



Conference & Exhibition

ICT-MobileSummit 2009

Final Programme

Santander - Spain

10 - 12 June 2009

Photograph Copyright (c) Santander Convention Bureau

Supported by

European Commission
Information Society and Media



Diamond Sponsor

Bronze Sponsor



Technical Co-Sponsor



Introduction

ICT-MobileSummit 2009 Conference & Exhibition takes place 10 - 12 June 2009 in Santander, Spain. This is the eighteenth in a series of Annual Conferences supported by the European Commission, which regularly attracts over 600 delegates from industry and research to share experiences and research results, identify future trends, discuss business opportunities and identify opportunities for international research collaboration under the ICT Theme of Framework Programme 7 (FP7). It will thus contribute to showcasing European research in the field, and position it within the multiplicity of related initiatives supported in other regions of the world.

ICT-MobileSummit 2009 will address all the challenges of building the Future Internet, which will be based on mobile, wireless and fixed broadband communications infrastructures. The impact of such Future Networks on the underlying Internet infrastructure will continue to be emphasized in the **2009** Summit. Technology enabling services and applications for billions of users involving trillions of interconnected potentially mobile devices will be addressed at the event.

The Scientific Programme incorporates all the key constituents of future communication networks including the themes Radio Access and Spectrum, Converged and Optical Networks, and Future Internet Technologies.

Supported by the European Commission and eMobility, the **ICT-MobileSummit's** reputation is based on high quality paper and panel sessions that showcase original results in all areas of wireless communications systems and networks, including Mobile and Fixed, Terrestrial and Satellite.

The goals of the **ICT-MobileSummit** are Community Building to facilitate research cooperation and successful exploitation of research results, to stimulate take-up of RTD results by industry, to promote knowledge sharing between commercial and research organisations and to exchange experiences about the current state of the art at a sectoral, national or regional level.

Who will you meet?

ICT-MobileSummit 2009 Conference & Exhibition attracts practitioners and researchers from leading commercial and research organisations around the world. Unlike many research conferences, **ICT-MobileSummit 2009** provides an opportunity to meet with senior managers, practitioners, project managers, software engineers and researchers. Delegates and speakers attend to share knowledge, experience and lessons learnt, and network with their peers from around the world.

ICT-MobileSummit 2009 Conference & Exhibition also provides the unique opportunity to identify partners and opportunities to co-operate in international research projects co-funded by the European Commission under Framework Programme 7 (FP7) and in particular, the FP7-ICT Theme.

The Venue

ICT-MobileSummit 2009 Conference & Exhibition takes place in Palacio de La Magdalena, Santander.

The Programme

The 3-day programme features an invigorating mix of case studies and technical papers. As well as three plenary sessions and panel sessions focused on Future Internet and Spectrum Regulation, delegates may participate in 30 thematically focused parallel sessions featuring different aspects of Radio Access and Spectrum, Converged and Optical Networks, and Future Internet Technologies.

The Conference Programme is complemented by a demonstration and technology exploitation focused Exhibition, a Welcome Networking Reception which will take place on Wednesday 10 June 2009 and a Conference Dinner on Thursday 11 June 2009.

The Conference Programme is subject to change and the **ICT-MobileSummit 2009** Organising Committee reserves the right to alter the contents, venue and/or speakers. The Final Programme will be published in April. Please view the Online Programme for the most up-to-date information.

Networking

Networking is a key feature of the **ICT-MobileSummit** Conference Series. Paper sessions are designed to maximise knowledge sharing by providing time for interactive discussions during the conference programme itself. Coffee breaks will take place in the Exhibition area to maximise exposure for technology demonstrations and posters and to facilitate informal one-on-one and small group discussions following paper or poster sessions. Social events are designed to facilitate informal discussion.

There are a number of dedicated networking areas around the venue with tables and chairs to facilitate short informal meetings.

The Delegate Showcase on the Conference Portal allows registered delegates, speakers and exhibitors to publish their own short profile and research interests to facilitate networking before, during and after the conference. Leverage this functionality to contact potential partners in advance and arrange to

meet during the conference.

Conference Proceedings

The **ICT-MobileSummit 2009** Conference Proceedings will be published on CD-ROM and the Conference Portal. Each delegate will receive a free copy of the conference proceedings at Registration.

Following the conference, registered delegates will have access to all PowerPoint presentations, which will be published on the Conference Portal.

Security, Health and Safety

Please wear your name badge for all activities during **ICT-MobileSummit 2009**, as it is your identification and allows access to the facilities offered. While the Conference and Exhibition is not open to the general public, it is still necessary to take care of bags, personal computers and other personal belongings.

While security staff will be present at the conference venue, the Organising Committee cannot accept any responsibility for any losses incurred or personal health and safety. Delegates should ensure they have personal health insurance and take due care when exploring Santander. Any special needs or requirements should be notified to the Conference Secretariat as far in advance of the event as possible.

Hotel Accommodation

Conference rates have been negotiated for delegates and accompanying persons with four hotels in Santander that are within 5 - 10 mins walking distance from the conference venue: Hotel Real, Gran Hotel Victoria, Hotel Santemar and Hotel Hoyuela. More information on the Conference hotels is published on the portal.

Conference hotel accommodation should be booked online on the **ICT-MobileSummit 2009** Conference portal as part of conference registration.

Delegates are strongly recommended to book their accommodation early as it will be allocated on a first-come, first-served basis. Hotel accommodation can only be confirmed upon receipt of payment. For further information, please visit:

www.ICT-MobileSummit.eu/2009

Networking Reception - 10 June

The Organising Committee is pleased to announce that the City of Santander will host a Networking Cocktail Reception on Wednesday 10 June from 18:45 - 19:45 in the Exhibition area. Delegates should indicate participation in this event as part of online registration.

Conference Dinner - 11 June

The Organising Committee is pleased to announce that the Conference Dinner will be held on Wednesday 11 June at 20:00 in Hotel Real.

The venue has a fixed capacity and delegates are requested to confirm their participation no later than 26 May as part of online registration.

Pre-Conference Workshops

A number of pre-conference workshops will take place on Tuesday 09 June at the **ICT-MobileSummit 2009** venue: Palacio de La Magdalena.

