



Thank you for being part of our journey...



Thank you for being a valued part of the p-NET community! Your continued engagement and support are what make this network thrive. Over the past few months, there's been a real buzz within p-NET - from exciting research collaborations and new project launches to insightful discussions and shared achievements. In this issue, we'll take you behind the scenes and highlight some of the key moments and progress shaping our journey!

p-NET designated first MSF Lab!



With the rise of generative and agentic AI, we are seeing a significant surge in interest around new AR glasses and geospatial technologies. Major players like META, NVIDIA, Google, and Samsung are actively investing in this space, regularly announcing new devices and solutions that point toward a future Internet with a strong spatial and 3D dimension.

p-NET is closely following these developments and has begun integrating these technologies into our capabilities. For Greece, their relevance is especially strong, as they align with key vertical sectors such as tourism, culture, gaming, and emergency response - areas of strategic importance for the country. At the global level, the Metaverse Standards Forum (MSF) is the main Consortium laying the groundwork for these technologies. It includes most of the world's leading organizations focused on the Metaverse and eXtended Reality (XR). p-NET has been active in this area for several years, and we are proud to have just been designated as the **first Principal Lab of the MSF!**

This designation positions us at the core of these emerging technologies and enables us to collaborate with the global leaders shaping the future of the spatial web. Through our role as the first MSF Principal Lab, we aim to establish Greece as a regional hub for innovation in 5G, Metaverse, and XR technologies.



The new Metaverse Standards Forum Labs Initiative
will help bridge the critical gap between
standards development and real-world testing.
We are delighted to welcome p-NET as our first Forum
Principal Lab - their advanced 5G/6G infrastructure and
expertise in immersive technologies will be
invaluable in validating metaverse interoperability standards
in practical environments.

Neil Trevett, Chairman of the MSF

We foster innovation, entrepreneurship, and technological progress in smart network technologies while promoting digital transformation and sustainability across sectors such as culture and tourism, smart cities, education, media, and public-sector services. We're eager to investigate how interoperability requirements and emerging standards affect user experience and value chains in controlled environments, and to help quantify the benefits of standards adoption.

Marios Nicolaou, Business Development Director, p-NET



p-NET innovation recognized by EU Innovation Radar



We're proud to share that an innovation developed by p-NET, in collaboration with NOVA Telecommunications & Media and the University of Patras, as part of the Horizon Europe-funded FIDAL project, has been recognized by the EU Innovation Radar as *Market Readu*.

This recognition highlights our private 5G testbed for vertical domain use cases - an advanced platform for experimenting with and validating pre-commercial 5G/6G applications tailored to real-world industry needs. Being featured among Europe's top innovations reinforces p-NET's role as a key player in next-generation digital infrastructure and our commitment to supporting verticals such as manufacturing, tourism, and energy through a flexible, NaaS-based approach. This milestone reflects the dedication and collaboration of the entire FIDAL consortium, and we thank our partners at NOVA and the University of Patras for making it possible. As we continue driving innovation in smart connectivity, we invite stakeholders and industry leaders to join us in shaping the networks of the future - together.

Our Highlights!

p-NET welcomes Secretary General for Research & Innovation



On July 21st, 2025, p-NET had the pleasure of hosting Dr. Tasos Gaitanis, Secretary General for Research & Innovation, at our offices at the Patras Science Park. Our team presented p-NET's key initiatives and contributions to Greece's digital transformation. We're proud to be part of a dynamic research community shaping the country's tech future. Special thanks to the Patras Science Park team for their support in making this visit possible.

Webinar: Cross-border Cybersecurity through the lens of Government





On July 2nd, 2025, p-NET organized the second session of its "Through the Lens of..." webinar series, focusing on the crucial role of governments in securing 5G infrastructures, especially in cross-border contexts. The event brought together policy leaders, regulators, cybersecurity experts, and researchers to discuss national frameworks, international cooperation, and innovation in protecting next-generation networks.

Presenters included representatives from the Ministry of Digital Governance of Greece, National Cybersecurity Authority, EETT, Digital Security Authority of Cyprus, National & Kapodistrian University of Athens, and Romania's National Cyber Security Directorate. Coordinated by Dr. Athanassios Staveris-Polykalas the webinar was supported by the <u>SAND5G</u> and <u>5G-TACTIC</u> projects.

p-NET joins the AI Data Robotics Association



p-NET is proud to announce its membership in ADRA (AI, Data and Robotics Association), a key European initiative that integrates artificial intelligence, data, and robotics to drive technological competitiveness and digital sovereignty. Through this partnership, p-NET will contribute to and benefit from cutting-edge advancements in areas such as generative AI, robotics, and innovation, thereby reinforcing its initiatives in supporting responsible, high-impact research and development in emerging technologies.

