



# SAND5G NEWSLETTER

Security Assessments for  
Networks andD services in 5G



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# Webinar: Cross-border Cybersecurity through the lens of Government



**πNET**  
EMERGING NETWORKS & APPLICATIONS

**Cross-border Cybersecurity through the lens of Government**

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Minister of Digital Governance of Greece

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Vice Governor  
National Cybersecurity Authority of Greece

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Webinar Series

p-NET Emerging Networks & Verticals organized a webinar titled “**Cross-border Cybersecurity through the lens of Government**”. The event, held on 2 July, 2025, brought together key experts to discuss how national authorities can implement cybersecurity frameworks, promote innovation, and collaborate across borders to protect next-generation networks.

Speakers included amongst others, H.E. Dimitris Papastergiou, Minister of Digital Governance of Greece, Dr. Ioannis Pavlosoglou, Vice Governor, National Cybersecurity Authority (NCSA) of Greece and Prof. Dimitris Varoutas, Vice-President of EETT, Greece. The webinar provided invaluable insights into the collaborative efforts required to safeguard Europe’s 5G infrastructure from growing cyber threats.

[WATCH VIDEO](#)





## SAND5G Webinar Brings Together Experts to Tackle 5G Network Security



The webinar, "5G Networks Security through the Lens of SAND5G," organized by p-NET Emerging Networks & Vertical Applications was held on April 30th, where crucial insights into enhancing the security and resilience of next-gen 5G networks were provided.

The webinar was joined by expert speakers including Dr. Athanassios Staveris-Polykalas (p-NET), Prof. Paris Kitsos (University of Patras), Spyros Chatziloizos (NCSA), Vasileios Stathopoulos (ADAE), Kostas Poullos (Sphynx Technology Solutions AG), Alexandros Katsarakis (Sphynx Technology Solutions AG), Dr. Harilaos Koumaras (IIT at NCSR Demokritos), Dr. Antonios Lalas (CERTH/ITI) and Prof. Anna Tzanakaki (National & Kapodistrian University of Athens). The event was met with strong participation from professionals in telecom, cybersecurity, and academia, highlighting the growing importance of 5G security.

[WATCH VIDEO](#)



# SAND5G at Techritory 2025 in Riga



As part of **Techritory 2025**, held in Riga, Latvia, p-NET organized the “**Cyber Security & Resilience**” Workshop on October 23rd, 2025 where the SAND5G project presented its ongoing activities. Prof. Paris Kitsos from the University of Patras provided a comprehensive introduction to SAND5G, while Kostas Poullos from SPHYNX elaborated on its technical components. The workshop also featured contributions from the NATWORK, CURIUM, and CUSTODES EU projects, highlighting the importance of collaborative European research and innovation in building a trusted and secure digital future for Europe.

[WATCH VIDEO](#)





# Cybersecurity Workshop at TEDx Patras



The **“Think Before You Click! To Hackers, the Easiest Target is You!” Workshop** took place on May 17<sup>th</sup> at the University of Patras Conference Center as part of TEDxPatras 2025. Led by Cybersecurity Research Associates George Daniil and Nikolas Filippatos, the session provided practical tips to help attendees stay safe online, using real-life examples to highlight everyday cyber risks.

Supported by the SAND5G, CURIUM, and CUSTODES projects, the event focused on cybersecurity and digital resilience. Attendees also explored an interactive booth by p-NET Emerging Networks & Vertical Applications, showcasing EU cybersecurity efforts.

# SAND5G AT CYSAT 2025



At CYSAT 2025 in Paris, held on May 14-15, 2025, Karim Baccar, Cybersecurity Engineer, from OQ Technology, a key pilot partner in the validation of the SAND5G platform, represented the project at the largest Cybersecurity for the Space Industry event in Europe.

During the event, SAND5G was showcased through a presentation providing new and innovative security extensions for space applications, furthering the platform's mission to enhance cybersecurity in the space sector.





