











# IEEE 5G and IoT Thessaloniki Summit 2018

Thursday, October 25, 2018

Thessaloniki, Greece

Conference Centre of Piraeus Bank (12-14 Katouni st., Thessaloniki, Greece)

# **Program**

**Opening Session** (08:45 – 09:00)

H.E. Nikos Pappas, Minister of Digital Policy Telecommunications and Media, Greece

Prof. Konstantinos Masselos, President, Hellenic Telecommunications & Post Commission, Greece

Prof. Panagiotis Tzionas, Rector, Alexander TEI of Thessaloniki, Greece

Plenary Keynote: "Can 153 Years of Advancement in Wireless Communications be Continued into 5G and Beyond: Rethinking the Fundamentals" (09:00 – 09:45)

Professor Norman Beaulieu, Beijing University of Posts and Telecommunications (BUPT), China

Panel: "What's Next on 5G and IoT"

(09:45 - 11:00)

Moderator: Dr. Periklis Chatzimisios, Alexander TEI of Thessaloniki, Greece & Bournemouth University, UK

#### Panelists:

Ana Garcia Armada, University Carlos III of Madrid, Spain

Petar Popovski, Aalborg University, Denmark

Hossam S. Hassanein, Queen's University, Canada

Michael E. Kounavis Intel Corporation, USA

Nizar Zorba, Qatar University, Qatar

Crosta Paolo Secondo, ItalTel Spa, Italy

Sharief Oteafy, DePaul University, USA

**Coffee Break** (11:00 – 11:15)

Session 1: "5G and Internet of Things - Regulatory and Commercial Considerations" (11:15 – 13:15)

Chair: Dr. Aggeliki Sgora, Hellenic Telecommunications & Post Commission, Greece

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### "5G and IoT Cybersecurity Issues"

George Michaelides, Commissioner for Electronic Communications (Cyprus) and BEREC Vice Chair

### "The Radio Spectrum Policy Group activities for 5G"

Tasos Lyratzis, Hellenic Telecommunications & Post Commission (Greece) and co-rapporteur for the Working Group "5G implementation Challenges" RSPG

### "The role of ADAE in the 5G era"

Christos Kalloniatis, Hellenic Authority for Communication Security and Privacy (ADAE) - University of the Aegean, Greece

#### "5G - From Innovation to Commercial Utilization"

Tilemachos Doukoglou, COSMOTE S.A., Greece

### "5G/IoT, an operator's Perspective"

Antonis Tzortzakakis, Wind

### "Nova Insight into IoT & 5G"

Manolis Chaniotakis, Forthnet S.A., Greece

### **Lunch Break** (13:15 – 14:00)

Plenary Keynote: "The world's first urban 5G deployment: Technical architecture & lessons learned" (14:00 – 14:45)

Professor Dimitra Simeonidou, University of Bristol, UK

# Plenary Keynote: "IEEE Standards – A Toolbox to Address 5G Use Cases" (14:45 – 15:30)

Dr. Hermann Brand, Director of European Standards Affairs, IEEE Technology Centre GmbH, Austria

**Coffee Break** (15:30 – 15:45)

### Session 2: "The Race to 5G"

(15:45 - 17:00)

Chair: Dr. Aggeliki Sgora, Hellenic Telecommunications & Post Commission, Greece

#### "5G Open for Business"

Maria Boura, Ericsson South East Europe, Greece

### "Opportunities and Challenges on the Road to 5G"

Dimitrios S. Kritharidis, Intracom Telecom, Greece

### "Evolution towards the Digital Society"

Martin Bakhuizen, Huawei

Nektaria Kalogeropoulou, Nokia

### "Greece towards a "mobile first" digital strategy: Prospects & Requirements"

George Stefanopoulos, Greek Mobile Operators Association

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# Session 3: "Testbeds, Trials and Deployment for 5G" (15:45 – 17:00)

Chairs: **Dr. Anna Tzanakaki**, National and Kapodistrian University of Athens, Greece & University of Bristol, UK **Dr. Tanya Politi**, University of Peloponnese and Patras Smart City Innovation Hub, Greece

## "5G-VINNI a pan-European 5G end to end (E2E) facility for supporting verticals"

Spyros Denazis, NAM Group, University of Patras, Greece

# "A trial of 5G slicing and orchestration technologies to support neutral hosts in the 5GBarcelona ecosystem"

Apostolos Papageorgiou, Sergi Figuerola Fernandez, Daniel Camps Mur, Shuaib Siddiqui, i2CAT, Spain

### "NITOS Testbed: A Platform for the Evaluation of 5G Experimentally Driven Research"

Thanasis Korakis, University of Thessaly, Greece

### "Towards 5G validation trials: experiences and outlook"

Konstantinos V. Katsaros, Intracom, Greece

# Session 4: "The Radio and Network Perspectives for 5G and IoT" (15:45 – 17:00)

Chair: Prof. Sofiene Affes, INRS, Canada

### "How PLC comes into play in 5G"

Andrea M. Tonello, IEEE Distinguished Lecturer, University of Klagenfurt, Austria

