

Network of Excellence

**NEWCOM#**

Network of Excellence in Wireless Communications#

**FP7 Contract Number: 318306**

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**WP3.3 – Journal special issues, book and book chapters**

**D33.3**

**Second report on journal special issues, book chapters and books**

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## Document Information

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<b>Version Date:</b>	November 20, 2014
<b>Total Number of Pages:</b>	35
<b>Abstract:</b>	This deliverable provides an overview of the on-going journal special issues, books and book chapters implemented by NEWCOM# researchers, or motivated by the NEWCOM# joint research activities. It also provides a detailed analysis of the current status of the special issues and book chapters implemented so far. This analysis includes aspects like timing, life-cycles, and composition of the editorial teams, topic and workpackage/task coverage, publisher and journal coverage, how NEWCOM# is acknowledge, and how special issues are publicized. Finally, the original Calls for Papers are included for reference purposes.
<b>Keywords:</b>	journal special issue, book, book chapter, guest editor, research topic, call for papers, impact factor, publisher.

## Authors

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## Version history

Issue	Date of Issue	Comments
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0.2	23/09/2014	First draft
0.3	26/09/2014	Review of previous version
1.0	19/11/2014	Final version

## Executive Summary

Among the various tools used in the scientific community to disseminate the research results, journal special issues, book and book chapters are nowadays well used and well understood.

This deliverable offers an overview and a statistical analysis of the journal special issues, book and book chapters implemented so far within NEWCOM#.

A complete list of the journal special issues inspired by NEWCOM# joint research activities is presented and discussed in this deliverable, with a special emphasis on aspects like composition of the editorial teams, editorial information about the journal, and topics addressed in each special issue.

The Journal Special Issues originated by NEWCOM# activities published or launched so far are as follows:

- *Enabling 5G: Energy and Spectral Efficient Communication Systems*, to be published in the Transactions on Emerging Telecommunications Technologies;
- *Indoor Localization, Tracking, and Mapping with Heterogeneous Technology*, to be published in the IEEE Transactions on Vehicular Technologies;
- *Machine-to-Machine: An Emerging Communication Paradigm*, published in the Transactions on Emerging Telecommunications Technologies;
- *Special Issue on Signal Processing Techniques for Anywhere, Anytime Positioning*, published in the EURASIP Journal on Advances in Signal Processing ;
- *JCN Special Issue on Advances in Channel Coding* to be published in the Journal of Communications and Networks;
- *Special Issue on Technical advances in the design and deployment of future heterogeneous networks* to be published in the EURASIP Journal on Wireless Communications and Networking.

The published books are as follows:

- *Machine-to-Machine (M2M) Communications, Architecture, Performance and Applications*, Woodhead Publishing Ltd.
- *Opportunistic Spectrum Sharing and White Space Access: The Practical Reality* will be published by Wiley.

The following book chapters have been written by NEWCOM# members:

- "Null-space precoder for dense 4G and beyond networks" included in the book entitled *Resource Allocation and MIMO for 4G and Beyond*, Springer ;
- "Future challenges in efficiently supporting M2M in the long term evolution (LTE) standards", in "Machine-to-Machine (M2M) Communications, Architecture, Performance and Applications." Woodhead Publishing ;
- "An introduction to M2M", in "Machine-to-Machine (M2M) Communications, Architecture, Performance and Applications." Woodhead Publishing.

This deliverable also illustrates different aspects of WP3.3 activities conducted so far, with the specific aim of providing a useful tool for the NEWCOM# researchers who are planning the implementation of journal special issues, books or book chapters during the last year of the project.

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## List of Acronyms

3GPP	3rd Generation Partnership Project
5G	5th Generation
BC	Book Chapter
CfP	Call for Papers
CoMP	Coordinated MultiPoint
D2D	Device-to-Device
HetNet	Heterogeneous Network
JRA	Joint Research Activity
JSI	Journal Special Issue
IMT	International Mobile Telecommunications
LTE	Long Term Evolution
MIMO	Multiple-Input Multiple-Output
OSI	Open Systems Interconnection
P2P	Peer-to-Peer
RAN	Radio Access Network
RFID	Radio Frequency Identification
RRA	Radio Resource Allocation
RRM	Radio Resource Management
SLAM	Simultaneous Localization and Mapping
SON	Self-Organised Network





## 1. Introduction

In NEWCOM#, WP3.3 deals with «Journal special issues, books and book chapters». These tools have been identified as possible instruments to disseminate the research results produced by NEWCOM# researchers, as well as to increase the recognition of the network within the related international research community. The objectives of this WP3.3 are therefore as follows:

- To foster the design and implementation of Journal Special Issues in international peer reviewed journals, dealing with the main research topics addressed in NEWCOM#.
- To stimulate the participation of NEWCOM# researchers as prospective authors in the journal special issues organised either by NEWCOM# or by third parties.
- To trigger and organise the writing of book chapters and books. Book chapters will be devoted to the state-of-the-art and the recent advances of specific scientific and technological topics addressed by NEWCOM# researchers while books will be reserved for the results of Track 1 of the project.

The first deliverable, produced at T0+6, was entitled “Report on relevant journal, editors, topics and main contributors”. It was conceived as a useful tool to NEWCOM# researchers in the process of launching their special issues. It provided NEWCOM# researchers with a list of major journals using this type of instrument as well as a collection of topics relevant to the NEWCOM# activities. Moreover, a list of publishers who could be potential candidates for e-publishing book chapters, and/or (e)-publishing complete books was presented.

The second deliverable, produced at T0+12, was entitled “First report on planned/launched journal special issues, book chapters and books”. The main objective was to analyse the first 12 months of activity within WP3.3 and to present a statistical methodology to evaluate the achievements of this WP.

The D33.2, entitled “Second report on planned/launched journal special issues, book chapters and books”, proceeds along the route pursued in the D33.1. After having presented the on-going journal special issues, books and book chapters, the achievements of WP3.3 are illustrated through a statistical analysis.

The rest of the document is organised as follows. Section 2.1 provides an overview of the on-going journal special issues inspired by NEWCOM# joint research activities. The topics addressed in each special issue are listed and some useful information about the status of the JSI and the journal hosting the publications are provided. Section 2.2 presents the book and book chapters written by NEWCOM# researchers. Section 3 brings to attention the achievements of the activities carried out in the context of WP3.3 through a detailed statistical analysis. Sections 4 and 5 provide a succinct discussion on how NEWCOM# is acknowledged and how to disseminate CfPs and publicise books and book chapters, respectively. Finally, Section 6 summarises some concluding remarks.

## 2. Overview on journal special issues, books and book chapters

The objective of this section is to provide the reader with a summary of fundamental information concerning the on-going Journal Special Issues (JSIs), Books and Book Chapters (BCs) as of September 2014. The interested reader is referred to Appendix I, where the original Calls for Papers (CfPs) have been collected. The remainder of this section is organised as follows. In Section 2.1, we present a list of all the JSIs that have been launched during the first 24 months of research activities in NEWCOM#. For each JSI that has been launched during the second year of NEWCOM#, we also provide the reader with a list of topics of interest, a brief summary of the JSI's scope, the list of guest editors (with special emphasis on the ones participating in NEWCOM#), some important dates (deadline for manuscript submission, expected date to complete the first round of review, etc.), and some fundamental editorial information on the journal and/or publisher. Section 2.2 presents the Books and BCs inspired by NEWCOM# activities. For each planned/published book or BC relevant to the second year of the project, the reader is provided with a brief abstract of the book's (BC's) content, the list of the authors, as well as some fundamental information about the book (title, length, year) and the publisher. For more details concerning the JSIs, books and BCs that have already been reported at the end of year 1, the interested reader can refer to the D33.2 "*First report on planned/launched journal special issues, book chapters and books*".

### 2.1 Journal special issues

The Journal Special Issues originated by NEWCOM# activities published or launched so far are as follows:

- *Enabling 5G: Energy and Spectral Efficient Communication Systems*, to be published in the Transactions on Emerging Telecommunications Technologies;
- *Indoor Localization, Tracking, and Mapping with Heterogeneous Technology*, to be published in the IEEE Transactions on Vehicular Technologies;
- *Machine-to-Machine: An Emerging Communication Paradigm*, published in the Transactions on Emerging Telecommunications Technologies;
- *Special Issue on Signal Processing Techniques for Anywhere, Anytime Positioning*, published in the EURASIP Journal on Advances in Signal Processing ;
- *JCN Special Issue on Advances in Channel Coding* to be published in the Journal of Communications and Networks;
- *Special Issue on Technical advances in the design and deployment of future heterogeneous networks* to be published in the EURASIP Journal on Wireless Communications and Networking.

