

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

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## SS 03 - Management and Control for Converging Wired and Wireless Factory Networks

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Nowadays, several highly sophisticated wired and wireless communication technologies achieving high performance in one or a few out of many characteristics such as update frequencies, reliability, mobility or energy efficiency are available for industrial use. Combining some of these technologies enables a wide variety of applications in factories, but on the other hand increases the complexity with respect to the deployment, configuration, monitoring and maintenance of the resulting hybrid network infrastructures. Therefore, the management and control of converged wired and wireless technologies are needed in order to lower the effort in planning, commissioning and operating hybrid networks in factories while retaining the end-to-end performance.

This special session is dedicated to bringing together experts from various domains, such as ICT and OT, to discuss and elaborate on challenges, approaches, concepts and future work in the management and control of converging factory networks.

### Topics:

- Case studies on converged wired and wireless industrial communication
- Integration and configuration of 5G private networks
- Control and management architectures for hybrid industrial networks
- Information modelling for network configuration
- Control and management of Time Sensitive Networking over wireless
- Edge computing, virtualization and their co-configuration with the data transport network
- Advanced algorithms and concepts for control of end-to-end quality of service
- Integration strategies with legacy control and management systems
- Future-proof, user-friendly network management concepts for the industrial networks
- Zero-touch management of industrial communication technologies
- Simulation tools and frameworks for evaluating converged networks

**PAPER SUBMISSION:** Up to 8 double-column pages, following the IEEE conferences template.

Website: [wfcs22.unipv.it](http://wfcs22.unipv.it)

### IMPORTANT DATES (extended):

Deadline: February 7<sup>th</sup>, 2022

Notifications: March 1<sup>st</sup>, 2022

Final versions: March 12<sup>th</sup>, 2022