FIDAL Project Demonstration Showcases 5G in Action using p-NET's testbed







In April 2025, the Patras5G/p-NET testbed was used for a large-scale demonstration for the FIDAL Project, highlighting advanced 5G capabilities in real-world emergency response scenarios. Over two days, PPDR professionals, rescue teams, and firefighters tested three innovative use cases using a range of devices - including drones, AR/VR headsets, and a robotic dog - supported by outdoor 5G cells. The event underscored the performance and flexibility of the p-NET testbed and marked a key milestone in our mission to drive 5G+ innovation across critical sectors.

Drone Summit 2025 in Riga



On May 28th, p-NET participated in the Drone Summit 2025 in Riga, Latvia - an international event organized by the Latvian Ministry of Defence and Riga Technical

University. Representing p-NET, Business Development Director Marios Nicolaou joined panel discussions, workshops, and B2B sessions, contributing to key dialogues on the strategic role of drones in modern defense. With a focus on military applications and European cooperation, the summit highlighted the growing importance of drone technologies - especially in the context of the EU's €150 billion SAFE program - and their relevance for Greece and the wider Southeastern European region.

Cybersecurity Workshop at TEDxPatras



On May 17th, during TEDxPatras 2025 at the University of Patras, p-NET organized the engaging cybersecurity workshop "Think Before You Click! To Hackers, the Easiest Target is You!" Led by experts George Daniil and Nikolas Filippatos, the session used real-life scenarios and hands-on activities to raise awareness of everyday digital risks and practical cybersecurity habits. Supported by the EU-funded CURIUM, SAND5G, and CUSTODES projects, the workshop was complemented by an interactive p-NET booth showcasing our Competence Center and EU project involvement. Many thanks to TEDxPatras for the opportunity to contribute to this year's theme, "Once Upon Tomorrow."



On March 4th, 2025, p-NET's Business Development Director, Marios Nicolaou, took part in a panel on Digital Twins at the Smart Regions Summit hosted by Arizona State University. He emphasized Europe's - and particularly Greece's - potential to lead in advancing Digital Twin technologies, which are transforming Smart Cities through improved urban planning, sustainability, and citizen well-being.

At the forefront of innovation- X-TREME 6G

p-NET participates in cutting-edge European-funded projects in fields such as 5G/6G technologies, digital twins, cybersecurity, and sustainable digital infrastructures. Each issue of our newsletter will highlight one project. This time, we focus on **X-TREME 6G** - an SNS JU EU-funded research initiative focused on developing disruptive chiplets and chipsets for next-generation 6G platforms!



Launched six months ago in Grenoble, the project unites 17 partners from 8 countries. The latest consortium meeting - hosted in Greece by the University of Patras and p-NET - marked key progress, including the upcoming release of the first technical deliverable on platform architecture and use cases.

A Process Design Kit (PDK) is also set for release this September, enabling the transition from specification to advanced RFIC design. As part of its contribution, p-

NET is upgrading its Patras5G infrastructure to support 6G experimentation and validation. The testbed will help demonstrate use cases such as Wireless X-haul, Joint Communication and Sensing (JCAS), Non-Terrestrial Networks (NTN), and Network-as-Sensor (NaS). With a focus on SiGe and InP technologies across Ka to G bands, and a 3D heterogeneous integration strategy, X-TREME 6G is paving the way for Europe to lead in microelectronics-driven 6G innovation - benefiting industry, research, and society as a whole.

TREME 6G is an ambitious project. Both in the fact that it lays at the unique and yet under-exploited intersection of telecommunications and microelectronics; and that it covers a holistic technological area, as well as a diverse set of future use cases, aimed at making of Europe an optimal experimentation ground for 6G deployment.

With 17 partners spread across 8 European countries,
X-TREME 6G aims to unleash the full potential of 6G, and enable the emergence of new applications through specific developments for the underpinning novel microelectronic technologies.



Didier Belot, X-TREME 6G's coordinator, ST Microelectronics

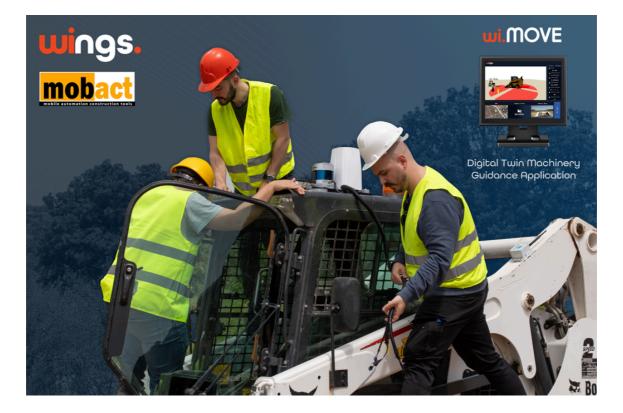


X-TREME 6G Consortium at the University of Patras

Find out more

Our Partners' News





WINGS is advancing the digital transformation of the construction sector through PIRGOS - a smart system developed in Greece as part of its wi.MOVE innovation platform for transport infrastructure and mobility services.

