

Annals of Telecommunications



**Call for papers
Special Issue on**

Dependable wireless communications: Applications and practices

Lead Guest Editor

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- **Prof. Nadjib AIT SAADI**, Engineering School ESIEE Paris / University Paris Est (UPE), Paris, France
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Topics of interest for this special issue include but are not limited to:

- New paradigms for dependable wireless communication
- Dependable wireless communications technologies
- Dependable distributed architectures
- Dependable wireless communications in IoT
- Dependable delay tolerant networks
- Dependable Medium Access Protocols
- Dependable aspects of smart mobility and cooperative ITS
- Wireless network virtualization
- Dependability evaluation of wireless communication systems
- Analytical and Numerical methods, simulations, experimentation, benchmarking, verification, field data analysis.
- Architecture, design, implementation and management of dependable applications supported by wireless communications
- Security threats in wireless communications
- Physical layer dependability
- Fault-tolerant techniques for wireless communications

- Harmonizing security and timeliness in wireless communications
- Industrial experiences and best practices relevant to the dependability of wireless communications

Over the past couple of decades, wireless communication technologies have become immensely adopted in various fields, appearing in a plethora of applications ranging from tracking victims, responders and equipment in disaster scenarios to machine health monitoring in networked manufacturing systems etc. Most of these applications demand strictly bounded timing response and are highly dependent on the performance of the underlying wireless communication technology. In most cases, these systems are required to have dependable timeliness requirements since data communication must be conducted within predefined temporal bounds along with fulfilling other requirements such as reliability, security etc. This is mainly because the unfulfillment of these requirements may compromise the expected behaviour of the system and cause economic losses or endanger human lives. In addition, the broadcast nature of wireless communications in an open environment makes it more vulnerable to un-wanted external entities compared to the wired communications. This makes the support of dependable wireless communications in open environments, where multiple devices are contending for the resources, a challenging task. Therefore, future wireless communications must tackle these challenging issues such as low communication reliability, real-time support, security, reachability and fault-tolerance. Original, high quality contributions that are not yet published, submitted or not currently under review by journals or peer-reviewed conferences are sought.

Papers must describe original research that advances state-of-the-art research and must not be simultaneously submitted to a journal or a conference with proceedings. Papers must be written in excellent English and should not exceed 20 pages. Previously published or accepted conference papers must contain at least 40% new material to be considered for the special issue. A covering letter to the Guest editors clearly describing the extensions made must accompany these types of submissions. All submissions must be made using the instructions available at:

<http://annalsoftelecommunications.wp.mines-telecom.fr/how-to-publish/>

The authors can directly submit their papers at: <https://www.editorialmanager.com/ante/> and must select the menu "Choose Article Type" and then the item "CfP: Dependable wireless communications: Applications and Practices".

Proposed schedule

- **Manuscript Submission:** ~~September 30, 2020~~
- **Extended to** **February 28, 2021**
- **Online with DOI:** As soon as accepted
- **Publication date:** 2021