



# TeamUp5G Newsletter

December 2021

## PROGRESS MEETING 6 (PM6)

TeamUp5G coordinated their sixth progress meeting (PM6) in an online manner. Firstly, a review to check whether the goals set in PM5 were met. Next, the current status of the work packages was explained by the respective leaders and decisions on foreseen goals were made. Last, other businesses and next actions were discussed.



TELECONFERENCE (BB COLLABORATE), JULY 7, 2021

## PROGRESS MEETING 7 (PM7)

TeamUp5G coordinated their seventh progress meeting (PM7) in an online manner. Firstly, a review to check whether the goals set in PM6 were met. Next, the current status of the work packages was explained by the respective leaders and decisions on foreseen goals were made. Last, other businesses and next actions were discussed.



TELECONFERENCE (BB COLLABORATE), NOVEMBER 12, 2021

## TEAMUP5G @ GLOBECOM 2021

The IEEE Global Communications Conference (GLOBECOM) is one of the IEEE Communications Society's two flagship conferences dedicated to driving innovation in nearly every aspect of communications. The 2021 IEEE Global Communications Conference (GLOBECOM) was held in Madrid, Spain, from 7 -11 December 2021 under the theme of "Connecting Cultures around the Globe".

The TeamUp5G ITN contributed to GLOBECOM in various ways. Starting with our supervisors: Ana Garcia Armada (General co-chair), Víctor P. Gil Jiménez (Executive vice-chair), Periklis Chatzimisios (Industry panels co-chair) and Maximo Morales Cespedes (Publicity chair) with the rest of our supervisors as moderators and paper presenters. Moreover, our ESRs actively contributed on the organization of the conference as volunteers.

Our ESRs in this conference had a valuable interaction with experts from both the academia and industry. Overall, the event was a great opportunity for the early-stage researchers from TeamUp5G to exchange ideas with other researchers from other countries and universities.

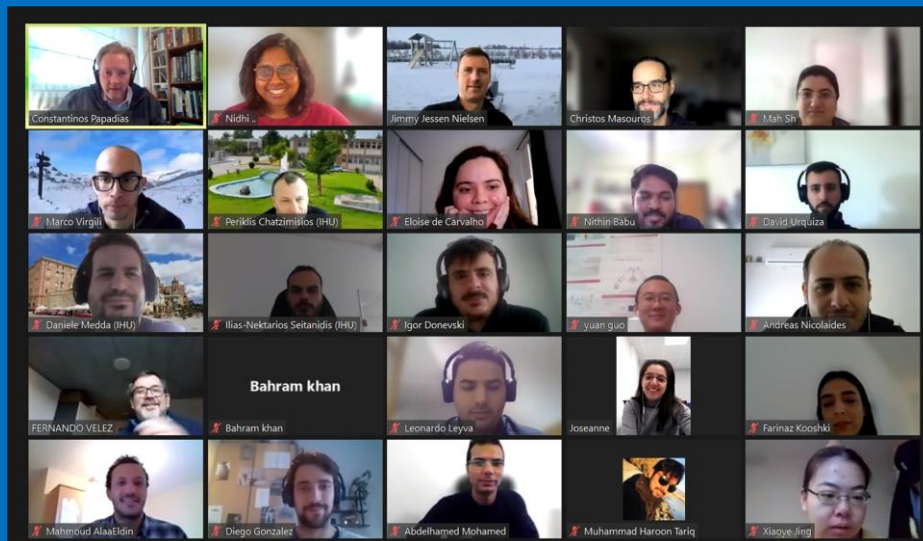
Last but not least, we are extremely proud of our ESR - Manuel Jose Lopez Morales- who presented his paper on the "Effect of Spatial Correlation on the Performance of Non-coherent Massive MIMO based on DMPSK"



MADRID (HYBRID), DECEMBER 7-10, 2021

## PAINLESS – TEAMUP5G JOINT WINTER SCHOOL

The PAINLESS and TeamUp5G ITNs organized their first joint virtual winter school. During this three day school various topics were presented by people coming from both academia and industry. The first day was dedicated on topics like connectivity to underdeveloped countries, on integrated sensing and communication and Energy Efficiency, just to mention a few. The second day of the school was mainly dedicated on the next steps of a Marie Skłodowska-Curie PhD fellow opportunities and aspects that regard the Intellectual Property Rights and the Patents. The last day of the school was devoted on the work of our 30 Early Stage Researchers (ESRs). The ESRs presented their work and discussed the common research areas that may lead to inter ITN collaborations.



