

23rd International Conference on Telecommunications

ICT2016 "Expansion to Small"

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Thessaloniki, Greece | Makedonia Palace Hotel

Technical Sponsorship



Special Session

Industrial Internet of Things: Constraints, Guarantees, and Resiliency

Organizers: **Antoine Gallais**, *University of Strasbourg, France*, **Fabrice Theoleyre**, *University of Strasbourg, France*, **Thomas Watteyne**, *Inria-Paris, France*

Call for Papers

More than one decade ago has emerged the Internet of Things (IoT), which enabled new applications in our everyday life. We have now a large variety of radio technologies (e.g. IEEE802.15.4, 6TiSCH, WirelessHART, WiFi, Bluetooth, LoRa, Z-Wave...) to connect more and more smart objects. After providing best-effort connectivity, we have now to integrate more and more constraints to constitute the industrial IoT (IIoT).

This special session aims at emphasizing the work done in providing performance guarantees and resiliency for low power lossy networks. We have now a wide variety of applications, including Smart Factory, Factory of the Future, Industry 4.0, Smart Building, Smart Cities, Healthcare and Eldercare, Smart Agriculture. The existing best-effort solutions cannot be applied directly to these specific scenarios, where performance guarantees have to be respected (e.g. data rates, delays, energy efficiency). Industrial IoT has to detect failures and to trigger reconfigurations autonomously, without any human intervention.

The main purpose of this special session is to bring together contributions from researchers and practitioners in the area of industrial low power wireless networks. Topics of interest include, but are not limited to the following:

- Resilient Systems, Dependable networking, Automated Diagnostics and Predictions
- Quality of Service, Quality of Experience, Service Level Agreements
- Implementation details and benchmarking of Industrial IoT protocols
- Monitoring and Measurements
- Efficient communication protocols for industrial IoT
- 5G: architecture, medium access, virtualization
- Performance Bounds, Soft/Hard Real-time, Formal Methods
- Security: privacy, policy management, IDS
- OS and Middleware, industrial cloud
- Real-world deployments, Lessons Learnt
- Applications: e.g. Smart Buildings and Cities, Healthcare and Eldercare, Industry 4.0, Smart Agriculture
- Standards-based solutions, Interoperability and Integration

Prospective authors are invited to submit high-quality original technical papers following the rules of the Main Track of ICT 2016 for presentation at the conference and **publication in the ICT 2016 Proceedings and IEEE Xplore**, via EDAS, using <https://edas.info/newPaper.php?c=21703&track=79103>.

Important Days

Paper submission deadline: **February 20, 2016**

Paper acceptance notification: **March 5, 2016**

Camera Ready Papers: **March 15, 2016**

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