



# 19<sup>th</sup> IEEE International Conference on Factory Communication Systems (WFCS)

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## SS 02 - Technologies, Platforms, and Standardization for Industrial Wireless Systems Performance Evaluation

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Wireless communications is an interesting and yet challenging topic for factory communications. Wireless brings a high degree of flexibility and lower installation costs but comes with valid concerns related to reliability and latency determinism for factory networks. People have been experimenting with and deploying wireless networks to factories with varying degrees of success. These networks have included low-rate networks such as IEEE 802.15.4, IEEE 802.11, 3GPP 4G/5G, and beyond. The wireless environment can be harsh and demanding, and the applications requirements are very different from traditional home and office applications where retransmissions and delays can be tolerated. To make wireless a reality, performance expectations must be managed and quantified according to standardized processes. This special session will consider relevant topics related to the evaluation of wireless systems for industrial and mission critical applications.

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

- Interference modelling and mitigation.
- Industrial physical environment representations.
- Wireless reliability and latency studies.
- Advanced wireless protocols and reliability enhancements.
- Wireless test and evaluation methods.
- Wireless platforms for performance testing.
- Wireless performance standardization.
- Open-source wireless projects.
- Analysis of measurement data from heterogeneous sensor/actuator sources.
- Spectrum capture, monitoring, management, and analysis.
- Requirements and use case analyses for industrial scenarios.
- Applicable machine learning and AI tools.

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

### Important dates:

Deadline: February 3<sup>rd</sup>, 2023

Notifications: February 28<sup>th</sup>, 2023

Final versions: March 15<sup>th</sup>, 2023



Website: [wfcs23.unipv.it](http://wfcs23.unipv.it)