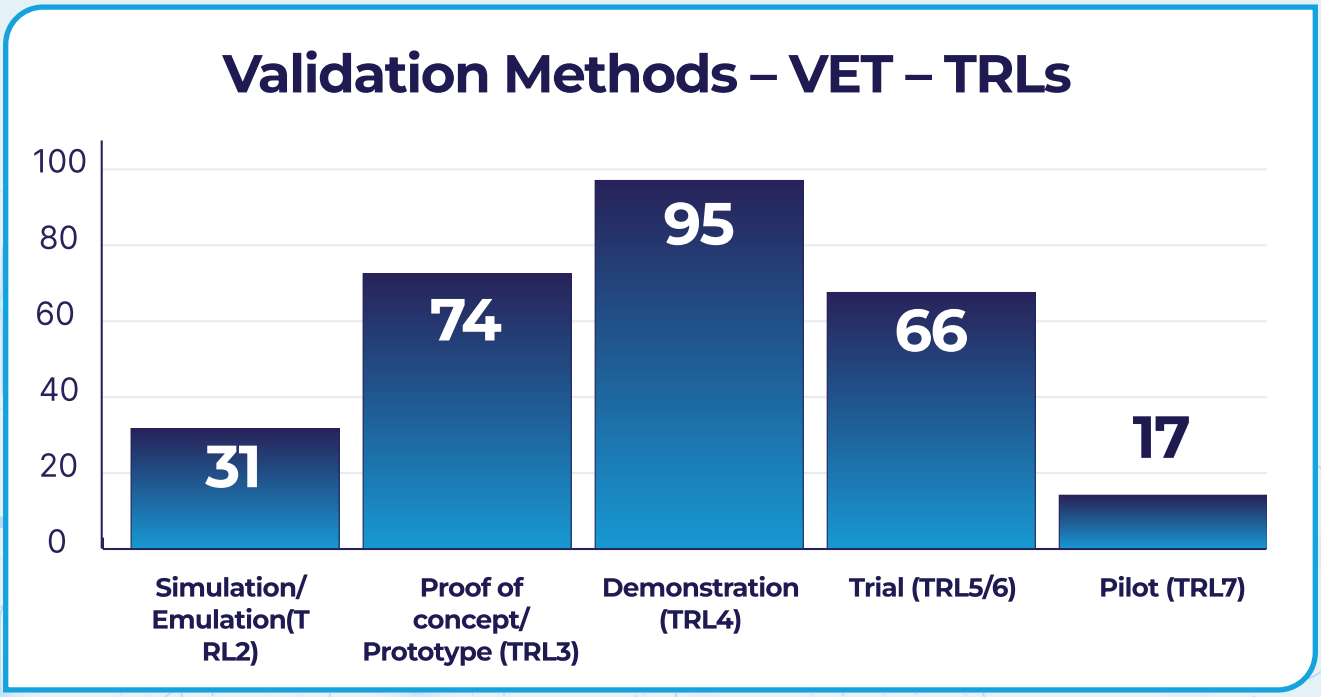


Figure 9.3: SNS VET Validation Methods / Maturity and TRLs

As anticipated, the number of SNS projects inputs to the VET (as of May 2025) is rising during the projects contractual lifetime, compared to the initial targets identified in the SNS Questionnaires at the project contractual start/plans. The current highest SNS projects method for experimentation is Lab Validation (TRL4). The number of the forthcoming high number of potential inputs to future editions of the T&P Brochure. The readers are clearly invited to visit the VET website/projects inputs to also assess/understand the overall SNS projects work for (1) High Risk (TRL2), (2) Experimental PoC (TRL3) and Lab Validation (TRL4) achievements, that will not be addressed in the SNS Brochures.

The type of (end-user) equipment for testing/trialing solutions in SNS Calls 1, 2 and 3 projects are summarised in the following figure 9.4 Mobile phones are the most popular UE by far. There is a good coverage of multiple types of UEs across the SNS projects. CPEs, IoT sensors and Modem/Routers are very popular among SNS projects and more specialized UEs are only used by projects with specific targeted use case.