Short **Radio Access and Spectrum Cluster meeting** followed by breakout into four full day RAS Workshops:

- *Dynamic Spectrum Management in Cognitive Radio Networks*
- *Channel Coding and Cooperation in Wireless Communications*
- *Self-organisation for Beyond 3G Wireless Networks*
- *Carrier Grade Wireless Mesh Networks*
- *Putting Mobile Services into Context (morning)*
- *Future Internet Architectures: New Trends in Service Architectures*
- *Converged and Optical Networks Cluster meeting (afternoon)*

It is necessary for all participants (presenters and delegates) in these workshops to pre-register in advance as part of online registration.

All participants will pay a contribution of 50 euro towards the cost of two coffee breaks, lunch and name badge. Delegates can attend multiple workshops during the day.

More information is available at

www.ICT-MobileSummit.eu

Organising Committee

- **Miriam Cunningham**, IIMC Ltd, Ireland
- **Paul Cunningham**, IIMC Ltd, Ireland
- **Prof. Luis Muñoz**, University of Cantabria, Spain



Conference Secretariat

IIMC Ltd
13 Docklands Innovation Park, 128 East Wall Road,
Dublin 3, Ireland
Tel: +353 (0) 1 8170607
Fax: +353 (0) 1 8170606
e-mail: secretariat@ICT-MobileSummit.eu

Conference Portal & Delegate Showcase

www.ICT-MobileSummit.eu/2009

Plenary Session Speakers



Antti Peltomäki
European Commission



Joao da Silva
European Commission



Federico Gutiérrez-Solana
University of Cantabria



Eduardo Fernandez Rojo
Research in Motion



Christen Krogh
Opera Software



Philippe Martineau
Prologue



Katalin Szomolányi
Magyar Telekom



Dave Faulkner
BT

Plenary Speakers confirmed as at 26 May include:

- **Antti Peltomäki**, Deputy-Director General, DG Information Society and Media, European Commission
- **Dr Joao Schwarz da Silva**, Director, DG Information Society and Media, European Commission
- **Mr Bernardo Lorenzo Almendros**, DG Telecommunications, Ministry of Industry, Commerce & Tourism
- **Federico Gutiérrez-Solana Salcedo**, Rector, University of Cantabria
- **Ms. Cristina Álvarez**, Director of Technology and Services Development in Telefónica Spain
- **Eduardo Fernandez Rojo**, Director, Research in Motion, Spain
- **Christen Krogh**, Chief Development Officer, Opera Software, Norway
- **Prof. Ed Candy**, Technology Director, Hutchison 3G, United Kingdom
- **David Wood**, Catalyst & Futurist, Leadership Team, Symbian Foundation
- **Philippe Martineau**, Board Director, Prologue, France
- **Katalin Szomolányi**, Magyar Telekom, Hungary
- **Dave Faulkner**, BT, United Kingdom
- **Laurent Herault**, CEA, France

Technical Programme Committee

A distinguished Programme Committee has been formed to review and provide feedback on papers and presentations, and to chair sessions.

The **ICT-MobileSummit 2009** Technical Programme Committee includes

- **Henrik Abramowicz**, Ericsson, Sweden
- **Angeliki Alexiou**, Bell Labs, Alcatel-Lucent, UK
- **Prof. Albert Banchs**, Universidad Carlos III de Madrid, Spain
- **Prof. Nigel Baker**, UWE Bristol, United Kingdom
- **Maurice Bellanger**, CNAM, France
- **Prof. Nicola Blefari Melazzi**, Università degli Studi di Roma - Tor Vergata, Italy
- **Dr. Sergio Bovelli**, EADS Innovation Works, Germany
- **Jose M^o Cabero Lopez**, ROBOTIKER-Tecnalia, Spain
- **Luis Campoy**, Telefonica, Spain
- **Prof. Augusto Casaca**, Inesc-ID, Portugal
- **Prof. Luis Correia**, Instituto Superior Technico, Portugal
- **Miriam Cunningham**, IIMC Ltd, Ireland
- **Paul Cunningham**, IIMC Ltd, Ireland
- **Francois Daoust**, W3C, France
- **Prof. Klaus David**, Kassel University, Germany
- **Dr. Hakan Delic**, TU Delft, Netherlands
- **Prof. Panagiotis Demestichas**, University of Piraeus, Greece
- **Zoran Despotovic**, DOCOMO, Germany
- **Prof. Bart Dhoedt**, Ghent University - IBBT, Belgium
- **Dr. Ralf Eickhoff**, Dresden University of Technology, Germany
- **Atilio Gameiro**, Instituto Telecomunicacoes, Portugal
- **Pierpaolo Giacomini**, Hitachi Europe, France
- **Dr Savvas Gitzenis**, CERT, Greece
- **Laurent Herault**, CEA-Leti, France
- **Uwe Herzog**, Eurescom, Germany
- **Dr Dirk Jaeger**, Technical University Braunschweig, Germany
- **Jean-Philippe Javaudin**, France Telecom, France
- **Nigel Jefferies**, Vodafone, UK
- **Prof. Peter Jung**, Universität Duisburg-Essen, Germany
- **Stefan Kaiser**, DoCoMo Euro-Labs, Germany
- **Prof. Thomas Kaiser**, Leibniz University, Germany
- **Prof. Raimo Kantola**, Helsinki University of Technology, Finland
- **David Kennedy**, Eurescom, Germany
- **Dr. Klaus-Michael Koch**, Technikon Forschungs- und Planungsgesellschaft mbH, Austria
- **Wolfgang Koenig**, Alcatel Lucent, Germany
- **Dr. Ibrahim Korpeoglu**, Bilkent University, Turkey
- **Dr Vinay Kolar**, RWTH Aachen University, Germany
- **Georgios Kormentzas**, University of the Aegean, Greece
- **Dr Dirk Kutscher**, Universität Bremen, TZI, Germany
- **Erik G. Larsson**, University of Linköping, Sweden
- **Matti Latva-aho**, University of Oulu, Finland
- **Dr. Roberto Llorente**, UPV, Spain
- **Prof. Marco Luise**, University of Pisa, Italy
- **Prof. Garik Markarian**, RINICOM, United Kingdom
- **Prof. Ingrid Moerman**, IBBT-Ghent University, Belgium
- **Dr. Klaus Moessner**, CSSR, University of Surrey, UK
- **Dr. Werner Mohr**, Nokia Siemens Networks, Germany
- **Dr. Paulo Monteiro**, NSN/University of Aveiro, Portugal
- **Prof. Paul Müller**, University of Kaiserslautern, Germany
- **Prof. Luis Muñoz**, University of Cantabria, Spain
- **Norbert Niebert**, Ericsson, Sweden
- **Mícheál O'Foghlú**, TSSG, WIT, Ireland
- **Dimitri Papadimitriou**, Alcatel-Lucent Bell, Belgium
- **Riccardo Pascotto**, Deutsche Telekom, Germany
- **Dr. Radoslaw Piesiewicz**, Create-Net, Italy
- **Jean-Charles Point**, JCP-Consult, France
- **Prof. George C. Polyzos**, Athens University of Economics and Business, Greece
- **Dr Mikhail Popov**, Acreo AB, Sweden
- **Prof Ramjee Prasad**, Aalborg University, Denmark
- **Prof. Josep Prat**, UPC, Spain
- **Mirko Presser**, University of Surrey, UK
- **Ronald Raulefs**, DLR, Germany
- **Janne Riihijarvi**, RWTH Aachen University, Germany
- **Maria Angeles Callejo Rodriguez**, TID, Spain
- **Susana Sargento**, University of Aveiro, Portugal
- **Dr. Oriol Sallent**, UPC, Spain
- **Reijo Savola**, VTT, Finland
- **Josy Sayir**, FTW, Austria
- **Hans Schotten**, University of Kaiserslautern, Germany
- **Dr Julian Sesena**, ROSE Vision, Spain
- **Prof. Vasilios Siris**, FORTH-ICS, Greece
- **Prof. Rahm Tafazolli**, University of Surrey, UK
- **Prof. Ralf Tönjes**, University of Applied Sciences Osnabrück, Germany
- **Prof. Peter Van Daele**, IBBT, Belgium
- **Prof. Hans Van den Berg**, TNO ICT, Netherlands
- **Prof. Alessandro Vanelli-Coralli**, University of Bologna, Italy
- **Dr. Liesbet Van der Perre**, IMEC, Belgium
- **Josep Vidal**, UPC, Spain
- **Prof. Konstantinos Voudouris**, TEI of Athens, Greece
- **Prof. Jiangzhou Wang**, University of Kent, UK
- **Dr Fiona Williams**, Ericsson, Germany
- **Prof. Djamel Zeghlache**, Institut National des Telecommunications, France
- **Prof. Sven Zeisberg**, University of Applied Sciences Dresden, Germany