In the following sections, the JSIs that have been launched during year 2 of NEWCOM# are presented.

#### 2.1.1 Special Issue on Advances in Channel Coding

Since the invention of turbo codes in 1993 there has been an enormous interest and progress in the field of capacity approaching code constructions. Many classical constructions have been replaced by newer, better performing codes with feasible decoding complexity. Most of these modern code constructions, such as turbo codes, Gallager's low-density parity-check (LDPC) codes and their generalizations, can be modeled by sparse graphical models. Spatial coupling of sparse graphical models has in the last years attracted a lot of interest due to the threshold saturation phenomenon, which leads to capacity achieving performance with iterative message passing decoding. Polar codes are a recently discovered class of capacity achieving codes that are formed by an explicit construction

based on a phenomenon called channel polarization. These codes, too, have various low-complexity decoding algorithms based on message passing on a sparse graph that has a recursive structure similar to that of fast transforms in signal processing.

Despite the enormous advances in channel coding in the last two decades, the state-of-the-art in this area is far from meeting the challenges of the near-future communication systems in terms of throughput, performance, robustness, flexibility and energy consumption. To give one example, it is unclear how current forward error-correction coding (FEC) techniques will scale to the 100+ GB/s data rates foreseen for wireless backhaul communications in the near future. New code constructions and algorithms as well as novel concepts may have to replace the techniques that we use today.

Prof. Erdal Arıkan, Prof. Michael Lentmaier and Prof. Guido Montorsi are serving as guest editors for an upcoming journal special issue on Advances in Channel Coding in the Journal of Communications and Networks (JCN, <http://jcn.or.kr>), to be published in August 2015. The scope of this special issue is inspired by some major challenges addressed in the NEWCOM# Task 1.1.3 “Capacity Reaching Channel Coding”, which all three guest editors are involved in. Flyers for the special issue were distributed at the ICC and ISIT conferences in June/July 2014.

A survey paper about the joint research activities on coding in Task 1.1.3 is planned to be included in this special issue, and of course NEWCOM# will be explicitly mentioned in the editorial.

#### **2.1.1.1 Topics of interest**

The topics include, but are not limited to:

- New code constructions and algorithms addressing the challenges of future communication systems
- Efficient decoding algorithms in terms of complexity and energy consumption
- Binary and non-binary coded modulation for spectrally efficient transmission
- Coding techniques for multi-terminal and cooperative communications
- Analysis and bounds on trade-offs in performance, latency, complexity and energy consumption
- Survey papers assessing the state-of-the-art in FEC vis-a-vis future challenges

The Tasks of NEWCOM# relevant to the topics listed above are:

- Task 1.1.3 Capacity Reaching Channel Coding

#### **2.1.1.2 Guest Editors**

This special issue involves three guest editors including two NEWCOM# members. The full list of Guest Editors for this JSI is as follows:

- **Prof. Erdal Arıkan,**

**Affiliation :** Bilkent University, Turkey.

**E-mail :** [arikan@ee.bilkent.edu.tr](mailto:arikan@ee.bilkent.edu.tr)

- **Prof. Michael Lentmaier,**

**Affiliation :** Lund University, Sweden.

**E-mail :** [michael.lentmaier@eit.lth.se](mailto:michael.lentmaier@eit.lth.se)

- **Prof. Guido Montorsi,**

**Affiliation :** Politecnico di Torino, Italy.

**E-mail :** [guido.montorsi@polito.it](mailto:guido.montorsi@polito.it)

### 2.1.1.3 Important dates

In the following we outline the deadline for manuscript submission as well as other important dates.

<b>Submission deadline:</b>	December 15 <sup>th</sup> , 2014
<b>Author Notification:</b>	February 15 <sup>th</sup> , 2015
<b>Final Manuscript:</b>	April 1 <sup>st</sup> , 2015
<b>Publication:</b>	August 5 <sup>th</sup> , 2015

### 2.1.1.4 Journal/Publisher

The Journal of Communications and Networks is published six times per year, and is committed to publishing high-quality papers that advance the state-of-the-art and practical applications of communications and information networks. Theoretical research contributions presenting new techniques, concepts, or analyses, applied contributions reporting on experiences and experiments, and tutorial expositions of permanent reference value are welcome. The subjects covered by this journal include all topics in communication theory and techniques, communication systems, and information networks.

**Field of interest:** information theory; modulation/signal design; detection/estimation; fading/equalization; optical communications; transmission systems; access systems; synchronization; error control coding; source coding/data compression; security/cryptography; cognitive radio; compressed sensing; network coding; portable communications systems; transmission modulation and coding for mobile terrestrial and satellite systems; multicarrier systems; cooperative communications; multi antenna/user systems; ultra-wideband communications; wireless network design and performance evaluation including traffic analysis; ad-hoc and sensor networks; MAC protocols; network physical and software architecture; communication protocols; network hardware and software technologies; switching and routing; multimedia techniques; Internet/Intranet protocols and services; mobility networks and protocols; operations and management; signalling and control; active networks; services and applications.

Journal Title	Journal of Communications and Networks
Publisher	Korea Information and Communications Society
ISSN	1229-2370
URL	<a href="http://www.jcn.or.kr/home/journal/">http://www.jcn.or.kr/home/journal/</a>
Editor-in-chief	H. Vincent Poor
Issues per year	6
Type of papers	Transactions
2011 total cites	N/A
Impact factor	N/A
Eigenfactor score	N/A
Article influence score	N/A
Tool for managing reviews in special issues	Manuscript Central
Contact person from NEWCOM#	Sinan Gezici

**Table 2.1. Journal of Communications and Networks**

## **2.1.2 Special Issue on Technical advances in the design and deployment of future heterogeneous networks**

Heterogeneous Networks (HetNets) that combine cells from various sizes ranging from macrocells to different kinds of small-cells are widely seen as one of the approaches that will be used to solve the problem of rapidly increasing data traffic in cellular networks. Based on such observation, this special issue focuses on the crucial aspects of practical design and management issues for heterogeneous networks, including energy and bandwidth efficiency of multi-tier wireless heterogeneous networks as well as interference and radio resource management algorithms.

### **2.1.2.1 Topics of interest**

Potential topics include, but are not limited to:

- PHY/MAC/Cross-layer design of future heterogeneous networks
- Interference management and mitigation issues for HetNets
- Cognitive technologies for small-cells
- Game theoretic algorithms for HetNets
- Energy efficient communications and green HetNets
- Backhaul design for HetNets
- Traffic offloading issues
- SON algorithms for HetNets
- Resource allocation and power control algorithms for HetNets
- Access schemes for femtocells/picocells
- Vertical handover solutions involving HetNets
- Cooperative transmission and relay selection methods for HetNets
- Carrier aggregation in heterogeneous networks
- CoMP techniques in heterogeneous networks
- Spectrum sharing for heterogeneous networks

### **2.1.2.2 Guest Editors**

- **Adrian Kliks** (Lead guest editor)

**Affiliation** : Poznan University of Technology, Poland

**E-mail** : [akliks@et.put.poznan.pl](mailto:akliks@et.put.poznan.pl)

- **Jordi Pérez-Romero**,

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- **Lila Boukhatem**,

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- **Andreas Zalonis**,

**Affiliation** : Institute of Accelerating Systems and Applications, Greece

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### 2.1.2.3 Important dates

Submission deadline:	June 30 <sup>th</sup> , 2014
Author Notification:	TBA
Final Manuscript:	TBA
Publication:	TBD

### 2.1.2.4 Journal/Publisher

The overall aim of the *EURASIP Journal on Wireless Communications and Networking* (EURASIP JWCN) is to bring together science and applications of wireless communications and networking technologies with emphasis on signal processing techniques and tools. It is directed at both practicing engineers and academic researchers. *EURASIP Journal on Wireless Communications and Networking* will highlight the continued growth and new challenges in wireless technology, for both application development and basic research. Articles should emphasise original results relating to the theory and/or applications of wireless communications and networking. Review articles, especially those emphasizing multidisciplinary views of communications and networking, are also welcome. *EURASIP Journal on Wireless Communications and Networking* employs a paperless, electronic submission and evaluation system to promote a rapid turnaround in the peer-review process.

