

CALL FOR PAPERS

Special Session on Network-based Control Systems and Applications

to be held in the frame of
IECON 2013 - The 39th Annual Conference of the IEEE Industrial Electronics Society
10th - 13th of November 2013, Austria Center, Vienna, Austria



TOPIC OF THE SPECIAL SESSION

Network-based Control Systems (NBCS) can be described by a collection of spatially distributed sensing, controlling and actuation components, which exchange control and feedback signals using information packages over digital communication links. The design, study and application of such systems present challenging and fundamental

problems underlying the theoretical foundations for the integration of several disciplines going from Automatic Control to Communications and Real-Time Computing. Distributed Network-Based Control Systems allow us to do distributed control and computing, telerobotics, cost-effective factory automation, among many other critical applications. Topics of interest include, but are not limited to:

- Controller design methods in constrained networked control systems
- Time-driven and event-driven control in networked control systems
- Real-time issues in networked control systems
- Task and message scheduling for networked control systems

SPECIAL SESSION ORGANISATION

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The organizers look forward to welcoming you to Vienna, Austria from 10th to 13th November 2013.

Important Dates

Regular Paper submission:	April 01, 2013
Notification of acceptance:	June 15, 2013
Final submission:	August 01, 2013



- Effect of network delays on control system performance
- Modeling and simulation in networked control systems
- Worst-case execution time and Quality of Service
- Performance issues and communication constraints
- Fault-tolerance in networked control systems
- Distributed wireless networks for control
- Autonomous distributed control systems
- Distributed sensing, estimation, computation and control
- Industrial communication and control systems
- NBCS in vehicles, space, medical, and other Applications

SUBMISSION OF PAPERS

The working language of the conference is English. Submit the full paper as PDF following the IEEE layout requirements by using the templates given at the conference web page. Accepted and presented papers will be published in an IEEE Proceedings volume and will be sent to IEEE Xplore. In addition, selected authors are encouraged to submit their papers for publication in the IEEE Transactions on Industrial Electronics or in the IEEE Transactions on Industrial Informatics.

THE CONFERENCE

IECON 2013 is the 39th Annual Conference of the IEEE Industrial Electronics Society, focusing on industrial and manufacturing theory and applications of electronics, controls, communications, instrumentation and computational intelligence. The objectives of the conference are to provide high quality research and professional interactions for the advancement of science, technology, and fellowship.

Papers with new research results are encouraged for submission. IECON 2013

will be held concurrently with the 7th IEEE International Conference on E-Learning in Industrial Electronics (ICE-LIE 2013). Participation in any of these events just requires a single conference registration fee. The world's industry, research, and academia are cordially invited to participate in the wealth of presentations, tutorials, special sessions and social activities, and furthermore, enjoy beautiful Vienna.