Wednesday, June 10, 2009

08:00

Registration

09:00 Plenary 1a

Welcome Address

Chair: [Joao da Silva, European Commission, Belgium](#)**Welcome**

Paul Cunningham, IIMC Ltd, Ireland & Prof. Luis Muñoz, University of Cantabria, Spain

Mr Federico Gutiérrez-Solana Salcedo, Rector, University of Cantabria

Mr Miguel Ángel Revilla Roiz, President of Cantabria

Mr Iñigo de la Serna Hernáiz, Mayor of Santander

Mr Bernardo Lorenzo Almendros, DG of Telecommunications, Ministry of Industry, Commerce and Tourism

Keynote Presentation

Mr Antti Peltomäki, Deputy Director-General, DG Information Society and Media, European Commission

10:00 Plenary 2a [Mobile Future Internet - Where will we be 10 years from now?](#)**Mobile Internet - A European Perspective**

João da Silva, European Commission, Belgium

The Future of Telco. Where will the Customer Take Us?

Ms. Cristina Álvarez, Director of Technology and Services Development, Telefónica Spain

11:00 Coffee Break

Exhibition & Networking

11:30 Session 3a

[Management of Cognitive Systems](#)Chair: [Jiangzhou Wang, University of Kent, United Kingdom](#)**A Case for Generic Interfaces in Cognitive Radio Networks**

Vinay Kolar, Department of Wireless Networks, RWTH Aachen University, Germany

Cognitive Resource Management for Wireless LAN within the Home

Timothy Farnham, Toshiba Research Europe Ltd, United Kingdom

Dynamic Spectrum Access and Management for Wireless Home Networks

Zhou Wang, European Microsoft Innovation Center, Germany

Cognitive Pilot Channel: A Radio Enabler for Spectrum Awareness and Optimized Radio Resource Management

Jordi Perez-Romero, Universitat Politècnica de Catalunya, Spain

Rule-based Algorithms for Self-x Functionalities in Radio Access Networks

Manfred Rosenberger, Deutsche Telekom Laboratories, Germany

11:30 Session 3b

[Advanced Physical Layer Techniques](#)Chair: [Jossy Sayir, FTW Austria, Austria](#)**Advanced Technologies for Next-Generation WiMAX Systems: WiMAGIC Contributions**

Guillaume Vivier, Sequans Communications, France

Use of Histograms at Decoder Outputs to Evaluate Performance of Turbo Codes

Shigeo Nakajima, Niigata Institute of Technology, Japan

First and Second Order Statistics of Synthetic Rain Attenuation Time Series

László Csurgai-Horváth, Budapest University of Technology and Economics, Hungary

Performance Evaluation of Non-Binary LDPC DAVINCI Codes

Stephan Pfletschinger, CTTC, Spain

DVB-C2 – a New Transmission System for Hybrid Fibre Coax Networks

Dirk Jaeger, Technical University Braunschweig, Germany

11:30 Special Session 3c

4WARD

Chair: [Luis Muñoz, University of Cantabria, Spain](#)**Towards A Future Internet Architecture**

Norbert Niebert, Ericsson, Germany

Towards Interoperability among Virtual Networks in the Future Internet

Liang Zhao, TZI ComNets, University of Bremen, Germany

Network Management Architecture in the Future Internet

Majid Ghader, University of Surrey, United Kingdom

Paths to Mobility Support in the Future Internet

Philippe Bertin, Orange Labs, France

Analysis of Path Splitting and Migration in the Virtualisation of Mobile Substrates

Gorka Hernando, ROBOTIKER-Tecnalia, Spain

11:30 Session 3d

[Gigabit Home and In-Building Networks](#)Chair: [Mikhail Popov, Acreo AB, Sweden](#)**Convergence at Inter-MAC Layer: First Implementation Analysis**

Vincenzo Suraci, CRAT, Italy

Gigabit Home Networking with Large-core Polymer Optical Fibers

Silvio Abrate, Istituto Superiore Mario Boella, Italy

Guidelines to Building Future-proof Home Networks

Claus Popp Larsen, Acreo, Sweden

Performance Analysis of OFDM Modulation Formats for Multimode Direct Detection Optical Links