**Field of interest:** antenna systems and design; channel modelling and propagation; coding for wireless systems; multiuser and multiple access schemes; optical wireless communications; resource allocation over wireless networks; security, authentication, and cryptography for wireless networks; signal processing techniques and tools; software and cognitive radio; wireless traffic and routing; ultra wide-band systems; vehicular networks; wireless multimedia communication; wireless sensor networks; wireless system architectures and applications

Journal Title	EURASIP Journal on Wireless Communications and Networking
Publisher	Springer
ISSN	1687-1499
URL	<a href="http://www.springer.com/engineering/signals/journal/13638">http://www.springer.com/engineering/signals/journal/13638</a>
Editor-in-chief	Luc Vandendorpe
Issues per year	12
Type of papers	Transactions and Tutorial
2011 total cites	936
Impact factor	0.873
Eigenfactor score	0.00686
Article influence score	0.442
Tool for managing reviews in special issues	SpringerOpen's online submission system
Contact person from NEWCOM#	C. Oestges, Jordi Pérez-Romero

**Table 2.2. EURASIP Journal on Wireless Communications and Networking**

## 2.2 Books and book chapters

To date, NEWCOM# has motivated the publications of the following books:

- *Machine-to-Machine (M2M) Communications, Architecture, Performance and Applications*, Woodhead Publishing Ltd.
- *Opportunistic Spectrum Sharing and White Space Access: The Practical Reality* will be published by Wiley.



Moreover, the following book chapters have been written by NEWCOM# members:

- “Null-space precoder for dense 4G and beyond networks” included in the book entitled *Resource Allocation and MIMO for 4G and Beyond*, Springer ;
- “Future challenges in efficiently supporting M2M in the long term evolution (LTE) standards”, in “Machine-to-Machine (M2M) Communications, Architecture, Performance and Applications.” Woodhead Publishing ;
- “An introduction to M2M”, in “Machine-to-Machine (M2M) Communications, Architecture, Performance and Applications.” Woodhead Publishing.

In the following, we provide the reader with all the details concerning books and BCs that have not been presented at the end of year 1.

### **2.2.1 An introduction to M2M (book chapter)**

This is a chapter of the book entitled *Machine-to-Machine (M2M) Communications, Architecture, Performance and Applications*, Woodhead Publishing, 2014.

#### **2.2.1.1 Authors**

- Carles Anton-Haro

**Affiliation** : Centre Tecnològic de Telecomunicacions de Catalunya, Spain.

**E-mail** : [carles.anton@cttc.es](mailto:carles.anton@cttc.es)

- Mischa Dohler

**Affiliation** : King's College London, UK

**E-mail** : [mischa.dohler@kcl.ac.uk](mailto:mischa.dohler@kcl.ac.uk)

#### **2.2.1.2 About the book**

An unprecedented communication paradigm facilitating the connection between a prior unseen number of automated devices is currently gripping both industrial as well as academic communities. Referred to as machine-to-machine (M2M) communication, it is essentially composed of three key ingredients: 1) a wireless end-device, 2) an infrastructure-based or infrastructure-less wireless carrier network, and 3) the back-end server network. This edited M2M book is focused on the networking part of the architecture, dwelling on the technology required to connect the device domain with the application domain.

The aim of this book is thus to provide a detailed technical insight into latest key aspects of M2M networks, with application to some chosen market verticals like smart cities and smart grids. The book will dig into the technical details of the technology required to provide such applications. We will deal with security, capillary and cellular access methods, and latest developments in standardization bodies. We will also aim to identify challenges and open issues, thus making the material presented in this book useful for industry and inspiring for research.

Book Title	Machine-to-Machine (M2M) Communications, Architecture, Performance and Applications
Publisher	Woodhead Publishing
ISSN	N/A
URL	<a href="http://www.woodheadpublishing.com/en">http://www.woodheadpublishing.com/en</a>
Editors	Carles Anton-Haro, Mischa Dohler
Year	2014
Pages	N/A

**Table 2.3. Machine-to-Machine (M2M) Communications, Architecture, Performance and Applications**

### **2.2.1.3 About the publisher**

The following information comes from the company website: “Woodhead Publishing Limited publishes in the areas of Food Science, Technology & Nutrition, Materials and Engineering, Textile Technology, Energy and Environmental Technology, Finance, Commodities and Investment, Mathematics and Biomedicine. Our ambitious publishing plans for the future will continue to bring you a range of authoritative reference books, professional texts and monographs, all written and produced to the exacting standards that have made Woodhead Publishing one of the UK's fastest growing independent publishers. All of our books are written in direct response to customers' needs by a truly international team of authors, ensuring they are designed for and relevant to a global audience. Building on previous years' achievements our publishing programme consolidates existing series with over 85 new titles.”

The books and ebooks dealing with «Computing and electrical engineering» can be found from the following link:

<http://www.woodheadpublishing.com/en/catalogue.aspx?catalogue=Engineering&heading=Computing and electrical engineering>.

### **2.2.2 Machine-to-Machine (M2M) Communications, Architecture, Performance and Applications (book)**

An unprecedented communication paradigm facilitating the connection between a prior unseen number of automated devices is currently gripping both industrial as well as academic communities. Referred to as machine-to-machine (M2M) communication, it is essentially composed of three key ingredients: 1) a wireless end-device, 2) an infrastructure-based or infrastructure-less wireless carrier network, and 3) the back-end server network. This edited M2M book is focused on the networking part of the architecture, dwelling on the technology required to connect the device domain with the application domain.

The aim of this book is thus to provide a detailed technical insight into latest key aspects of M2M networks, with application to some chosen market verticals like smart cities and smart grids. The book will dig into the technical details of the technology required to provide such applications. We will deal with security, capillary and cellular access methods, and latest developments in standardization bodies. We will also aim to identify challenges and open issues, thus making the material presented in this book useful for industry and inspiring for research.

The book, still in production, is organised in five parts, namely,

- Part I – Architectures and Standards for M2M Communications
- Part II – Access, Scheduling & Mobility Protocols
- Part III – Optimization of Network Operations
- Part IV – Security Issues
- Part V – Applications & Business Models



Book Title	Machine-to-Machine (M2M) Communications, Architecture, Performance and Applications
Publisher	Woodhead Publishing
ISSN	N/A
URL	<a href="http://www.woodheadpublishing.com/en">http://www.woodheadpublishing.com/en</a>
Editors	Carles Anton-Haro, Mischa Dohler
Year	2014
Pages	N/A

**Table 2.4. Machine-to-Machine (M2M) Communications, Architecture, Performance and Applications**

### 2.2.2.1 Editors

The full list of editors for this book is as follows:

- Carles Anton-Haro

**Affiliation :** Centre Tecnològic de Telecomunicacions de Catalunya, Spain.

**E-mail :** [carles.anton@cttc.es](mailto:carles.anton@cttc.es)

- Mischa Dohler

**Affiliation :** King's College London, UK

**E-mail :** [mischa.dohler@kcl.ac.uk](mailto:mischa.dohler@kcl.ac.uk)

Carles Anton-Haro is supported by the EC-funded project NEWCOM# (Network of Excellence in Wireless Communications).

### 2.2.2.2 About the publisher

The following information comes from the company website: "Woodhead Publishing Limited publishes in the areas of Food Science, Technology & Nutrition, Materials and Engineering, Textile Technology, Energy and Environmental Technology, Finance, Commodities and Investment, Mathematics and Biomedicine. Our ambitious publishing plans for the future will continue to bring you a range of authoritative reference books, professional texts and monographs, all written and produced to the exacting standards that have made Woodhead Publishing one of the UK's fastest growing independent publishers. All of our books are written in direct response to customers' needs by a truly international team of authors, ensuring they are designed for and relevant to a global audience. Building on previous years' achievements our publishing programme consolidates existing series with over 85 new titles."

The books and ebooks dealing with «Computing and electrical engineering» can be found from the following link:

<http://www.woodheadpublishing.com/en/catalogue.aspx?catalogue=Engineering&heading=Computing and electrical engineering>.

### 2.2.3 Opportunistic Spectrum Sharing and White Space Access: The Practical Reality (book)

This book is partially written by members of the NEWCOM# which are also members of the ACROPOLIS NoE. The publisher is Wiley and the targeted publication date is

end of 2014.