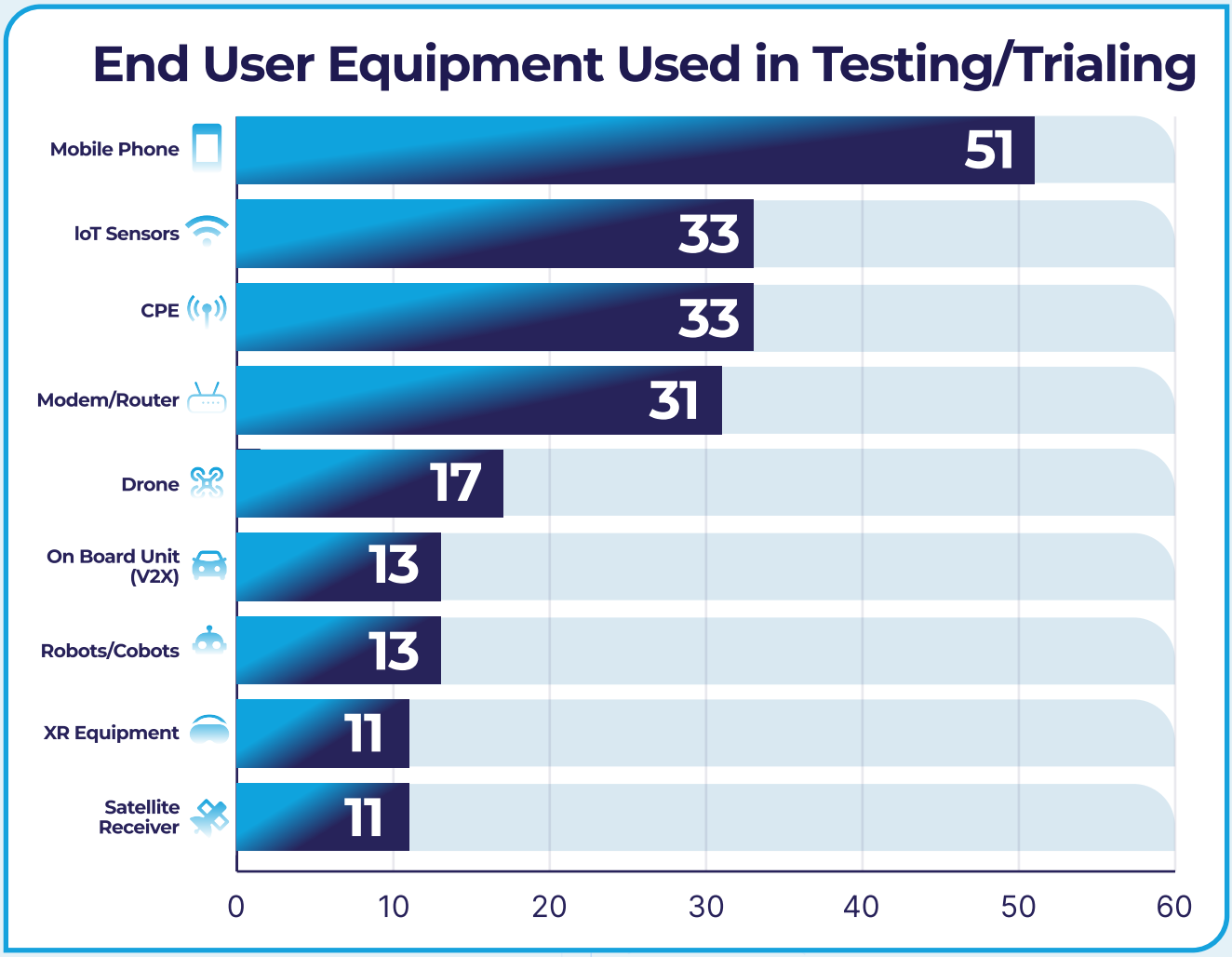


Figure 9.4: SNS Calls 1, 2 and 3 (End-User) Equipment used for Testing/Trialing

The SNS JU T&Ps included in the SNS Brochure used the following UEs: Mobile phones, IoT sensors, CPEs, drones, robots/cobots, XR equipment, wearable devices, satellite receivers.

Some of the key 5G, 5G Advanced and 6G enabling features demonstrated in this SNS JU T&Ps Brochure No.1 include:

Mission-Critical Communication & Dynamic Prioritisation

- Network slicing on a commercial 5G network, ensuring prioritised police communications in real-world scenarios.
- Use of OpenGateway QoD APIs to dynamically and on-demand prioritise traffic for a specific 5G terminal within a slice, allowing emergency services to adjust network resources according to operational needs. This enhances the reliability and efficiency of communications in high-demand situations.