Roberto Gaudino, Politecnico di Torino, Italy

PLC Channel Transfer Function Models for the OMEGA ICT Project

Pascal Pagani, France Telecom Orange Labs, France

11:30 Poster Session 3e

[Advanced Radio Technologies](#)Chair: [Ralf Eickhoff, Dresden University of Technology, Germany](#)**Performance of Short Polar Codes under ML Decoding**

Erdal Arıkan, Bilkent University, Turkey

Simplified RF Architectures for Analogue Antenna Combining

Ignacio Santamaria, University of Cantabria, Spain

Low Complexity Maximum Likelihood Detection in Zero-IF OFDM-based Transceivers

Liesbet Van der Perre, IMEC, Belgium

Multihop Relay Stations: An MRBS-RS Link-Level Performance

Konstantinos Voudouris, Technological Educational Institution (TEI) of Athens, Greece

Improving Downlink Performance by Reusing the Subcarriers within the Cell

Muhammad Ali Imran, University of Surrey, United Kingdom

24 GHz UWB-over-Fiber system for Simultaneous Vehicular Radar and Communications

Roberto Llorente, Universidad Politécnica de Valencia, Spain

Simulation Framework for Performance Evaluation of RF Antenna Combining Systems

Michael Wickert, Dresden University of Technology, Germany

COST IC0603 ASSIST: Coordinating the Antenna Research for Next Generation Radio System

Marta Martínez-Vázquez, IMST GmbH, Germany

Complexity Comparison of Non-Binary LDPC Decoders

Emmanuel Boutillon, UBS, France

3D Duo Binary Turbo Decoder Hardware Implementation

Timo Lehnigk-Emden, University of Kaiserslautern, Germany

Multilayer Spatial Multiplexing in Next-generation WiMAX

Alberto Tarable, Politecnico di Torino, Italy

13:15 Lunch

Exhibition & Networking

14:30 Special Panel Session 4a

[Towards a Mobile-Friendly Internet](#)Chair: [Paulo de Sousa, European Commission, Belgium](#)**Not-Mobile-IP: How to Change the Internet Protocol to Support Mobility**

Dr. Krishan Sabnani, Senior Vice President Alcatel-Lucent Bell Laboratories, United States

It is Moving, Sensing, and Communicating: A View to Future Mobile Internet

Prof. Petri Mahonen, RWTH Aachen University, Germany

Internet Resource Pooling for Mobile Devices

Dr. Lars Eggert, Principal Scientist, Nokia Research Center, Finland
Mobility and the Internet: Quick Fixes or Clean Slate Solutions?
Dr. Heinrich Stüttgen, Vice President, NEC Laboratories Europe, Germany
Panel Discussion

16:15 Coffee Break Exhibition & Networking

16:45 Session 5a Cooperative and Distributed Algorithms

Chair: [Ronald Raulefs, DLR e.V., Germany](#)

Experimental Study of Spectrum Sensing Based on Distribution Analysis

Mohamed Ghozzi, EURECOM, France

An Asymptotical Approximation of the Outage Probability for Distributed MIMO Systems

Fabien Heliot, University of Surrey, United Kingdom

Distributed Routing and Power Allocation for IDMA Applied in Multi-Hop Wireless Networks

Hendrik Schoeneich, Qualcomm CDMA Technologies GmbH, Germany

Base Station Cooperation in Multiple Input Multiple Output (MIMO) Orthogonal Frequency Division Multiple Access (OFDMA) Systems

Defne Aktas, Bilkent University, Turkey

Power Allocation for multiuser Nonregenerative Cooperative Communication under Various Levels of Channel State Information

Reza Hoshyar, University of Surrey, United Kingdom

16:45 Session 5b Radio Resource Management

Chair: [Panagiotis Demestichas, University of Piraeus, Greece](#)

Comparison of BER-based and SNR-based Chunk Allocation in OFDMA Systems

Huilong Zhu, University of Kent, United Kingdom

Requirements for Radio Resource Management in Multi-cell WiMedia Networks

Frank Leipold, EADS Innovation Works, Germany

Capacity Investigation of BFWA Networks Applying Adaptive Site Diversity Techniques

János Bitó, Budapest University of Technology and Economics, Hungary

QoE Evaluation of Scheduling Algorithms for NRT Services in LTE

Pablo Ameigeiras, University of Granada, Spain

Self-organising Radio Resource Management for Cellular Mobile Radio Networks using Power-Bandwidth Characteristics

Philipp Hasselbach, Technische Universität Darmstadt, Germany

16:45 Session 5c Future Internet - Routing and Measurement

Chair: [Fiona Williams, Ericsson GmbH, Germany](#)

Robustness in Next-Generation Network

Gianmarco Panza, CEFRIEL, Italy

Wireless Mesh Networking Framework for Fast Development and Testing of Network-level Protocols

Josep Mangués-Bafalluy, CTTC, Spain

Overlay Multicast Assisted Mobility for Future Publish/Subscribe Networks

Konstantinos Katsaros, Athens University of Economics and Business, Greece

Semantic Unified Access to Traffic Measurement Systems for Internet Monitoring Service

Ángel Ferreiro, Telefonica Investigación y Desarrollo, Spain

Business Cases and Deployment Scenarios for Future Collaborative Wireless Networks

Artemios Andreou, MTN Cyprus, Cyprus

16:45 Session 5d WDM and long-reach Passive Optical Networks

Chair: [Peter Van Daele, IBBT - Ghent University, Belgium](#)

Protection of Demands Against Single Link Failure in Two Layer Networks with Bacterial Evolutionary Algorithm

Peter Soproni, Budapest University of Technology and Economics, Hungary

A Long-reach Resilient Passive Optical Network for Scalable Access

Josep Prat, UPC Universitat Politècnica de Catalunya, Spain

Optical Networks: Connecting the Future Internet

Andrew Houghton, European Commission, Belgium

BONE: Your gateway to European Optical Networks Research

Peter Van Daele, IBBT vzw, Belgium

16:45 Poster Session 5e

Cognitive Radio Systems

Chair: [Wolfgang Koenig, Alcatel-Lucent Deutschland, Germany](#)

Decentralised Dynamic Spectrum Usage in WLAN Ad Hoc Network

Soamsiri Chantarakul, CCSR, University of Surrey, United Kingdom

User Cooperation in Spectrum Sensing in Opportunistic Radio

Klaus Moessner, University of Surrey, United Kingdom

Analysis of Spectrum Band Aggregation in Opportunistic Radio using Game Theory

Rahim Tafazolli, University of Surrey, United Kingdom

Multiband Multimode High Data Rate UWB System Concept in 3-10/60 GHz Frequency Bands