#### **2.2.3.1 Editors**

The full list of editors for this book is as follows:

- **Oliver Holland**

**Affiliation** : King's College London, UK.

- **Hanna Bogucka**

**Affiliation** : Poznan University of Technology, Poland

**E-mail** : [hbogucka@ET.PUT.Poznan.PL](mailto:hbogucka@ET.PUT.Poznan.PL)

- **Arturas Medeisis**

**Affiliation** : Vilnius Gediminas Technical University, Lithuania

Hanna Bogucka is supported by the EC-funded project NEWCOM# (Network of Excellence in Wireless Communications).

#### **2.2.3.2 About the publisher**

The following information comes from Wikipedia: "**John Wiley & Sons, Inc.**, also referred to as **Wiley**, is a global publishing company that specialises in academic publishing and markets its products to professionals and consumers, students and instructors in higher education, and researchers and practitioners in scientific, technical, medical, and scholarly fields. The company produces books, journals, and encyclopedias, in print and electronically, as well as online products and services, training materials, and educational materials for undergraduate, graduate, and continuing education students. »

The catalogue of (e)books on "Mobile and wireless communications" can be found at the following link: <http://eu.wiley.com/WileyCDA/Section/id-350549.html>.

### 3. Analysis of journal special issues, books and book chapters inspired by NEWCOM#

In this section, we present a statistical analysis of the achievements within WP3.3 illustrating different aspects of the JSIs, books and BCs implemented so far, with the specific aim of summarizing the main achievements of this WP. Notably, we will first focus on the current status of each JSI, book and BCs (open for submissions, peer-review process on-going, ready to be published, published), thus providing a detailed chronicle of their life-cycles. A particular attention will be devoted to the percentage of NEWCOM# members of the editorial team or in the list of authors as well as the coverage of the various topics addressed and their relevance with the different WPs.

#### 3.1 Journal special issues

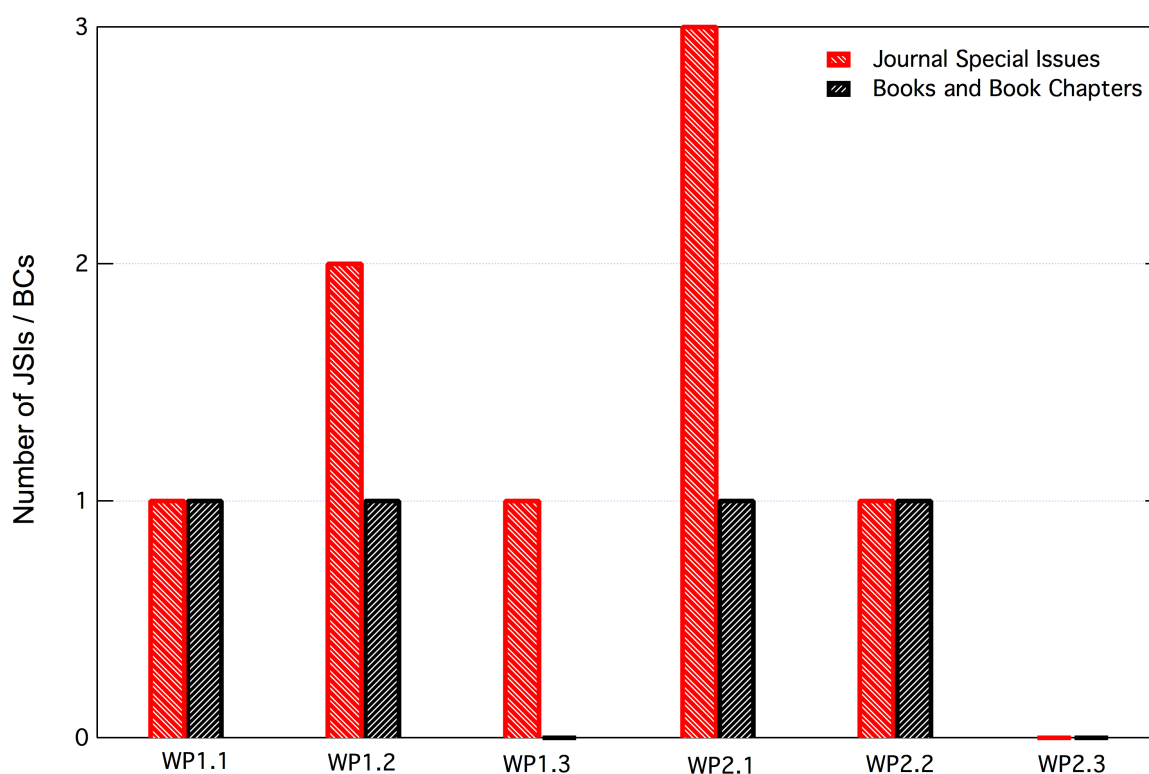
Currently, a total of 6 journal special issues have been launched to date. As apparent from Table 3.1, only one of them are in the “open for submissions” status, four are ready for publication and one has been already published. The next publication of a JSI inspired by NEWCOM# activities is expected to take place in the last quarter of 2014. Bearing in mind the usual life-cycle of a JSI and the time required to consolidate a joint research activity most of the JSIs planned during the first year of the project will be published between the last quarter of 2014 and the first quarter of 2015. The average number of guest editors in the special issues launched so far is 3.83 with a 65.21% coming from institutions which belong to the network of excellence NEWCOM#.

Though it was expected a proliferation of the JSIs in the second year, only two new special issues inspired by the NEWCOM# activity have been launched in 2014. However, as it is shown in Figure 3.2, all the workpackages have been involved in the preparation of JSIs. Currently, only 1 WPs, namely WP2.3, have not been involved in the launch of JSIs. Besides, as it is apparent from Figure 3.3, the involvement of the different NEWCOM# institutions on planned/launched JSIs is more balanced with respect to the first year of the project. Taking into consideration the unavoidable latency associated with the launch of JSIs and the fact that the JRAs have produced their first results only at the end of year 1, the current status can be regarded as encouraging.

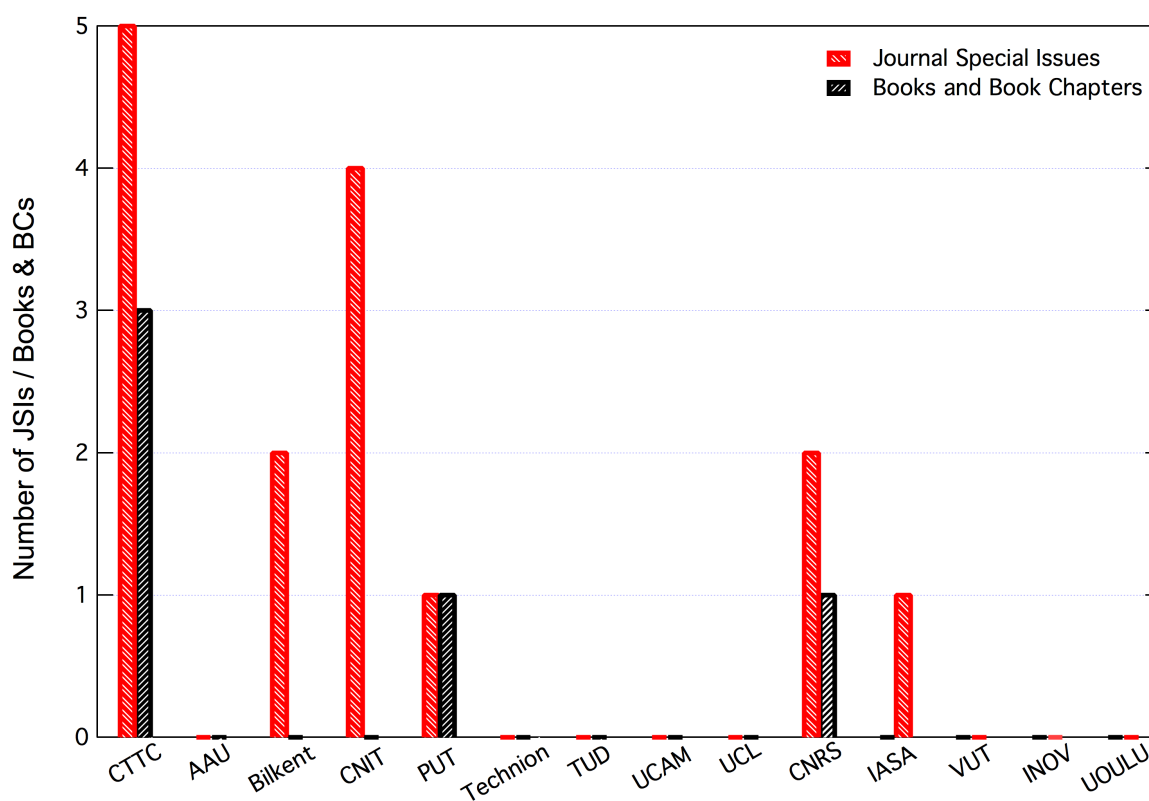
Eventually, it is worth remarking the significative presence of non-European institutions (e.g. from the US and China) in the guest editorial boards, confirming that NEWCOM# institutions are proactive in creating collaborations with non-European partners.