# SAND5G Paper Presented at IEEE NFV-SDN 2025



IEEE NFV-SDN

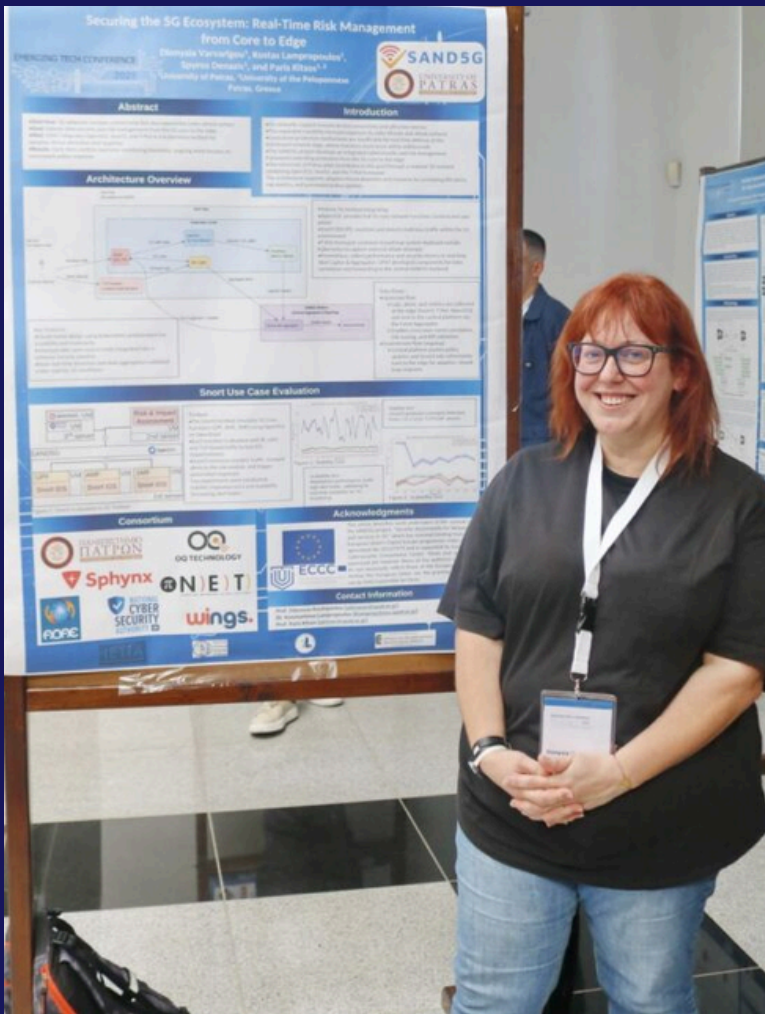
IEEE Conference on Network Function Virtualization and  
Software Defined Networks  
10-12 November 2025 // Athens, Greece



A paper from the SAND5G Project, titled “A Practical Assessment of IDS and IPS Capabilities in a 5G Network Testbed”, was presented at the **11th IEEE Conference on Network Functions Virtualization and Software-Defined Networking (IEEE NFV-SDN 2025)** in Athens, held from November 10-12, 2025.

Authored by Nikolas Filippatos, Panagiotis Papaioannou, Dr. Dionysia Varvarigou, Dr. Kostas Lampropoulos, Prof. Spyros Denazis, and Prof. Odysseas Koufopavlou, the paper evaluates the performance of Intrusion Detection Systems (IDS) and Intrusion Prevention Systems (IPS) in 5G networks. The conference provided an excellent platform to share findings and engage in discussions with experts on 5G security.

# SAND5G at the ETCEI 2025 & IEEE DSD Conference



The **Emerging Tech Conference Edge Intelligence (ETCEI 2025)** took place on October 24–25 in Athens, organized by the Hellenic Emerging Technologies Industry Association (HETiA).

Dr. Dionysia Varvarigou presented a poster titled “Securing the 5G Ecosystem: Real-Time Risk Management from Core to Edge”, co-authored with Dr. Kostas Lampropoulos, Prof. Spyros Denazis, and Prof. Paris Kitsos. The poster showcased an extension of the SAND5G security concept to Edge Computing.

The event raised SAND5G’s profile in both academic and industry circles, leading to valuable business connections and potential future collaborations.

The **Euromicro IEEE Digital System Design (DSD) 2025 Conference** took place from September 10 – 12, 2025, in Salerno, Italy, where the research paper titled: “An FPGA Architecture for Authentication and Key Agreement Protocol for 5G Networks,” was presented. The paper was authored by Marios Papadopoulos, Dr. Konstantinos Lampropoulos, and Prof. Paris Kitsos. The paper introduces a significant hardware architecture and implementation aimed at enhancing authentication mechanisms in 5G networks.





# Research Papers presented

A research paper titled “Regulatory and Governance Aspects of 5G and Beyond” was presented at the **1st International Conference on Engineering, Technology and Applied Science Innovations (ICETASI 2025)**, held in Amaliada, Greece from the 1st – 3rd of October, 2025.

The paper, authored by Dr. Dionysia Varvarigou, Dr. Kostas Lampropoulos, Prof. Spyros Denazis, Prof. Odysseas Koufopavlou, and Prof. Paris Kitsos, examined critical regulatory and governance challenges related to 5G and future network technologies. The event provided an excellent opportunity for SAND5G to engage with the research community and exchange ideas on security and governance in 5G and beyond.