Kai Dombrowski, TES Electronic Solutions, Germany

Functional Architecture for Cognitive Wireless Systems in the B3G World

Panagis Magdalinos, University of Athens, Greece

Awareness of User Behaviour in Cognitive Device Management

Yioulis Kritikou, University of Piraeus, Greece

Impact of User Correlation on Collaborative Spectrum Sensing for Cognitive Radio

Kamran Arshad, University of Surrey, United Kingdom

Autonomous Functionalities for Cognitive Radio

Kari Kalliojärvi, Nokia Corporation, Finland

Emerging Management Strategies for the Introduction of Cognition in B3G Wireless Systems

Aggelos Saatsakis, University of Piraeus Research Center, Greece

Enhancing Learning in Cognitive Radio Systems by means of Artificial Neural Networks

Kostas Tsagkaris, University of Piraeus Research Center (UPRC), Greece

18:30 End of Conference Day

18:40 - 19:40 Networking Reception in Exhibition



Thursday, June 11, 2009

09:00 Plenary 6a **The New Generation of Handset Operating Systems: What Impact for Mobile Network Evolution?**

Chair: **Joao da Silva, European Commission, Belgium**

Smartphone's Operative Systems, Mobile Services and Market Implications

Eduardo Fernandez Rojo, Research in Motion, Spain

One Web

Christen Krogh, Opera Software ASA, Norway

Mobilising the Internet

Ed Candy, Hutchison 3G, United Kingdom

Challenges that Hinder Mobile Openness and Impact Prosperity

David Wood, Symbian Foundation, United Kingdom

Panel Discussion

11:00 Coffee Break Exhibition & Networking

11:30 Session 7a Relaying in Wireless Networks

Chair: **Atilio Gameiro, University of Aveiro, Portugal**

Capacity Comparison of Relay-Assisted Schemes with and without Direct Path

Sara Teodoro, Instituto de Telecomunicacoes, Portugal

The Single Relay Channel: Does Randomized Coding Increase Diversity?

David Gregoratti, CTTC, Spain

A Robust Network Coding Scheme over Two Way Relay Channel

Mohammad Sadegh Fazel Falavarjani, University of Surrey, UK

A Practical Semi-Distributed Relay Node Selection Algorithm for Simple Relaying Schemes

Vasile Bota, Technical University of Cluj-Napoca, Romania

Performance of Multicell Joint Processing Cellular Uplink in the presence of Relay Nodes

Muhammad Ali Imran, University of Surrey, United Kingdom

11:30 Session 7b Cognitive and Reconfigurable Systems

Chair: **Matti Latva-aho, University of Oulu, Finland**

A Reconfigurable Baseband Receiver Architecture Based on Time-Frequency Signal Processing

Thomas Hunziker, University of Kassel (UNIK), Germany

Investigation of Timescales for Channel, Rate, and Power Control in a Metropolitan Wireless Mesh Testbed

Vangelis Angelakis, FORTH-ICS, Greece

On Improving H264/AVC Adaptability to Handover Events in 802.16e Vehicular Networks

Jon Casasempere, TECNALIA-Telecom, Spain

Filter Bank Based Cognitive Radio Physical Layer

Markku Renfors, Tampere Univ. of Technology, Finland

A Study on Spectral Efficiency of Physical Layer over Cognitive Radio

Fotis Foukalas, University of Athens, Greece

11:30 Session 7c Future Internet - Link Layer Technologies

Chair: **Albert Banchs, Universidad Carlos III de Madrid, Spain**

Joint Multi-path Routing and Accountable Congestion Control

Marcelo Bagnulo, Universidad Carlos III de Madrid, Spain

The Acreo GMPLS Testbed – Current Functionality and a Path Towards a Multi-flavoured Ethernet Hierarchy

Pontus Sköldström, Acreo AB, Sweden

A MAC Layer Abstraction for Heterogeneous Carrier Grade Mesh Networks

Bernd Gloss, Bell Labs, Alcatel-Lucent, Germany

Hierarchical Ethernet Transport Network Architecture (HETNA)

Ran Giladi, Ben-Gurion University of the Negev, Israel

Towards Efficient Integration of Unidirectional Links into LMDs

David Wagner, Fraunhofer FOKUS - Fraunhofer Institute for Open Communication Systems, Germany

11:30 Session 7d Fixed Mobile Convergence

Chair: **Jean-Charles Point, JCP-Consult, France**

Specification of Optimized Handover Operations among Cooperative Networking Environments

Lambros Sarakis, National Center for Scientific Research "Demokritos", Greece

A Reinforcement Learning Solution for the Connection Admission Control

Silvano Mignanti, Sapienza Università di Roma, Italy

Dynamic Feedback Controlled Harmonic Suppression for Uncooled Dual Function Sensing and Communications Radio over Fibre Link

Michael Crisp, University of Cambridge, United Kingdom

Stream-level, Fine Grained Session Control in IMS Environments

Rafael Morón, Telefónica I+D, Spain

High SNR Broadcast Channel Differential Capacity

Daniel Castanheira, Instituto de Telecomunicações, Portugal

11:30 Poster Session 7e **Applications, Platforms and Middleware for Seamless Service**

Chair: **Roberto Llorente, Universidad Politecnica de Valencia, Spain**

A Novel Scalability Adaptation Concept for Higher R-D Performances of Scalable Video

Gokce Nur, University of Surrey, United Kingdom

The Daidalos Mobile University - Concept and Validation

Juergen Jaehnert, Universität Stuttgart, Germany

Enabling IEEE 802.21 in a B3G Cellular Experimental Network

Michelle Wetterwald, Institut Eurecom, France

Performance Assessment of Hybrid Data Fusion and Tracking Algorithms

Stephan Sand, German Aerospace Center (DLR), Germany

13:15 Lunch Exhibition & Networking

14:30 Special Session 8a WINNER+

Chair: **Werner Mohr, Nokia Siemens Networks GmbH & Co. KG, Germany**

Radio Innovation Areas for IMT-Advanced & Beyond: WINNER+ System Concept

Afif Osseiran, Ericsson, Sweden

Flexible Spectrum Use for IMT-Advanced: WINNER+ Spectrum Concept

Jaakko Vihriala, Nokia Siemens Network, Finland

Advances in Device-to-Device Communications and Network Coding for IMT-Advanced

Eric Hardouin, Orange Labs, France

Coordinated MultiPoint Systems for IMT-Advanced in the Framework of the WINNER+ Project

