

# Call for Papers

# 9th International Workshop on Broadband Wireless Access

December 9th 2013, in conjunction with IEEE GLOBECOM 2013, Atlanta, USA

In the next decade, we will not only see an exponential increase in the demand of wireless broadband capacity, with predictions on traffic growth ranging from x100 to x1000, but we will also see a large diversification in the applications and communication scenarios requiring broadband wireless access. With the advent of the Internet of Things, at least an order of magnitude more devices will require wireless connectivity anytime and anywhere with the cloud. On the other hand, it is likely to see more localized and context-aware communication between humans or devices in close proximity, where direct but network-facilitated device-to-device communication will play a bigger role, and where hence the classical function split between the cloud, network infrastructure and devices may have to be rethought. The question arises whether the evolution of current standards such as LTE-Advanced is sufficient to address these needs, or if more radical, possibly non-backward compatible approaches are needed.

The 9th Broadband Wireless Access full day workshop will provide a forum for the exchange and discussion of new research results and for the pragmatic assessment of the usage of innovative technologies in the broadband wireless access domain. It will cover a broad range of topics including, but not limited to, those listed below:

#### Novel application and communication scenarios

Traffic and mobility models, propagation models for novel deployment scenarios, edge computing, context and application-aware communication

## Novel physical layer techniques

New waveforms, non-orthogonal multiple access schemes, PHY concepts facilitating machine-type communications (MTC) and direct device-to-device (D2D) communication

#### Novel MAC design for broadband wireless access

Flexible and programmable MAC design, collaborative and cooperative MAC schemes, MAC for user/control plane split, MAC for centralized/decentralized schemes

# Further evolution of multi-antenna and cooperative communications

Massive MIMO communications, interference alignment techniques, full-duplex radio

# IMPORTANT DATES:

Paper submission: July 7th, 2013 Author notification: Sept. 1st, 2013 Camera-ready manuscript: Oct 1st, 2013

#### PAPER SUBMISSION:

Papers should follow the 2-column IEEE conference template and not exceed 6 pages (1 additional page is possible for an overlength fee of \$100 due upon paper acceptance), and be submitted through EDAS (<a href="www.edas.info">www.edas.info</a>  $\rightarrow$  Submit paper  $\rightarrow$  GC13 WS – BWA). Accepted papers will be published on IEEEXplore. At least one author per accepted paper must register at the full workshop rate.

#### **GENERAL CHAIRS:**

Dr. Patrick Marsch, Nokia Siemens Networks, Poland Dr. Andreas Maeder, NEC Laboratories Europe, Germany

#### TPC CHAIRS:

Dr. Arun Ghosh, AT&T Labs, USA Prof. Giridhar K, IIT Madras, India Dr. Peter Fertl, BMW Group Research & Techn., Germany

## STEERING COMMITTEE:

Prof. Thomas M. Bohnert, Zurich Univ. of Appl. Sciences, Switzerland Dr. Dirk Staehle, DOCOMO Communications Laboratories Europe, Germany Dr. Gabor Fodor, Ericsson Research, Sweden

# Management of dense, heterogeneous networks

Novel interference and mobility management concepts, possibly incorporating MTC or D2D communications, novel cell concepts, e.g. regarding user/control plane split

### Novel forms of spectrum access and usage

Cognitive and dynamic spectrum management techniques, mm-Wave for backhaul and access links, dynamic and opportunistic carrier aggregation schemes

#### Novel broadband wireless access architecture concepts

Architectures for B4G networks and cloud RAN, cross-layer optimization techniques, QoS/QoE management, cellular network congestion management schemes

## Pragmatic assessment / experimental concept evaluation

Lab- / field trial results and their comparison to simulation and stochastic geometry based analysis, economical assessment of broadband wireless access concepts

#### **TECHNICAL PROGRAM COMMITTEE:**

Neda Aboutarab (Australian National University), Abdulkareem University), Mari Carmen Aguayo-Torres (University of Malaga), Adinoyi (Carleton Khalid Al-Begain (University of Glamorgan), Guiseppa Alfano (Politecnico di Torino), Tara Ali Yahira (University Paris Sud), Sergey Andreev (Tampere University of Technology), Guiseppe Avellone (ST Microelectronics), Leonardo Badia (Universita degli Studi di Padua), Francisco Barcelo-Arroyo (Universitat Politecnia de Catalunya), Marco Belleschi (Ericsson), Francisco Cercas (ISCTE-IUL), Swades De (IIT Delhi), Antonio de la Oliva (Universidad Carlos III de Madrid), Guido Dietl (University of Applied Sciences Landshut), Mian Dong (Samsung), Klaus Doppler (Nokia), Michael Einhaus (Panasonic), Mauro Femminella (University of Perugia), Marco Fiore (National Research Council of Italy), Frank Frederiksen (Nokia Siemens Networks), Sudhanshu Gaur (Hitachi America), Michael Grieger (TU Dresden, Germany), Ilkka Harjula (VTT, Finland), Peyman Hesami (University of Notre Dame), Patrick Hosein (University of the West Indies), Joakim Jalden (KTH Royal Institute of Technology), Eduard Jorswieck (Dresden University of Technology), Volker Jungnickel (Fraunhofer Heinrich Hertz Institute), Juha Karjalainen (Renesas Mobile Europe), Witold Krzymien (University of Alberta / TR Labs), Ying Li (Samsung Telecommunications America), Jia-Chin Lin (National Central University), Giridhar Mandayam (Qualcomm), Gerald Matz (Vienna University of Technology), Christoph Mecklenbräuker (Vienna University of Technology), Guoweng Miao (KTH Royal Institute of Technology), Melody Moh (San Jose State University), Keivan Navaie (University of Leeds), Ai-Chun Pang (National Taiwan University), Klaus Pedersen (Nokia Siemens Networks), Simone Redana (Nokia Siemens Networks), Mark Reed (Australian National University), Markku Renfors (Tampere University of Technology), Vinay Ribiero (IIT Delhi), Peter Rost (NEC Laboratories Europe), Jorge Sa Silva (University of Coimbra), Pierluigi Salvo Rossi (Second University of Naples), Harru Skianis (University of the Aegean), Susanna Spinsante (Universita Politecnica delle Marche), Tommy Svensson (Chalmers University of Technology), Hwee Pink Tan (Institute for Infocomm Research), Hidekazu Taoka (DOCOMO Euro-Labs), Sibel Tombaz (KTH Royal Institute of Technology), Stefan Valentin (Bell Labs), Fernando Velez (University of Beira Interior), Alexey Vinel (Tampere University of Technology), Jens Voigt (Actix), Florian Wamser (University of Wuerzburg), Dirk Wuebben (University of Bremen), Wei Zhang (University of South Wales)

FURTHER INFORMATION: http://bwaws.org/GLOBECOM2013