

VDE/ITG Section/Fachausschuss 5.2 "Communication Networks" Open Workshop

Munich, December 1st, 2017 hosted by Technical University of Munich (TUM)

http://itg.lkn.ei.tum.de/

Call for Contributions

Within its series of round tables, the VDE/ITG Section 5.2 invites to a workshop organized by its expert group 5.2.4 "IP and Mobility" on the topic

Cellular Internet of Things

The workshop will take place at Technical University of Munich, Chair of Communication Networks, Arcisstr. 21, 80333 Munich, Germany, on December 1st, 2017. We solicit:

- - Technical overview presentations Presentations of results of ongoing research
- Project presentations/demo
- Visionary (possibly provocative) presentations

Cellular technologies provide many advantages for Internet-of-Things (IoT) deployment: wide coverage, existing infrastructure, low latency, mature network management and operation concepts. However, IoT requirements often contradict traditionally data rate-oriented cellular networks, for instance, w.r.t. energy efficiency, low cost and complexity. Recent research and standardization activities are working towards addressing these requirements and bringing IoT under the cellular umbrella. The objective of this workshop is to bring together stakeholders from telecom operators, vendors, and academia to discuss the current state, challenges and developments towards the Cellular Internet of Things. Topics of particular interest include:

- IoT Architectures
 - Edge Computing and IoT
 - SDN and NVF and IoT
 - Network slicing
 - o Network management
 - IoT Radio Access Networks
 - Narrowband IoT, eMTC, ...
 - o LoRaWAN, Sigfox, ...
 - New Radio MTC / 5G MTC, ...
- Testbeds / Field Trials / Implementation

- Resource Management for IoT Support
 - Energy efficient communication
 - Low latency communication
 - Grant-free/Random access
- Machine-to-Machine Communication
- Cellular IoT Applications & Requirements
 - o Industrial Automation
 - o Smart Cities
 - o Automotive, ...
- Standardization aspects

Please inform the workshop organizers (via email to: <u>mikhail.vilgelm@tum.de</u>) about your planned contribution by **November 6th, 2017**. The number of contributions is limited and assigned on a first come first served basis. The workshop program will be published mid of November. Participants should register via email by November 20th. 2017.

The workshop will take place in the morning (ca. 9:00 - 14:00) of Friday December 1th, 2017. On the evening before a joint **dinner** for all participants on a self-pay basis will be organized.

For further questions, please do not hesitate to contact the workshop organizers:

- Mikhail Vilgelm (mikhail.vilgelm@tum.de)
- Murat Gürsu (murat.guersu@tum.de) •
- Wolfgang Kellerer (wolfgang.kellerer@tum.de)

Website: http://itg.lkn.ei.tum.de/