

CALL FOR PAPERS

Special Issue of the International Journal on Network Management (IJNM) on *Management of the Internet of Things and Big Data*

Publication: May 2016

Scope of the Special Issue

The all-connected paradigm passes by connecting people, things, processes and data in the network. It is based on near Internet ubiquity and includes three types of connections: Machine-to-Machine, Person-to-Machine and Person-to-Person. Machine-to-Machine (M2M) is closely related to industrial automation, logistics and infrastructures as well as civil security (e.g., security in autonomous vehicles, disaster alert, etc.). Person-to-Machine (P2M) communication brings an unquestionable increase of well-being in home and enterprise automation systems but also is fundamental for intelligent parking, patient monitoring and disaster response, among others. At last, Person-to-Person (P2P) connection is already changing the inter-personal relations, which are becoming more multimedia-oriented and located in the social networks. The all-connected paradigm will increase the scenarios of person-to-person networked communication such as remote collaboration, networked learning and telemedicine.

The future of the all-connected model depends on the effective solution to a number of technical challenges including sensor capabilities improvement and sensor miniaturization, Big Data processing and efficient remote data management (by introducing new remote management oriented architectures), as well as the open and secure composition of processes, which may be easily implemented into new scenarios.

Some initiatives try to build all-connected scenarios from the scratch (e.g., some infrastructures for smart cities proposed in China), but the trend is to group together specific use cases of the Internet of Things, cloud computing and all-as-a-service communication frameworks. The backbone of the all-connected paradigm is the sum of the existing technologies: fiber and mobile high-speed access to the Internet, GPS, multimedia devices (video cameras, end users' terminals), wired and wireless sensor networks, cloud computing. The management should be distributed at different layers. Privacy and authorization & authentication should be managed at the application level (i.e., communication between processes). Instead, other aspects of security should be provided at the network level due to rather low complexity required for sensors and things.

Contributions to the following topics are of specific interest, but are not limited to:

• Management of M2M, P2M and P2P communication	• Ubiquitous aspects of data and processes
• Interconnection of Internet of Things and Cloud computing	• (R)evolutionary scenarios for all-connected networking in public/private sectors
• Application Programming Interfaces to Big Data	• Solutions for management in Smart Cities
• Application processes for Security & Privacy in all-connected networking	• Advances in sensor networks management
• Composition of services and processes	• Sensor miniaturization and efficiency
• Platforms for sharing processes in the Web	• Personal aspects: location, ubiquitous, privacy
• Management automation of services and processes	• Machine aspects: automation, security

Submission Guidelines

Paper submissions should not exceed 20 pages. Author instructions are available at

[http://onlinelibrary.wiley.com/journal/10.1002/\(ISSN\)1099-1190/homepage/ForAuthors.html](http://onlinelibrary.wiley.com/journal/10.1002/(ISSN)1099-1190/homepage/ForAuthors.html)

and the respective LaTeX template can be found at

[http://onlinelibrary.wiley.com/journal/10.1002/\(ISSN\)1099-1190/homepage/latex_class_file.htm](http://onlinelibrary.wiley.com/journal/10.1002/(ISSN)1099-1190/homepage/latex_class_file.htm)

All submissions will be peer-reviewed. In case of acceptance, the final and camera-ready version has to take into account comments of reviewers and needs to follow the template's requirements.

Important Deadlines

Submission Deadline: October 31, 2015

Notification of Acceptance: December 31, 2015

Final Version: February 15, 2016

Publication: May, 2016

Submissions in PDF format only to

<http://mc.manuscriptcentral.com/nem>

Guest Editors

Jordi Mongay Batalla, National Institute of

Telecommunications (Poland) - ✉ j.mongay@itl.waw.pl

George Mastorakis, Technological Educational Institute of

Crete (Greece) - ✉ gmastorakis@staff.teicrete.gr

Constandinos X. Mavromoustakis, University of Nicosia

(Cyprus) - ✉ mavromoustakis.c@unic.ac.cy