Total number of JSIs	6
Open for submission	1
Peer-review on-going	2
Peer review completed	2
Published	1

**Table 3.1. Current Status of the Launched/Planned JSIs**



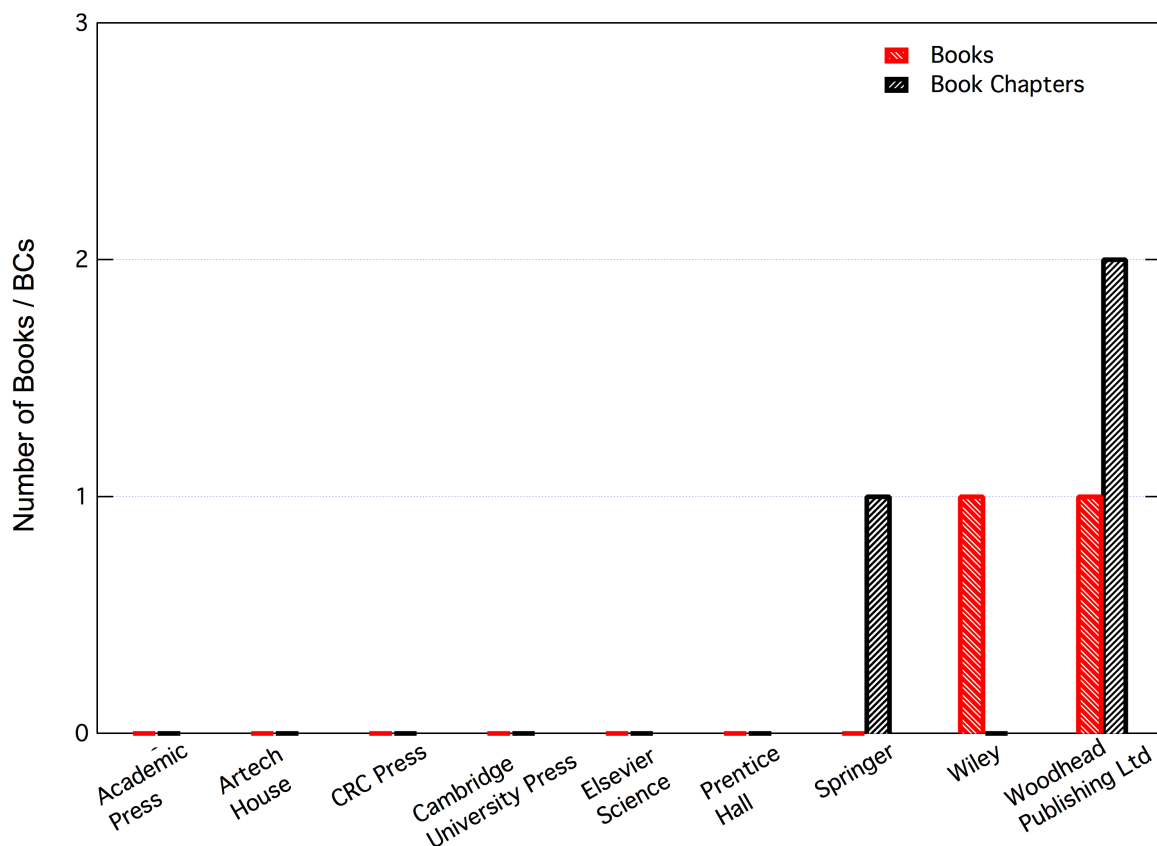
**Figure 3.1. WPs coverage of planned/launched JSIs, Books and BCs.**



**Figure 3.2. NEWCOM# institutions involved in planned/launched JSIs, Books and BCs.**

### 3.2 Books and book chapters

NEWCOM# has motivated the publications of one book and three book chapter so far. The book chapter entitled *Null-space precoder for dense 4G and beyond networks* has been published at the end of 2013 while the book *Machine-to-Machine (M2M) Communications, Architecture, Performance and Applications* has been published in the first quarter of 2014. The book entitled *Opportunistic Spectrum Sharing and White Space Access: The Practical Reality* (book) is a collaboration between the networks of excellence NEWCOM# and ACORN and it will be published in the last quarter of 2014. Figure 3.4 shows the distribution of books and book chapters among the major publishers. Other figures considered in this analysis are the distribution of books and BCs authors across the WPs (Figure 3.1) and the NEWCOM# institutions represented in the list of authors (Figure 3.2).



**Figure 3.3. Distribution of planned/launched Books and BCs among the major publishers.**

## 4. Acknowledgements to NEWCOM#

As it was mentioned in the previous deliverables, the main objective of NEWCOM# JSIs is to enhance the visibility of the joint research activities performed by NEWCOM# members. For this reason, guest editors should make sure that the project is **properly acknowledged**.

However, sometimes guest editors can encounter difficulties in acknowledging NEWCOM# due to the editorial constraints enforced by the publisher or the need to find a trade-off in terms of acknowledgement formulae when non-NEWCOM# editors are members of the team.

Being aware that journals may be subject to different formatting rules and editorial restrictions, we hereby enumerate a number of *acknowledging* strategies and statements which have been considered by the corresponding guest editors, namely:

- To explicitly mention NEWCOM# in the text of the corresponding Call for Papers.
- To insert the NEWCOM# logo on the cover of the journal special issue.
- To explicitly mention NEWCOM# in the title of the special issue (e.g. 'NEWCOM# Special Issue on...').
- To include a sentence in the guest editorial such as '*This special issue has been supported by the European Network of Excellence NEWCOM#*'.
- To point out in the guest editorial that (part of) of the team of guest editors are involved in NEWCOM#.

During the first 24 months of the project, explicitly mention NEWCOM# in the guest editorial has been the most used acknowledgement formula.

## 5. Usage of means to publicise Journal Special Issues

JSIs, Books and BCs were publicised via various means, namely, Journals' webpage, the NEWCOM# webpage, the NEWCOM# Newsletter, distribution through the mailing lists of the guest editors.

In the following, we present a non-exhaustive list of the most popular ways of announcing NEWCOM# inspired JSIs:

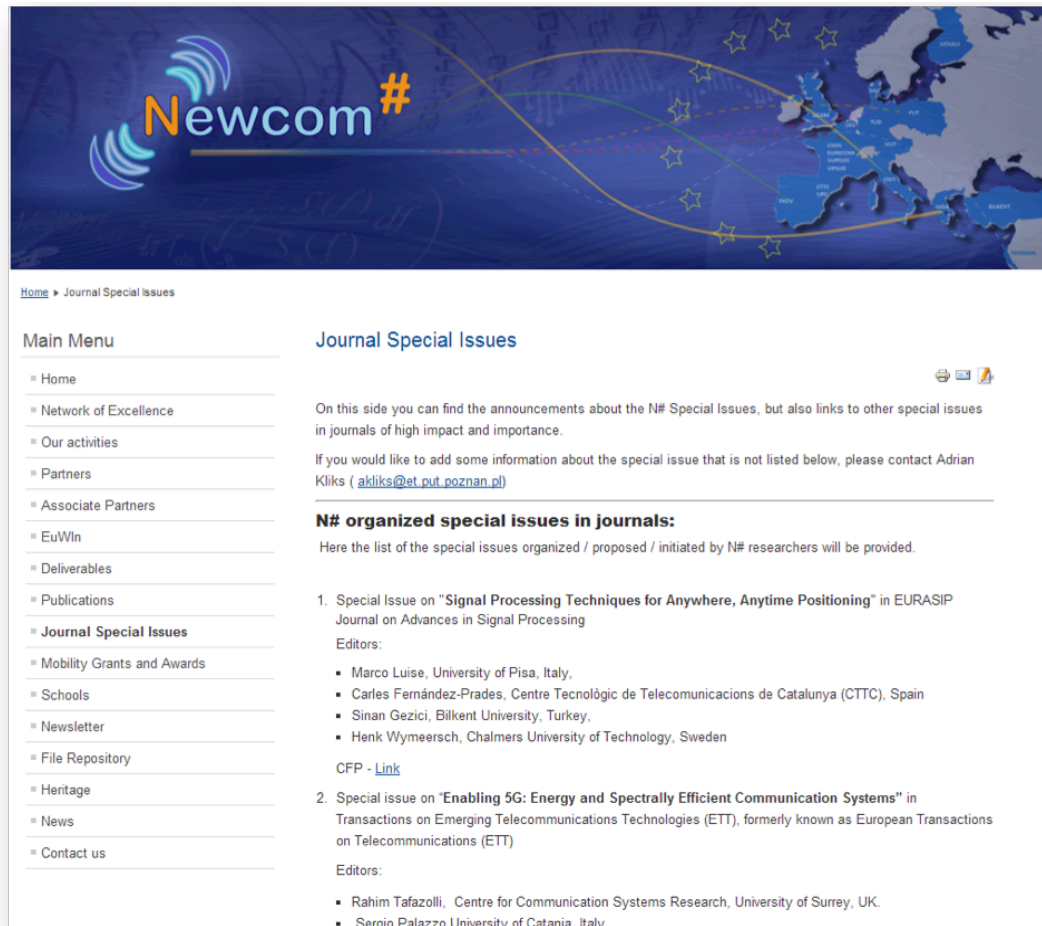
- Portals and websites:
  - NEWCOM# portal (<http://www.newcom-project.eu>).
  - Society webpages (e.g. <http://www.signalprocessingsociety.org>).
  - Publisher's or journal webpages.
  - Personal webpages.
- Newsletters:
  - NEWCOM# newsletter.
  - Societies' Newsletters.
- Mailing lists:
  - Mailing lists run by various IEEE technical committees.
  - COST2100 mailing list.
  - Personal mailing lists.
  - NEWCOM# mailing lists.

Besides, paper copies of the CFPs have been distributed in various conferences and workshops where guest editors regularly participate in the months preceding the submission deadline.

The information about the special issues of potential interest to the NEWCOM# community is disseminated via email notifications using mailing lists, but by placing such information on the project web-page. A dedicated area for Journal Special Issues was created, which is accessible by every visitor by clicking on the appropriate link on the main left menu. Interested users will find there brief announcements on the special issues open for paper submission, regardless if these are inspired or not by the NEWCOM#. In order to highlight and promote the activities performed under the auspices or at least supported by the project, the special issues edited by the partners working in NEWCOM are provided first, and are followed by the links to the other special issues.

Several emails have been also circulated among partners informing about the necessity of delivering the appropriate information on the organised special issues with the purpose of including that data on the project webpage.

Two screenshots illustrating that dedicated area on the NEWCOM portal are placed below. In the first figure one can see the part of the list of all special issues organised by the NEWCOM# partners, while the second figure shows the actual list of other open special issues.



**Figure 5.1. Screenshot from the NEWCOM# webpage showing the part of the list of the special issues inspired by the project.**



#### Other Special Issues:

1. IEEE JOURNAL on SELECTED AREAS IN COMMUNICATIONS

- [Full-duplex Wireless Communications and Networks](#) - October 15 (EXTENDED), 2013
- [Series: Cognitive Radio](#) - November 1, 2013
- [5G Wireless Communication Systems](#) - December 1, 2013
- [Deep Packet Inspection: Algorithms, Hardware, and Applications](#) - December 15, 2013
- [Wireless Communications Powered by Energy Harvesting and Wireless Energy Transfer](#) - March 1, 2014
- [Series: Smart Grid Communications](#) - EXTENDED TO October 22, 2013

2. IEEE Communication Magazine

- [Context-Aware Networking and Communications](#) - November 1, 2013
- [Energy-Efficient Cognitive Radio Networks](#) - November 1, 2013
- [Mobile Crowd Sensing \(MCS\)](#) - December 1, 2013
- [5G Networks: End-to-end Architecture and Infrastructure](#) - February 1, 2014
- [The Future of WiFi](#) - April 1, 2014
- [Recent Advances in Technologies for Extremely Dense Wireless Networks](#) May 1, 2014

3. IEEE Wireless Communications

- [Green Media: The Future of Wireless Multimedia Networks](#) - December 1, 2013
- [Multi-hop Cellular: From Research to Systems, Standards, and Applications](#) - January 15, 2014

4. EURASIP Journal on Wireless Communications and Networking

- [Special Issue on Advances In Flexible Multicarrier Waveforms For Future Wireless Communications](#), November 1, 2013
- [Special Issue on GNSS Remote Sensing](#), November 16, 2013
- [Special Issue on Security Challenges and Issues in Cognitive Radio Networks](#), December 1, 2013

5. IET Communications

▪

6. .

Figure 5.2. Screenshot from the NEWCOM# webpage showing the part of the list of the other special issues, i.e. not inspired by the project

## 6. Conclusions

To date, a total of six NEWCOM# JSIs have been implemented. Out of them, only one JSI is now open for manuscript submission and one has been already published.

Taking into consideration the unavoidable latency associated with the launch of JSIs and the time spent in the consolidation of the JRAs, the current status can be regarded as very encouraging. We expect a further increase in the number of such special issues during the last year of the project. Moreover, two books, and three book chapters have been implemented and published by major publishers like Springer, Wiley and Woodhead publishing.

After having described the current status of the on-going JSIs, books and BCs, an analysis of the activities carried out in WP3.3 has been presented. It is worth remarking that the average number of guest editors in the special issues launched so far is 3.83 with a 65.21% coming from NEWCOM# institutions. Thus, NEWCOM# institutions played a key role to keep the focus on the topics addressed within the network of excellence.

As it was expected, the per-workpackage involvement is more balanced with respect to the first 12 months of the project. Unfortunately, the per-partner involvement in the launched/planned JSIs, books and BCs is not homogeneous yet. Besides, a clear relationship between the size of the NEWCOM# institutions and their presence in the JSIs, books and BCs implemented so far can be observed. Specific actions to boost the launch of such JSIs, books and BCs and balance the per-partner involvement in these dissemination activities will be taken in the next months.

Finally, the conducted analysis indicates that also non-European institutions have been involved in launching of JSIs, books and BCs so far. Two of them are located in the US and one in Asia. Concerning the collaboration with other EC-funded project, it is worth mentioning the book entitled *Opportunistic Spectrum Sharing and White Space Access: The Practical Reality*, which is the result of a joint effort between NEWCOM# and ACORN members. However, in the coming months, further initiatives aimed at stimulating the number of partnerships with non-European institutions, as well as the collaboration with other EC-funded projects will be taken.

As far as the acknowledgement to NEWCOM# in the JSIs is concerned, the inclusion of a statement in the Guest Editorial seems to be the most popular formula. JSIs, Books and BCs were publicised via various means, namely, Journals' webpage, the NEWCOM# webpage, the NEWCOM# Newsletter, distribution through the mailing lists of the guest editors.

## 7. APPENDIX I : Call for Papers of NEWCOM# Journal Special Issues

(in chronological order)

### Transactions on Emerging Telecommunications Technologies (ETT) *Enabling 5G: Energy and Spectrally Efficient Communication Systems*

Current estimates predict that, by 2020, there will be 50 billion devices connected to Internet. As a result of the generated data traffic, the network load will be increased by three orders of magnitude compared to what operators are experiencing today. Such unprecedented burden of data delivery poses, essentially, two challenges that will need to be addressed by 5G technology. First, the coexistence of this unbelievably high number of devices requires an efficient approach to the spectrum use to overcome the, otherwise unavoidable, “spectrum crunch”. Second, the energy consumption needed to sustain such pervasive network infrastructure and wireless devices must be kept at a minimum to achieve environmental sustainability through Green communications.

Such stringent requirements on the use of spectrum and energy open a wide research area for future 5G communication technology, that can impinge on a plethora of aspects related to communication systems: from lay-out optimization at component level to large-scale network architecture designs. In this sense, viable solutions will impact both future commercial activities as well as standardization approaches.