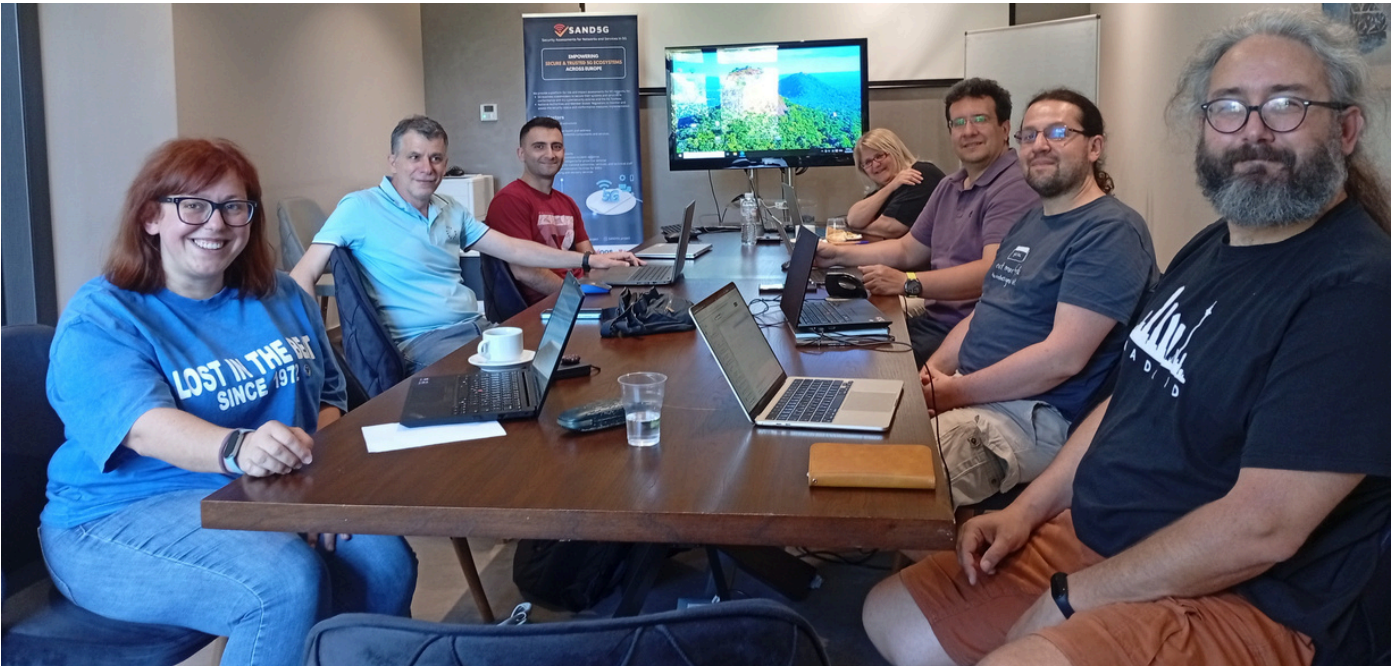
The **IEEE 10th South-East Europe Design Automation, Computer Engineering, Computer Networks and Social Media Conference (SEEDA-CECNSM 2025)** was held from September 19 – 21, 2025, in Patras, Greece.

During the conference, a research paper titled: “Simulating Exposed 5G Ports Using a Dockerized Honeypot Framework for Cybersecurity Analysis in a 5G Testbed,” authored by Dr. Dionysia Varvarigou, Dr. Konstantinos Lampropoulos, Prof. Spyros Denazis, and Prof. Paris Kitsos, was presented. The event provided an excellent opportunity for participants to exchange ideas and insights on 5G and future network security.

The **IEEE International Conference on Cyber Security and Resilience (CSR)** took place from August 4 – 6, 2025, in Chania, Crete. A particularly noteworthy research paper was presented titled “An Efficient Methodology for Real-Time Risk and Impact Assessment in 5G Networks,” authored by Dr. Dionysia Varvarigou, Dr. Konstantinos Lampropoulos, Prof. Odysseas Koufopavlou, Prof. Spyros Denazis, and Prof. Paris Kitsos.

The paper titled 'An FPGA Architecture of Extensible Authentication Protocol EAP-AKA' for 5G Networks was presented at the **14th Mediterranean Conference on Embedded Computing (MECO 2025)** in Budva, Montenegro, from June 10th to 14th, 2025. The paper was authored by Marios Papadopoulos, Dr. Konstantinos Lampropoulos, and Prof. Paris Kitsos.

# Training Session at the Patras Science Park



On June 12th, 2025, SAND5G held a productive and insightful training session at Patras Science Park, organized and hosted by p-NET Emerging Networks & Verticals. The internal training aimed to educate and prepare SAND5G team members for the kick-start of the planned pilot activities. Focused trainings covered the specificities of all foreseen pilot cases.

Pilot trainings were given by Dr. Dionysia Varvarigou from the University of Patras, Sotiris Katsimbass from OQ Technologies and Aimilia Bantouna from WINGS.

Each session offered valuable insights into the pilot architecture, data integration strategies, technical requirements on the SAND5G platform, and use case scenarios.

The training session marked an important step in enhancing the technical expertise and operational readiness of the teams involved, helping to advance the development of SAND5G's innovative 5G-enabled solutions.





We would like to extend our warmest wishes for a  
*Merry Christmas and a Happy New Year!*

As we reflect on the past year, we thank our colleagues  
and partners for collaborations, innovations, and progress  
we've made together.

We look forward to an exciting year ahead, filled with  
new opportunities to advance 5G technology and  
create meaningful impact.

the Sand5G Consortium



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