Resilience, Sustainability & Intelligence in 5G Advanced/6G

- Resilient, reliable, and sustainable operations in challenging environments enabled by 5G Advanced/6G technologies. These include intent-based networking, exposure of management, network and infrastructure data and capabilities, as well as extended services such as sensing, compute, and AI-as-a-service.
- Flexible network topologies and AI-driven resource allocation support long-term environmental, social, and economic sustainability, offering capabilities that go well beyond those of previous generations.

Real-Time Awareness & Adaptive Network Responses

- Ultra-low latency and high reliability enable real-time data transmission from IoT sensors, drones, and first responders, supporting faster, more informed decision-making.
- Advanced network slicing and edge computing optimise data processing and dynamic resource allocation, ensuring more efficient and adaptive responses.
- An integrated cloud-edge architecture enables distributed data management and real-time processing closer to the source.

Situational Awareness & Intelligent Environments

- Enabling unprecedented situational awareness and responsiveness in complex environments, such as flood management.
- Reconfigurable Intelligent Surfaces (RIS) improve coverage, spectral efficiency, and signal reliability by dynamically controlling radio wave propagation, particularly in challenging Non-Line of Sight (NLoS) scenarios and mmWave settings (FR2), accelerating smart cities, autonomous systems, and next-gen IoT.

Precision Robotics & Machine Coordination

- Providing the bandwidth needed to stream point cloud data for real-time safety analysis, enabling detailed monitoring of deconstruction zones.
- Ultra-low latency ensures fast and accurate robot commands for smooth system operation. Additionally, low-latency machine-to-machine (M2M) communication enhances coordination across components, ensuring efficient and safe task execution with minimal delay.

Advanced Applications and Hyper-Connected Experiences

- Sub-millisecond latency and massive IoT support enable real-time apps like autonomous driving, incident response, and urban traffic optimisation.
- 5G Advanced/6G transforms cloud gaming with <10ms latency, enabling AR/VR, real-time multiplayer, and high-resolution streaming.
- AI-powered network optimisation ensures adaptability in high-demand environments.

Critical Infrastructure & Energy Resilience

- Reliable, intelligent, adaptive services for critical infrastructure under disaster and energy constraints.
- Features like network slicing and dynamic orchestration support adaptive energy management and uninterrupted service continuity

Data Fusion & Predictive Intelligence

- Real-time integration of heterogeneous data sources (e.g., drones, IoT, satellite imagery) for emergency planning, enabled by low-latency and high-bandwidth 5G/6G links and distributed inference.
- Exposure of "beyond-communication" capabilities such as pre-processed sensor data and fleet telemetry, supporting verticals in creating data-driven digital twins and predictive maintenance solutions.

Zero-Touch & Sustainable Operations

- Robust service continuity under disaster or energy-constrained conditions, achieved through zero-touch orchestration, edge agility, and slice-level adaptation.
- AI-driven sustainability frameworks, enabling optimisation of OPEX/CAPEX and carbon footprint across verticals such as logistics and manufacturing.

Please note that significant achievements and results across a wide range of vertical sectors have also been thoroughly captured in recent SNS JU programme and project Public-Private Partnership (PPP) White Papers and webinars. These materials provide valuable insights into the progress and impact of the initiatives undertaken within the scope of SNS JU activities.

A considerable number of the SNS JU Trials and Pilots (T&Ps) are currently undergoing further development and refinement. The outcomes of these ongoing efforts will be included in future editions of the SNS T&Ps brochures and will also be continuously reflected and updated in the SNS Vertical Engagement Tracker (VET), ensuring timely and comprehensive dissemination of the latest advancements.

Conclusion and Next Steps

The SNS JU T&Ps Brochure No. 1 offers a concise overview of eight outstanding Trials and Pilots (T&Ps) emerging from the SNS Joint Undertaking. These featured T&Ps represent just a glimpse of the dynamic research and innovation (R&I) landscape within the SNS programme. Numerous other SNS projects are actively advancing their R&I efforts, generating impactful results—including the development of specialised T&Ps tailored to address the needs of key vertical industries on the path toward full digitalisation.

We hope that the SNS JU T&Ps Brochure No. 1 inspires readers to explore more. We encourage you to delve deeper into the SNS JU ecosystem: visit the official SNS JU and project websites, watch the T&P-related videos, read the supporting documents, and engage directly with SNS JU participants at meetings, workshops, and conferences.