Tommy Svensson, Chalmers University of Technology, Sweden

Channel Modelling for Radiated Testing of MIMO Capable Terminals

Pekka Kyösti, Elektorbit, Finland

14:30 Session 8b System Coexistence and Heterogeneous Access

Chair: **Roberto Llorente, Universidad Politecnica de Valencia, Spain**

Heterogeneous Access Networks: Study and Evaluation of Coexistence

Ana Sierra, Telefónica I+D, Spain

Cognitive Control Radio (CCR) - Enabling Coexistence in Heterogeneous Wireless Radio Networks

Kari Kalliojärvi, Nokia Corporation, Finland

A Novel Autonomous RAT Selection Algorithm for Non Real Time Services

Jordi Perez-Romero, UPC, Spain

Experimental Analysis of WiMedia-defined UWB and WiMAX 802.16e Coexistence in Personal Area Networks

Roberto Llorente, Universidad Politécnica de Valencia, Spain

Mobile Mediator Control Function: An IEEE 802.21-based Mobility Management and Access Network Selection Model

Karl Andersson, Luleå University of Technology, Sweden

14:30 Session 8c Future Internet Architecture

Chair: **Rainer Zimmermann, European Commission, Belgium**

The EIFFEL Approach Towards Visions for a Future Networked Society

George Polyzos, Athens University of Economics and Business, Greece

Towards an Architecture for the Real World Internet

Martin Bauer, NEC Europe Ltd., Germany

Demanding Applications on Resource Constrained Mobile Devices through Thin Client Computing

Bert Vankeirsbilck, Ghent University, Belgium

Economic Traffic Management for Overlay Networks

Maria Angeles Callejo Rodriguez, TID, Spain

Enhanced Key Management Scheme for Securing Intra Domain Handovers in the Next Generation Mobile IP Networks

Klaus Moessner, University of Surrey, United Kingdom

14:30 Session 8d Privacy and Security in the Future Internet

Chair: **Bart Van Caenegem, European Commission, Belgium**

Privacy-Aware Future Internet Architecture

Sophia Khavtasi, Telscom AG, Switzerland

A Semantic Framework to Anonymize Network Data and Define Their Acceptable Use

Giuseppe Tropea, CNIT, Italy

A Framework for Daily Emergency Services Support and Disaster Management in Next Generation Networks (NGNs)

Nelson Blanco, PDM&FC, Portugal

A Framework Supporting Extreme Emergency Services

Christos Politis, Kingston University, United Kingdom

14:30 Special Poster Session 8e OMEGA

Chair: **Jean-Philippe Javaudin, Orange Labs, France Telecom, France**

Architecture Reference Model for Next Generation Home Networks

Jean-Philippe Javaudin, Orange Labs, France Telecom, France

Criteria and Factors Affecting Home Networks Deployment: Evidence from the ICT-OMEGA project

Dimitris Varoutas, University of Athens, Greece

Functional Analysis for Next Generation Home Networks

Marco Castrucci, University of Rome "Sapienza", Italy

Load Balancing Strategy in Heterogeneous Meshed Home Access Network

Vincenzo Suraci, University of Rome "Sapienza", Italy

16:15 Coffee Break Exhibition & Networking

16:45 Special Panel Session 9a Spectrum without Boundaries

Chair: **Peter Stuckmann, European Commission, Belgium**

Regulator Perspective

Klaus-Udo Marwinski, BNetzA, Germany

Operator Perspective

Stefan Mangold, Swisscom, Switzerland

Innovator Perspective

Andrew Stirling, Microsoft, United Kingdom

Manufacturer Perspective

Klaus Kohrt, Independent Consultant and Former Chairman UMTS Forum, Germany

Femtocells: Concept, Market Progress and Future Challenges

Simon Saunders, Chairman Femto Forum, United Kingdom

18:30 End of Conference Day

20:00 Conference Dinner - Hotel Real



Friday,
June 12, 2009

DAY

09:00 Plenary 10a Sustainable Communications

Chair: **Mario Pickavet, Ghent University – IBBT, Belgium and Mikhail Popov, Acreo AB, Sweden**

Priorities for Sustainability in Telecommunications Networks

Dave Faulkner, BT, United Kingdom

Sustainability of Mobile Network Solutions

Laurent Herault, CEA, France

Mobile Thin Client Computing and Energy Efficiency

Philippe Martineau, Prologue, France

Sustainable Mobile Communication – Challenges & Potential

Katalin Szomolányi, Magyar Telekom, Hungary

Panel Discussion

11:00 Coffee Break Exhibition & Networking

11:30 Session 11a Hardware Implementation of Wireless Technologies

Chair: **Konstantinos Voudouris, Technological Educational Institution (TEI) of Athens, Greece**

SDR Based Methodology for On-Board Communications Systems Design

Asier Alonso Muñoz, Tecnalia - Telecom, Spain

A Soft-Output Near-ML MIMO Baseband Receiver For 75Mbps+ SDR

Filip Louagie, IMEC, Belgium

Architecture of an Analog Combining MIMO System Compliant to IEEE802.11a

Zoran Stamenkovic, IHP, Germany

MIFA: Modified IFA Radiating Element for Small Handheld Devices

Oscar Gago, TTI Telecommunication and Information Technologies, Spain

Taking Advantage of the Envelope Statistics on a Polar Transmitter Design

Lorena Cabria, Universidad de Cantabria, Spain

11:30 Session 11b Signal Processing in Wireless Communications

Chair: **Stefan Kaiser, DoCoMo Euro-Labs, Germany**

Ant Colony Optimization for Subcarrier Allocation in OFDMA-based Wireless Systems

Kostas Tsagkaris, University of Piraeus Research Center, Greece

Performance Evaluation of Wireless MIMO Radios

Ralf Eickhoff, Dresden University of Technology, Germany

Optimization and Parallelization of 40 MHz MIMO SDM-OFDM Baseband Processing to Achieve Real-Time Throughput Behavior

Liesbet Van der Perre, IMEC, Belgium

QO-STBC MIMO Wireless System with Bayes Decision Algorithm

John An, National Taiwan Ocean University, Taiwan

11:30 Session 11c Future Internet Self-Management

Chair: **Henrik Abramowicz, Ericsson, Sweden**

Architectural Principles for Synergy of Self-management and Future Internet Evolution

Andrej Mihailovic, King's College London, United Kingdom

Self Configuration Architecture for Carrier Grade Mesh Network (CARMEN)