### "Artificial Intelligence for 5G Wireless Networks and as an Enabler towards 6G"

Maziar Nekovee, University of Sussex, UK

### "Machine-to-Machine Communications: 5G and Beyond"

Sinem Coleri Ergen, Koc University, Turkey

#### "WiFi for IoT: Deterministic Access in IEEE 802.11ax WLANs"

Boris Bellalta, Universitat Pompeu Fabra (UPF), Barcelona

### "Can 5G kill Wi-Fi?"

Evgeny Khorov, Institute for Information Transmission Problems, Russian Academy of Sciences, Russia

# Session 5: "The 5G and IoT eco-system" (17:00 – 19:00)

Chair: Prof. Andrea M. Tonello, IEEE Distinguished Lecturer, University of Klagenfurt, Austria

### "End-to-End Network Slicing Orchestration for Vertical Industries"

Vincenzo Sciancalepore, NEC Laboratories Europe GmbH, Germany

### "Towards AI-driven network slicing"

Steven Latre, University of Antwerp, Belgium

### "Edge Computing, vRAN, and the Tactile Internet"

George Iosifidis, Trinity College Dublin, Ireland

## "Enabling a new communication primitive for 5G Networks through Social Internet of Things"

Antonio Iera, University of Calabria, Italy

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# "From Content-Centric to Entertainment-Centric Networks: Convergence of Communication, Caching, and Recommendation Systems at the Network Edge"

Thrasyvoulos Spyropoulos, EURECOM, France

### "Edge-Caches for Rent!"

Anastasios Giovanidis, CNRS-LIP6, University of Pierre et Marie Curie, France

### "Low Power Networks for the Internet of Things"

Nicola Accettura, LAAS-CNRS, Toulouse, France

### "Efficient and Pragmatic Resource Orchestration in 5G/B5G Networks"

Symeon Papavassiliou, ICCS and National Technical University of Athens, Greece

# Session 6: "Security, Privacy and Applications for IoT" (17:00 – 19:00)

Chair: Dr. Michael E. Kounavis, Intel Corporation, USA

### "Security and safety for IoT platforms"

Dimitrios Serpanos, University of Patras & Research Centre ATHENA, Greece

### "Physical Layer Security Of Multi-Agent Cyber-Physical Systems"

Gunes Karabulut Kurt, Istanbul Technical University, Turkey

### "Data security and privacy in emerging scenarios"

Sara Foresti, Universita' degli Studi di Milano, Italy

### "Challenges and opportunities for a scalable cloud"

Thomas Karagiannis, Microsoft Research, USA

### "The Great Potentials of Objects Collaborations in the IoT"

Luigi Atzori, University of Cagliari, Italy

# "5G and IoT Wireless Technologies: Key Drivers for the Development of Smart Cities and Communities in the New Industry 4.0 Era"

Sofiene Affes, INRS, Canada

"Enabling the IoT Machine Age With 5G: Machine-Type Multicast Services for Innovative Applications" Giuseppe Araniti, University Mediterranea of Reggio Calabria, Italy

# Session 7: "European Research Projects on 5G" (17:00 – 19:00)

Session Chair: Prof. Ioannis Tomkos, Athens Information Technology Center, Greece

## "Integrating IoT and Satcom in the 5G Era: lesson learnt from the ESA M2MSAT project"

Maria Rita Palattella, Luxembourg Institute of Science and Technology, Luxembourg

# "BlueSpace 5G PPP Project: How the use of novel photonic technologies and new generation of optical fiber access technology enables the emerging 5G networks realizing their promises"

Ioannis Tomkos, Athens Information Technology Center, Greece

#### "5G Verticals Innovation Infrastructure"

Anastasius Gavras, Eurescom GmbH, Germany

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# "GamECAR: Enabling immersive eco-driving experiences using 5G V2V and V2I communication technologies"

Ioannis Chatzigiannakis, "La Sapienza" University of Rome, Italy

### "WiVi-2020 Wireless Visionaries for 2020"

Vangelis Angelakis, Linkoping University, Sweden

### "The 5GTANGO project"

Evgenia Kapassa, University of Piraeus, Greece

"Evolution of converged optical-wireless networks towards 5G network architectures"

John Vardakas, Iquadrat Informatica S.L., Barcelona, Spain

"Optical technologies in mmWave 5G Hot-Spot Networks: the 5G-PHOS project approach"
Nikos Pleros, Aristotle University of Thessaloniki, Greece

**"5G Mobile Network Architecture for diverse services, use cases & applications in 5G and beyond"**Dimitrios Tzovaras and Anastasios Drosou, CERTH-ITI

Closing Session (19:00 – 19:15)