Looking ahead, many exciting achievements are expected over the coming months and years, particularly through the continued development of SNS calls. A second edition of this brochure is tentatively planned for 2026 - so stay connected and follow our progress closely.

Trials & Pilots Brochure No.1 Editors and Champions

The editors/Core Team of this Trials & Pilots Brochure No.1 are Didier Bourse (Nokia), Kostas Trichias (6G-IA), Alexandros Kaloxylos (6G-IA), Carles Antón-Haro (CTTC), Mikael Fallgren (Ericsson), Carole Manero (IDATE) and Valeriya Fetisova and Veronica Vuotto (Trust-IT).

The Members of the T&Ps Brochure No.1 Panel having evaluated/selected the 8 T&Ps are listed in the following Table 1.

Panel Participants	SNS Roles
Didier Bourse (Panel Chair)	6G-IA SNS Work Programme Task Force / Core Team (Chair), Trials Working Group (WG), TB, Verticals Task Force (VTF)
Kostas Trichias	6G-IA, SNS Technology Board (TB) (Chair)
Alexandros Kaloxylos	6G-IA Executive Director, Trials WG, Technology Board, Verticals Task Force (VTF)
Carles Antón-Haro	6G-IA Board, Trials WG (Chair), Verticals Task Force (VTF)
Mikael Fallgren	SNS Steering Board (SB) (Chair)
Raffaele de Peppe	6G-IA Board, Verticals Task Force (VTF) (Chair), Trials WG
Valerio Frascolla	Trials WG, Verticals Task Force (VTF)
Jyrki Huusko	Trials WG
Carole Manero	Trials WG
Mir Ghoraishi	Trials WG
Hakon Lonsethagen	6G-IA Board, Vision WG (Co-Chair)
Dan Warren	6G-IA Board
Colin Willcock	6G-IA Board (Chair)
Pavlos Fournogerakis	SNS Office
Valeriya Fetisova	COMMS WG
Veronica Vuotto	COMMS WG

Table 1: SNS T&Ps Brochure No.1 Evaluation/Selection Panel Members

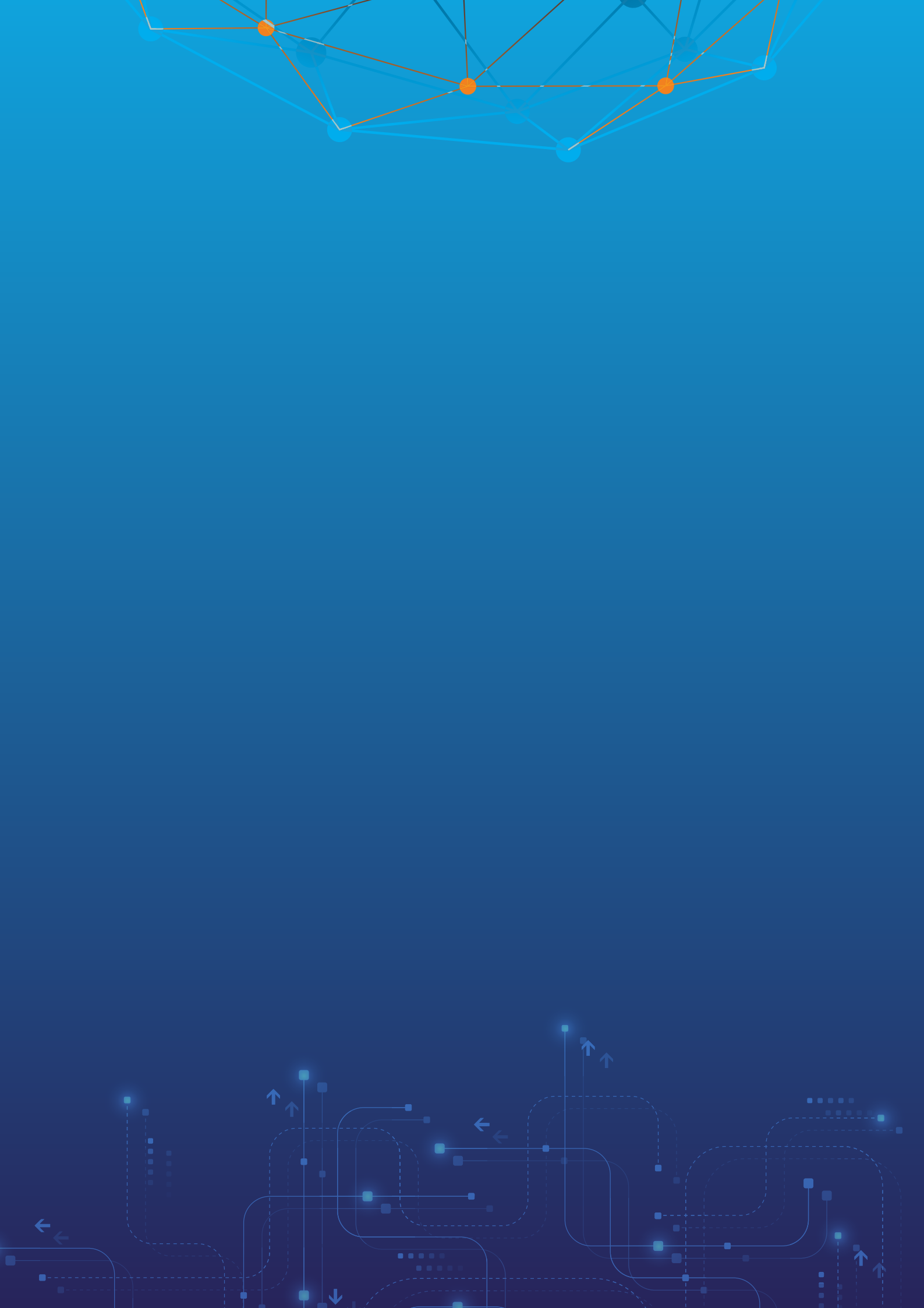
The following Table 2 summarises the key SNS JU Champions involved in the 8 Trials & Pilots highlighted in this SNS T&Ps Brochure No.1.