In light of the above, the main purpose of this special issue is to promote novel approaches in analyzing, designing and optimizing energy and spectrum constrained 5G communication systems focusing on the network, link and physical layer aspects. Topics include but are not limited to:

- Physical layer solutions (e.g. large-scale MIMO, interference management, mmWave)
- Link layer (e.g. dynamic spectrum access, SON-enabled RRM, smart link adaptation)
- Network layer (e.g. packet core designs, Network virtualization, information-centric protocols, wireless mesh backhaul)
- Architecture design (e.g. software-defined networks, scalable wireless access, HetNets, multi-cell cooperation, cloud-RAN)
- Technologies (e.g. P2P backhauling, joint access/backhaul, device-to-device (both for unlicensed and licensed spectrum))
- Enablers (e.g. self-organizing networking principles)

Papers must be tailored to the problems related to 5G communication systems and explicitly consider energy and spectrally efficient techniques and algorithms. The editors maintain the right to reject papers they deem to be out of scope of this special issue. Only originally unpublished contributions and invited articles will be considered for the issue. The papers should be formatted according to the ETT guidelines [http://onlinelibrary.wiley.com/journal/10.1002/\(ISSN\)1541-8251/homepage/ForAuthors.html](http://onlinelibrary.wiley.com/journal/10.1002/(ISSN)1541-8251/homepage/ForAuthors.html). Authors should submit a PDF version of their complete manuscript via ManuscriptCentral (which can be found at <http://mc.manuscriptcentral.com/ett>) according to the timetable below.

#### Important Dates:

Submission deadline:	February 1 <sup>st</sup> , 2014
Author Notification:	June 14 <sup>th</sup> , 2014
Final Manuscript:	July 31 <sup>st</sup> , 2014
Publication:	Q4, 2014

#### Guest Editors:

Rahim Tafazolli      Centre for Communication Systems Research, University of Surrey,  
UK (r.tafazolli@surrey.ac.uk)

Sergio Palazzo      University of Catania, Italy (palazzo@diit.unict.it)

Miquel Payaró      Centre Tecnològic de Telecomunicacions de Catalunya, Spain  
(miquel.payaro@cttc.es)

Robert W. Heath Jr.      The University of Texas at Austin, TX, USA (rheath@utexas.edu)

Sergio Palazzo and Miquel Payaró are supported by the EC-funded project NEWCOM# (Network of Excellence in Wireless Communications).

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**Call for Papers**  
**IEEE Transactions on Vehicular Technology**  
**Special Section:**

*“Indoor localization, tracking, and mapping with heterogeneous technologies”*

Indoor localization, tracking, and mapping, has been gaining relevance due to widespread of devices and technologies, as well as the necessity for seamless solutions for location-based services, for example, in the field of automated guided vehicles in manufacturing lines, first-responder navigation, vehicular navigation, asset navigation and tracking, indoor unmanned vehicles, or people-movers. A current trend in addressing indoor localization, tracking and mapping is to use standard, low-cost, and already deployed technologies. These technologies are highly heterogeneous, encompassing inertial measurement units, sonar, laser, IR, visual light communications, or radiofrequency signals to name a few alternatives. The latter set typically includes WiFi, UWB, RFID, Bluetooth, NFC, 3GPP/LTE, 802.11x, digital TV, or, in general, the so-called available signals-of-opportunity. All this entails that the latest challenge in indoor localization, tracking, and mapping is not to design specialized sensors for these tasks but to design and implement data fusion methods using the already available technologies.

Data fusion in indoor localization, tracking, and mapping is a key element for further advances of the field and presents exciting challenges for signal processing practitioners and researchers. Due to the large variety of technologies and standards involved, a data fusion algorithm typically needs to account for several communication channel models, bandwidths, sampling rates, as well as asynchronicity of the recorded data. Online approaches that have been proposed are based on the Bayesian filtering methodology, including variants of the Kalman filter and more recently the much more versatile framework provided by particle filtering.. The latter allows for a general way of coping with severe nonlinearities and non-Gaussianities and of forcing the solution to be inside a map.

In this Special Section of the IEEE Transaction on Vehicular Technology, we solicit paper submissions of original works addressing fundamentals, supporting technologies, and technical issues on data fusion of heterogeneous technologies for localization, tracking and mapping. The topics not only cover the design and analysis of data fusion methodologies, but also include practical implementations and deployments.

### **Topics of interest**

This Special Section of the IEEE Transactions on Vehicular Technology aims at publishing novel results on most recent developments in data fusion for indoor localization, tracking, and mapping with emphasis on the integration of various technologies for improved performance. The topics include, but are not limited to:

- Advanced simultaneous localization, tracking, and mapping
- Advanced data fusion schemes for heterogeneous technologies
- Cooperative localization and distributed systems
- Cooperative and cloud simultaneous localization and mapping (SLAM)
- Indoor unmanned vehicles navigation
- Fundamental limits

- Online Bayesian filtering
- Methods with robust performance
- Position-dependent parameters estimation techniques
- Learning algorithms for environmental mapping
- Localization via signals-of-opportunities
- Acoustic-aided methods
- Vision-aided methods
- Hybrid IMU and magnetic pedestrian navigation
- Ultra-wideband technology
- Passive and active RFID
- Wireless sensor radar
- Localization methods for the Internet of Things
- Security and privacy issues
- Mobility models for tracking
- Testbeds and experimentation

## Submission Instruction

Authors should follow the IEEE TVT manuscript format and submission procedure which can be found at the IEEE TVT home page <http://transactions.vtsociety.org/> under Information for Authors. We recommend that the submitted papers are of length 20 pages or less (in the TVT submission format or 8 pages in final publication format). However, authors who need more space can submit papers up to 35 pages as TVT policy allows. Note that in that case extra page charges apply (see TVT website for details). Prospective authors should submit a PDF version of their complete manuscript via the journal online paper submission system at <http://mc.manuscriptcentral.com/tvt-ieee>

## Timetable

Deadline for manuscript submissions: 30 April 2014

First editorial decision: 25 July 2014

Revised manuscript due: 26 September 2014

Final editorial decision: 28 November 2014

Final papers due: 19 December 2014

Estimated publication date: First quarter 2015

## Guest Editors

**Prof. Davide Dardari**, (Corresponding Guest Editor),

Dipartimento di Ingegneria dell'Energia Elettrica e dell'Informazione - Guglielmo Marconi - (DEI) - University of Bologna, [davide.dardari@unibo.it](mailto:davide.dardari@unibo.it)

**Dr. Pau Closas**, Communications Systems Division, Centre Tecnològic de Telecomunicacions de Catalunya (CTTC), [pau.closas@cttc.cat](mailto:pau.closas@cttc.cat)

**Prof. Petar M. Djurić**, Department of Electrical and Computer Engineering, Stony Brook University, [petar.djuric@stonybrook.edu](mailto:petar.djuric@stonybrook.edu)



### Call for Papers

#### Transactions on Emerging Telecommunications Technologies (ETT) *Machine-to-Machine: An Emerging Communication Paradigm*

##### Aim and Scope:

In recent years, the number of networked machines and/or devices, such as those encountered in automatic meter readers, vending machines, or in remote monitoring applications; has dramatically increased. As a result, we have witnessed the emergence of the so-called paradigm of Machine-to-Machine (M2M) communication. M2M devices are often characterized by very modest data rates, low mobility and stringent cost requirements, along with the need to communicate over a wide area. Besides, in the coming years, M2M devices are expected to significantly outnumber voice and (often bandwidth-hungry) data terminals. All this entails a major re-design of future cellular networks, which were originally conceived with human-to-human communications in mind. This opens a wide research area for future M2M communications, including investigations on scalability, wide-area coverage, energy-efficiency, spectral-efficiency, heterogeneity, cooperation, security and inter-networking architectures. To this end, the European Telecommunication Standards Institute's M2M Technical Committee has proposed a hybrid architecture whereby cellular-enabled gateways act as traffic aggregation and protocol translation points for their capillary (i.e. wireless sensor) networks. Capillary networks, in turn, are composed of a potentially high number of devices (namely, sensors and actuators) equipped with short-range radio interfaces, often compliant IEEE802.15.4-related standards. Current standardization activities in 3GPP (Third Generation Partnership Project) encompass a number of optimizations specifically addressing machine-type communication needs. Moreover, IPSO (IP for Smart Objects) is assembling a protocol stack from standards being finalized at the IEEE and IETF.

This special issue aims at gathering recent advances in the areas of advanced M2M communication systems, and technologies, with the perspective of current M2M-related standardization activities in 3GPP, ETSI, IEEE, IETF and IPSO.