Burak Simsek, Fraunhofer Institute FOKUS, Germany

Instant Knowledge: a Secure Mobile Context-Aware Distributed Recommender System

Martin Helmhout, University of Southampton, United Kingdom

Demystifying Self-awareness of Autonomic Systems

Jens Tiemann, Fraunhofer FOKUS, Germany

Multi-Criteria Decision Making Enabling Self-Management and Migration to Future Internet Systems
Eleni Patouni, University of Athens, Greece

11:30 Session 11d Service Adaptation & Service Platforms

Chair: **Klaus Moessner, University of Surrey, United Kingdom**

Federated Service Discovery

Silvano Mignanti, Sapienza Università di Roma, Italy

Quantifying System and Business Dynamics in Services and Service Platforms

Josip Zoric, Telenor R&I, Norway

Servery: Web Telco Marketplace

Lourdes Calvo Val, Telefónica I+D, Spain

Guidelines for Mobile Web Content Adaptation by Third-party Proxies

Francois Daoust, W3C, France

SMEPP: A Secure Middleware for Embedded P2P

Jose L. Serrano, Tecnatom, S.A., Spain

11:30 Poster Session 11e Wireless Networks

Chair: **Luis Munoz, University of Cantabria, Spain**

Homogeneous Wireless Sensor Networks Through SENSEI's Resource Concept

Nicola Bui, Consorzio Ferrara Ricerche, Italy

Implementation and Testing of Co-Operative Schemes on a Real-Time DSP-Based Testbed

Per Zetterberg, Royal Institute of Technology, Sweden

Packet Scheduling for Carrier Aggregation based LTE-Advanced System

Yajuan Li, Hisilicon Technologies, China

Unified Approach for Topology Control in IEEE 802.15.4 - based WSN

Petia Todorova, Fraunhofer FOKUS, Germany

Cell-ID Positioning in WiMAX Networks Analysis of the Clearwire Network in Belgium

Mussa Bshara, Vrije Universiteit Brussel, Belgium

Tracking a Large Number of Tokens: A Customised Prioritised Medium-access Protocol for Target Responses

Tobias Renk, Universitaet Karlsruhe (TH), Germany

QoS and Mobility in IEEE 802.16 networks in Heterogeneous Scenarios

Susana Sargento, Universidade de Aveiro, Portugal

Enhancing TCP Fairness and Stability in Multihop Ad hoc Networks

Rahim Tafazolli, University of Surrey, United Kingdom

Controlling the Handover Mechanism in Wireless Mobile Nodes Using Game Theory

Omar Raoof, Brunel University, United Kingdom

Communication for Air Traffic Management (ATM) in Northern Regions

Jan Erik Håkegård, SINTEF, Norway

Opportunistic Networking for Sensor Data Collection in Urban Environment

Flavio Fabbri, University of Bologna, Italy

Advanced Radio Resource Management for IMT-Advanced in the Framework of WINNER+ Project

Jose F. Monserrat, Universidad Politecnica de Valencia, Spain

iTETRIS: a Framework for Large-Scale Research on the Impact of Cooperative Wireless Vehicular Communications Systems in Traffic Efficiency

Ramon Bauza, University Miguel Hernandez, Spain

13:15 Lunch Exhibition & Networking

14:30 Session 12a Protocols for Mobile and Wireless Networks

Chair: **Rahim Tafazolli, CCSR, University of Surrey, United Kingdom**

QoS Guarantee over DQCA for Wireless LANs with Heterogeneous Traffic

Elli Kartsakli, Technical University of Catalonia (UPC), Spain

QoS in 4G Scenarios in Mobile Environments: Experimental Validation

Vitor Jesus, Instituto de Telecomunicacoes, Portugal

Initialization of Handover Procedure in WiMAX Networks

Zdenek Becvar, Technical University in Prague, Czech Republic

Adaptive Soft Handover Forwarding in Evolved HSPA Systems

Csaba Vulkán, Nokia Siemens Networks, Hungary

Iub/Iur HSDPA Congestion Control

Zoltán Nagy, Nokia Siemens Networks, Hungary

Forwarding Challenges and Solutions for a Publish/Subscribe Network

Dmitrij Lagutin, Helsinki Institute for Information Technology, Finland

14:30 Session 12b Application & Service Enablers

Chair: **Werner Mohr, Nokia Siemens Networks GmbH & Co. KG, Germany**

Design and Implementation of Mobile Electronic Memos: a Tool to Capture and Share Information in Mobile Environments

Nicola Blefari Melazzi, University of Rome Tor Vergata, Italy

Rapidly Deployable Satellite Communications for Emergency Situations: the WISECOM Trials

Javier Mulero Chaves, German Aerospace Center (DLR), Germany

Evaluation and Choice of Adaptation Mechanisms in the Content Adaptor

Merat Shahidi, Kings College London, United Kingdom

Modular and Extendible Context Provisioning for Evolving Mobile Applications and Services

Michael Knappmeyer, University of Applied Sciences Osnabrueck, Germany

Plug & Play Multiradio Home Box

Eduardo Ortego Martinez, Telefónica Investigación y Desarrollo, Spain

14:30 Session 12c Business Case Studies

Chair: **Sergio Bovelli, EADS, Germany**

Value Propositions for Self-x Functionalities in Future Wireless Networks

Vânia Gonçalves, IBBT-SMIT, Vrije Universiteit Brussel, Belgium

A General Architecture for Enabling and End User services in IMS

Robert Mullins, TSSG, Ireland

Business Modelling in Home Networks: the OMEGA case

Dimitris Katsianis, University of Athens, Greece

14:30 Session 12d Putting Context in its Place

Chair: **Ralf Tönjes, University Applied Sciences Osnabrück, Germany**

Context Management Architecture for Future Internet Services

Madiha Zafar, University of The West of England, United Kingdom

Context-Aware Multiparty Networking

Jose Simoes, Fraunhofer FOKUS, Germany

Efficient Employment of Service Location Protocol in Multi-cluster Networks

Majid Ghader, University of Surrey, United Kingdom

Context-Aware Media Delivery Architecture

Vasos Vassiliou, University of Cyprus, Cyprus

Sense and Sens'ability: Semantic Data Modelling for Sensor Networks

Payam Barnaghi, University of Surrey, United Kingdom

16:15 End of Parallel Sessions

16:30 Closing Plenary 13a ICT-Call 5

Chair: **João da Silva, European Commission, Belgium**

Overview of Call 5 - ICT-2009.1.1: The Network of the Future

Andrew Houghton, European Commission, Belgium

Best Paper Award

Best Demonstration Stand Award

17:30 End of Conference

Registration Information

It is necessary for all **ICT-MobileSummit 2009** delegates to register online. Each delegate should be registered separately.