## TELECONFERENCE, DECEMBER 1 – 3, 2021

### ONLINE TALK “HOW TO CONTRIBUTE TO (3GPP) STANDARDS”

The talk was presented by Dr.Xizeng Dai received MSEE from China Academy of Telecommunication Technology in 2004, and Ph.D. of Electrical Engineering from Tsinghua University China in 2008.

In 2008, he joined Huawei and since then he began attending 3GPP RAN working group 4 (WG4) and RAN meeting until now. He was elected as RAN4 Vice Chair in August 2015, and was elected as RAN4 Chair in April 2021. Now he served as RAN4 Chair for the first term. He made significant contributions to LTE and NR standardizations especially in WG4. His research interests include RF, waveform, receiver algorithm and signal processing for wireless systems.

ONLINE, NOVEMBER 09, 2021

## ONLINE TALK “TRAINING ON RESEARCH EXPLOITATION AND PRESENTATION AT IEEE STANDARDIZATION MEETINGS”

TUNCER BAYKAS (Senior Member, IEEE) received the Ph.D. degree in electrical engineering from the University of Ottawa, in 2007. He joined the National Institute of Information and Communications Technology, Japan, in 2007. During his tenure, he contributed to multiple standardization projects, including 802.15.3c, 802.11ad, and 1900.7. He served as the Chair for IEEE 802.19.1 coexistence in TVWS Task Group. In 2021, he joined Kadir Has University. He is currently IEEE Standards Coordinator in Region 8, the Vice Chair of 802.19 Working Group and 802.11bb Light Communications Task Group. He has over 50 major journal and conference publications, and three U.S. and 37 Japanese patents. His research interests include THz communications, spectrum sharing, and radar signal processing. He was one of the recipients of Turkish Academy of Sciences Young Researcher Award, IEEE-SA Standards Board Award, and IEEE-SA Certificate of Appreciation. He served as a Guest Editor for IEEE Communications Magazine and a Board Member for IEEE COMSOC MMT E-LETTERS.

ONLINE, NOVEMBER 17, 2021

## SUMMER SCHOOL ON MASSIVE IOT AND BUSINESS CREATION/INNOVATION AND STANDARDS AND STANDARDIZATION FOR 5G AND IOT

The event lasted three days and had two themes. The first theme was about massive IoT and business creation/innovation and was coordinated by Prof. Albena Mihovska. The topics addressed by the five speakers spanned broadly. Some of the topics regarded the creation of new business through a startup, the evolution of the radio access network, the key elements to achieve success when pursuing a goal in engineering, how data science applied to drones can enable further technologies, how to merge innovation in wireless technologies and green business models.

The second theme regarded standards and standardization for 5G and IoT, and was coordinated by Prof. Periklis Chatzimisios. It featured ten speakers, both from academia and industry. The main topics regarded the general approach to standardization and how different standardization committees and organizations are organized (ETSI, 3GPP, ITU, IEEE). Finally, the panelists introduced the latest activities for several wireless technologies in terms of standardization and how to assess the Quality of Service in mobile networks.

TELECONFERENCE, NOVEMBER 19 – 21, 2021

## PUBLICATIONS ON JOURNALS

- **D. A. Urquiza Villalonga, F. Riera-Palou, M. J. Fernández-Getino García, and G. Femenias, “Deployment of clustered-based small cells in interference-limited dense scenarios: Analysis, design, and trade-offs,” *Wireless Communications and Mobile Computing*, vol. 2021, pp. 1–15, 2021.**
- **L. Leyva, D. Castanheira, A. Silva, A. Gameiro, and L. Hanzo, “Cooperative multiterminal radar and Communication: A new paradigm for 6G Mobile Networks,” *IEEE Vehicular Technology Magazine*, pp. 2–11, 2021.**

## UPCOMING EVENTS

### **Massive Online Course on Ultra-Dense Networks for 5G and its Evolution**

This MOOC is under preparation with the participation of all the TeamUp5G early researchers and several supervisors.

The MOOC will be integrated by 6 modules focused on the following subjects:

**Module 1** – Ultra-dense networks and small cells

**Module 2** – New transmission technologies

**Module 3** – Interference management and energy efficiency

**Module 4** – Spectrum sharing and carrier aggregation

**Module 6** – The future ahead

## ONLINE, Q1 2022

### **Workshops**

Big Industrial Workshop

3rd Training on Standardization and Workshop on Testbeds and VLC transmission technologies

### **Online Talks**

Online Talk on “Writing your thesis”

## ONLINE, SPRING 2022

TeamUp5G project has received funding from the European Union’s Horizon 2020 research and innovation programme under the Marie Skłodowska-Curie project number 813391.

Further information on [here](#)

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