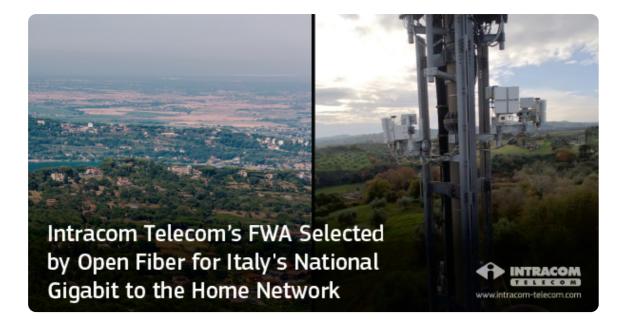
Read more



WINGS ICT Solutions, with the support of DAEM, demonstrated the future of smart city applications focused on urban resilience, public safety, and cultural engagement at an event which took place at Technopolis City of Athens as part of the *TrialsNet* project.

Read more





Intracom Telecom and Open Fiber have expanded their partnership to deploy Fixed Wireless Access (FWA) using 5G mmWave technology, aiming to deliver gigabit internet to homes and businesses across Italy. Open Fiber selected Intracom Telecom's WiBAS™ G5 smart-BS platform for its high-speed, long-range, and efficient spectrum use. The collaboration supports Italy's goal of leading the EU in Very High Capacity Networks (VHCN) and meeting the EU Digital Compass objectives. This initiative targets rural and underserved areas, offering a reliable, cost-effective, and energy-efficient alternative to traditional connectivity solutions.



Intracom Telecom has partnered with Sky Telecom, Greece's largest wireless ISP, to upgrade its network using the WiBASTM G5 dual-BS radio system. This shift from the 5 GHz to the licensed 28 GHz mmWave band enables ultra-fast, fiber-like broadband speeds up to 1 Gbps. The advanced Fixed Wireless Access (FWA) technology supports cost-effective expansion, especially in underserved areas, with high efficiency and scalability. Both companies emphasize the strategic importance of their alliance, highlighting Greek innovation and commitment to delivering reliable, high-speed connectivity nationwide.







ACTA participated in the DEFEA (Defence Exhibition Athens) event, held from 6–8 May 2025, with a dedicated booth highlighting its innovative work on the **CUSTODES** project. ACTA representatives engaged with visitors, sharing details about the CUSTODES approach and its real-world use cases in the context of security and defense. Informational flyers were distributed, sparking interest and discussions with stakeholders from across the sector. Following the exhibition, ACTA circulated a newsletter to its partners, summarizing its presence at DEFEA and outlining key takeaways and future opportunities related to CUSTODES..



Poznan, Poland • 3-6 June 2025



ACTA participated in the 6G-PATH EC project booth at the EUCNC | 6G Summit, held from 3–6 June 2025 in Poznań, Poland. The event served as a key platform to promote the 6G-PATH use cases and to announce the upcoming Open Call #2 (6gpath.eu).

As part of the exhibition, ACTA presented the use case in which it is actively involved, highlighting its role within the 6G-PATH project. The summit also offered a valuable opportunity to engage in discussions about the CUSTODES project and its related use cases. Informational flyers for both initiatives were distributed to interested attendees, fostering awareness and dialogue.

Upcoming Events



Advanced Telecom Summit 2025

WINGS will participate in the Advanced Telecom Summit on October 7, 2025, at the Zappeion in Athens, where it will showcase its pioneering solutions in AI-powered telecommunications, 5G optimization, and smart network management. Attendees will have the opportunity to explore the future of telecommunications and digital innovation, driven by WINGS.

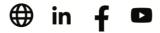
Photo taken from Advanced Telecom Summit's site



Techritory 2025

Join us at Techritory 2025 in Riga, where p-NET will host a dedicated Cybersecurity Workshop on October 23rd as a side event of the Techritory Forum. The workshop will explore key cybersecurity challenges for future networks, featuring insights and demonstrations from four cutting-edge EU-funded projects: NATWORK, SAND5G, CUSTODES, and CURIUM.





p-NET Emerging Networks and Vertical Applications

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