Conference Fees

Authors Fees (Due by 06 April)

- Authors **€550**

Please note that the author fee is only available to accepted presenters in the Programme (**only one presenter per paper/poster**). Each presenter in the Programme should be unique. Co-authors who wish to participate should register as Delegates.

Delegates' Fees - Early Bird (Due by 06 April)

- Early Bird **€600**

Delegates' Fees - Full Fee from 07 April

- Delegate Full Price **€700**

The Conference Fee includes:

- Entrance to all Plenary and Parallel Sessions
- Entrance to Exhibition
- Documentation with Proceedings on CD-Rom
- Three luncheons and refreshments at morning and afternoon breaks
- Welcome Networking Reception - Wednesday 10 June
- Cyber Café facilities

Terms & Conditions

1. All authors who are presenting a paper at **ICT-MobileSummit 2009** must complete their payment registration and ensure payment is received by **06 April** at the latest, prior to publication of the Final Programme.
2. In the case where a paper is jointly authored, the presenter of the paper is considered to be the author/presenter from a payment registration point of view. All co-authors are considered to be delegates.
3. All paper presenters in the Programme should be unique. Additional accepted papers must be reassigned to a presenter not already in the Programme.
4. Accepted Exhibitors (other than accepted presenters) must complete payment registration by **06 April**.
5. Delegates' fees must be paid before admission to the Conference and Exhibition.
6. IEEE Members are entitled to apply for a 10% discount on the appropriate fee. Please provide Membership No. as part of online registration and fax a copy of valid Membership card to +353-1-8170606.
7. There are **no refunds for cancellations** but substitutions may be made at any time prior to the event by contacting the Conference Secretariat.
8. The Conference Organisers reserve the right not to accept any conference registration either online or onsite without providing a reason.
9. Each individual must be registered separately on the **ICT-MobileSummit** Conference portal.
10. Payment may be made by bank transfer or credit card (with some restrictions). Payments made by bank transfer must be **net of any bank charges** and the payment instruction should refer to "**ICT-MobileSummit 2009 Conference**", your name, organisation and invoice number (if relevant).

11. Receipts are automatically issued electronically upon receipt of payment. If your organisation requires an invoice to process payment registration by bank transfer, please contact the Conference Secretariat.

12. Conference registration or hotel accommodation is not confirmed until full payment is received.

13. Online registration facilities conference registration, participation in pre-conference event, booking of hotel accommodation, attendance at Welcome Networking Reception and Conference Dinner, and booking of social tours. It is possible to go back through online registration at any stage, book items not previously confirmed and make payment.

14. The registration desk will open on Tuesday 09 June from 14:00 to 17:00 and will remain open during normal conference hours from 08:00 on Wednesday.

Santander

Santander, the capital of Cantabria, is a pretty and historical city, with good infrastructure and public transport. There is a good range of hotels and restaurants with different price points, nice sea front and easy access to other parts of Cantabria for tours.

Apart from visiting the historical parts of Santander, delegates should also visit nearby attractions in Cantabria including Santillana del Mar and Caves of Altamira, Cabárceno Park and Caves of El Soplao.

It is possible to fly directly to Santander with Ryanair and Iberia. The airport is 7 km from the city centre. Ryanair has direct flights to Santander from Dublin, Frankfurt, London, Milan, and Rome, while Iberia has direct flights to Santander from Amsterdam, Paris, Madrid, Barcelona and other national airports.

Bilbao airport is 89 km from Santander with very good connections to other European cities. It takes 1 - 1.5 hrs to drive from Bilbao depending on traffic and time of day. All major car hire agencies have an office at Bilbao airport.

Partners & Post Conference Social Programme

During the three days of the Conference, partners will be able to choose from a selection of tours. If your partner would like to attend the Welcome Reception and Conference Dinner, it will be possible to book additional tickets for these evening social events.

Details of tours are available on

www.ICT-MobileSummit.eu

Sponsors

The **ICT-MobileSummit 2009 Diamond Sponsors** confirmed to date include SODERCAN Group. Silver Sponsors include eMobility (Alcatel-Lucent, Thales, FUNDACIÓN ROBOTIKER, Univeristy of Cantabria). Bronze Sponsors include TTI and Telefonica. The City of Santander is kindly hosting the Networking Reception on Wednesday 10 June in the Exhibition. **Technical Co-Sponsors** include IEEE Region 8 (Europe, Middle East, Africa), IEEE UKRI Computer Chapter, IEEE Turkey Section and IEEE Turkey Communications Chapter and IEEE Spain Computer Chapter.



Exhibition

ICT-MobileSummit 2009 Exhibition showcases applied ICT research results and applications through technology demonstrations and posters, whether funded commercially, or at a national, regional or European level.

Demonstration Stands

Stand Name	Organisation	Country
DG Information Society & Media	European Commission	Belgium
4WARD: Architecture and Design of the Future Internet	University of Bremen	Germany
Context Casting (C-CAST)	Portugal Telecom Inovação S.A	Portugal
Emerging Wireless Transmitter Characterization Platform	University of Cantabria	Spain
eMobility	Ericsson	Germany
End-to-End Efficiency (E3)	Alcatel-Lucent Deutschland	Germany
EUWB - Towards Advanced UWB Applications	GWT-TUD GmbH	Germany
ICT ALPHA - Architectures for fLexible Photonic Home and Access networks	Acreo AB	Sweden
ICT-eMuCo - Embedded Multi-core Processing for Mobile Communication	Ruhr-University Bochum	Germany
IMS ARCS	TSSG, WIT	Ireland
NEWCOM++: The Network of Excellence in Wireless Communications	CNIT	Italy
SENSEI - Real World Internet	University Politehnica of Bucharest	Romania
WALTER	inno group	France
WHERE project	DLR e.V.	Germany
WiMAGIC	RINICOM	United Kingdom
SODERCAN	Grupo SODERCAN	Spain
GRAMMAR	Acorde S.L	Spain
IdeallST	IdeallST Consortium	
Autol	University College London	United Kingdom

Conference Portal & Delegate Showcase
www.ICT-MobileSummit.eu

ICT-MobileSummit 2009 eMobility Silver Sponsors