##### Topics of Interest:

The topics relevant to this special issue include but are not limited to:

- Scalable system architecture and components
- Channel and traffic modeling and methodology
- Optimization of radio access technologies and protocols for M2M communications
- Interworking and routing protocols for M2M networks
- Device and mobility management
- Data aggregation techniques and architectures for massive M2M networks
- Low-latency and energy-efficient communication protocols
- Energy-harvesting techniques for M2M devices
- Security, trust, reliability and privacy of M2M devices and services
- New M2M applications, services, and business models
- Emulation, test-beds, and field trials
- Regulatory issues



[springer.com](http://springer.com)

# EURASIP Journal on Advances in Signal Processing

**Special Issue on  
Signal Processing Techniques  
for Anywhere, Anytime Positioning**



**SpringerOpen** 



The Special Issue will showcase the latest research results on signal processing for ubiquitous positioning, and in particular on the techniques to increase the accuracy, availability, and reliability of position indication of a user terminal, including indoor environments.

Information about the position of a mobile wireless device turns out to be the key for the development and deployment of a myriad of emerging applications, ranging from emergency and security services to tourist information, from transportation to selective advertisement, and so on. The workhorse of positioning systems is certainly GNSS (Global Navigation Satellite Systems), which turns out to be insufficient for a number of applications, typically indoor and/or precision positioning. Other technologies are rapidly catching up, like those based on signals from cellular, Wi-Fi and/or on Bluetooth networks, spurred by the boom of low-cost smartphones. Still, the issue of anywhere, anytime positioning based on radio techniques remains unsolved, especially in indoor applications, and in general with the degree of coverage, reliability, and accuracy that applications (and imagination) demand.

In parallel, we also see that the signal processing capabilities of positioning terminals is ever-growing, with manufacturers steadily implementing more sophisticated algorithms for signal detection, parameter estimation, positioning, and navigation even on low-cost devices. This signal processing contents increase may play a pivotal role in solving the anywhere, anytime issue mentioned above. We refer in particular to the most modern techniques for distributed and cooperative localization of wireless terminals, to new approaches to data fusion and hybridization of sensors, to the opportunistic use of ubiquitous radio signals (like those of cellular networks and digital TV), and all factors that increase the availability, accuracy, and reliability of current GNSS-based positioning.



## Call for Papers

*Journal of Communications and Networks*  
<http://jcn.or.kr>

JCN SPECIAL ISSUE ON

## ADVANCES IN CHANNEL CODING

PUBLICATION DATE: August 2015

Since the invention of turbo codes in 1993 there has been an enormous interest and progress in the field of capacity approaching code constructions. Many classical constructions have been replaced by newer, better performing codes with feasible decoding complexity. Most of these modern code constructions, such as turbo codes, Gallager's low-density parity-check (LDPC) codes and their generalizations, can be modeled by sparse graphical models. Spatial coupling of sparse graphical models has in the last years attracted a lot of interest due to the threshold saturation phenomenon, which leads to capacity achieving performance with iterative message passing decoding. Polar codes are a recently discovered class of capacity achieving codes that are formed by an explicit construction based on a phenomenon called channel polarization. These codes, too, have various low-complexity decoding algorithms based on message passing on a sparse graph that has a recursive structure similar to that of fast transforms in signal processing.

Despite the enormous advances in channel coding in the last two decades, the state-of-the-art in this area is far from meeting the challenges of the near-future communication systems in terms of throughput, performance, robustness, flexibility and energy consumption. To give one example, it is unclear how current forward error-correction coding (FEC) techniques will scale to the 100+ GB/s data rates foreseen for wireless backhaul communications in the near future. New code constructions and algorithms as well as novel concepts may have to replace the techniques that we use today.

This Special Issue therefore seeks original research articles, as well as expository and survey papers, addressing the challenges of future channel coding schemes. Examples of topics of interest:

- ✓ New code constructions and algorithms addressing the challenges of future communication systems
- ✓ Efficient decoding algorithms in terms of complexity and energy consumption
- ✓ Binary and non-binary coded modulation for spectrally efficient transmission
- ✓ Coding techniques for multi-terminal and cooperative communications
- ✓ Analysis and bounds on trade-offs in performance, latency, complexity and energy consumption
- ✓ Survey papers assessing the state-of-the-art in FEC vis-a-vis future challenges

Continuing JCN's tradition of fast turnaround together with full peer reviews, a tentative schedule is set as follows:

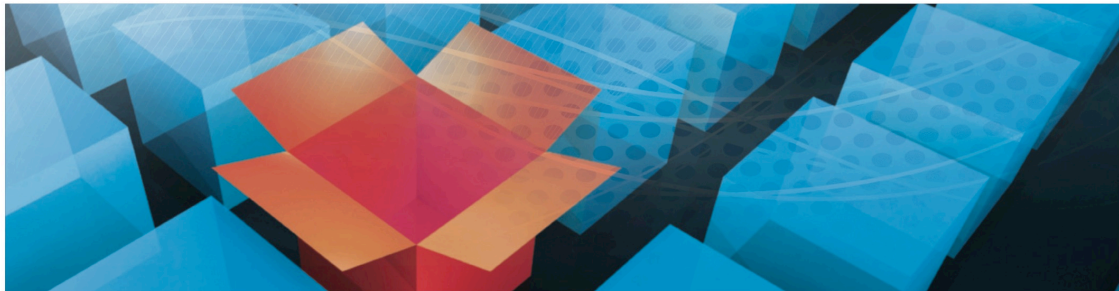
<b>December 15, 2014</b>	Electronic manuscript (.ps or .pdf) submission to JCN website [An earlier note to editors with intent to submit will be appreciated.]
<b>February 15, 2015</b>	Reviews returned to authors. Papers will be either accepted, rejected, or returned to the authors with requests for changes
<b>April 1, 2015</b>	Final revised manuscript due
<b>August 5, 2015</b>	Special Issue published

**Prof. Erdal Arikan, Bilkent University, Turkey, [arikan@ee.bilkent.edu.tr](mailto:arikan@ee.bilkent.edu.tr)**  
**Prof. Michael Lentmaier, Lund University, Sweden, [michael.lentmaier@eit.lth.se](mailto:michael.lentmaier@eit.lth.se)**  
**Prof. Guido Montorsi, Politecnico di Torino, Italy, [guido.montorsi@polito.it](mailto:guido.montorsi@polito.it)**

Electronic submissions should be made through <http://mc.manuscriptcentral.com:80/jcommnet>. Information about submissions is available on the JCN web site, <http://mc.manuscriptcentral.com/jcommnet>. Please direct inquiries and intent to submit notifications to the Lead Guest Editor (email: [arikan@ee.bilkent.edu.tr](mailto:arikan@ee.bilkent.edu.tr)).

JCN is a high-quality bimonthly archival journal, published by the Korean Institute of Communications and Information Sciences with the technical co-sponsorship of the IEEE Communications Society, covering the fields of Communication Theory and Systems, Wireless Communications, and Networks and Services. JCN began publication in March 1999.





# EURASIP Journal on Wireless Communications and Networking

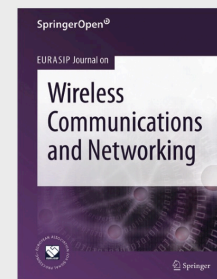
Special Issue on  
Technical advances in the design and  
deployment of future heterogeneous networks

Heterogeneous Networks (HetNets) that combine cells from various sizes ranging from macrocells to different kinds of small-cells are widely seen as one of the approaches that will be used to solve the problem of rapidly increasing data traffic in cellular networks.

Based on such observation, this special issue focuses on the crucial aspects of practical design and management issues for heterogeneous networks, including energy and bandwidth efficiency of multi-tier wireless heterogeneous networks as well as interference and radio resource management algorithms.

## Potential topics include, but are not limited to:

- PHY/MAC/Cross-layer design of future heterogeneous networks
- Interference management and mitigation issues for HetNets
- Cognitive technologies for small-cells
- Game theoretic algorithms for HetNets
- Energy efficient communications and green HetNets
- Backhaul design for HetNets
- Traffic offloading issues
- SON algorithms for HetNets
- Resource allocation and power control algorithms for HetNets
- Access schemes for femtocells/picocells
- Vertical handover solutions involving HetNets
- Cooperative transmission and relay selection methods for HetNets
- Carrier aggregation in heterogeneous networks
- CoMP techniques in heterogeneous networks
- Spectrum sharing for heterogeneous networks



Call for  
Papers

## Submission instructions:

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