SS 02 – Cellular Networks for Hard Real-Time

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Cellular communication opens new possibilities for highly available, reliable and real-time capable networks for industrial applications. This especially holds true for campus networks and the potential support of Time Sensitive Networking (TSN), which is envisaged since Rel. 16. However, there are still a lot of open questions around this topic, with regards both to product availability and to systematic research.

The SS focuses on (but is not limited to):

- how to optimize cellular (campus) networks for hard real-time communication with minimum usage of resources?
- how to model heterogeneous networks combining different network protocols, i.e. cellular, WiFi, or wired Ethernet?
- how to manage such heterogenous networks from both sides, i.e. from the viewpoint of 5G network management and from the viewpoint of TSN Central User Configuration (CUC) and TSN Central Network Configuration (CNC)?
- what are the major use cases for real-time capable 5G Campus Networks especially in industrial automation?
- what are the experiences and results from existing 5G-TSN solutions and/or prototype installations?

We additionally invite participations to present real-world industrial wireless demonstrations, and results of solutions from testbeds, simulations, and live deployments fo evaluation tools.

IMPORTANT DATES

Deadline: **January 12**, 2024
Notifications: **February 21**,2024
Final versions: **March 1**, 2024