Trials & Pilots	Trials & Pilots Champions
FIDAL: 5G for Public Protection and Disaster Relief (PPDR)	Almudena Díaz Zayas (University of Málaga)
HEXA-X-II: Industrial cobots leveraging beyond communication aspects	Patrik Rugeland (Ericsson), Mikko Uusitalo (Nokia), Mauro Boldi (Telecom Italia), Panagiotis Demestichas and Sokratis Barmpounakis (WINGS)
IMAGINE-B5G: Situational Awareness Framework Enabling Robust Emergency Response for Urban Flood Warnings (SAFER-FLOW)	Sandra Barnabé and Daniela Ferreira (Ubiwhere), Irene Alepuz Benaches (University Politecnica Valencia), Paulo Alexandre Duarte (Cap Gemini), Carlos Martins Marques (Altice Labs) and José Ricardo Guimarães (Safer-Flow project).
6G-SANDBOX: Validation of FR2 Reconfigurable Intelligence Surfaces (RIS) in the city of Malaga	Michael Dieudonne, Joao Ferreira and Carles Navarro Manchón (Keysight Technologies), Pedro Merino Gómez, Pablo Herrera and María del Mar Moreno (University of Málaga) and T.C. Song (ITRI)
TARGET-X: Robotic deconstruction prototype system	Janina Gauß, Niels König and Eva Yussefi Marzi (Fraunhofer) and Bart Mellaerts (Ericsson)
TrialsNet: Smart Traffic & Crowd Management	Ciprian Comsa, Iulian Ciocoiu, Nicolae Cleju and Tiberiu Sorescu (Technical University Gheorghe Asachi Iasi), Carmen Patrascu, Cristian Patachia, Razvan Mihai, Alexandru Oprea and Cristian Petrache (Orange)
TrialsNet (Open Call): Next gen gaming and training platform for everyone and everywhere	Giovanni Romano, Alberto Ciarniello and Samuele Rocca (Domethics)
6GREEN: Critical Infrastructure Operation during Energy-Constraint Disaster Scenarios	Janez Sterle, Rudolf Susnik and Luka Koršič (INTERNET INSTITUTE), Chiara Lombardo and Roberto Bruschi (CNIT and University of Genoa)

Table 2: SNS Brochure No.1 T&Ps Champions

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 the SNS JU. Neither the European Union nor the SNS JU can be held responsible for them. The SNS JU projects have received funding from the Smart Networks and Services Joint Undertaking (SNS JU) under the European Union's Horizon Europe research and innovation programme

Co-funded by the European Union



6GSNS

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