

2011 15th International Conference on Intelligence in Next Generation Networks

(ICIN 2011)

**Berlin, Germany
4-7 October 2011**



**IEEE Catalog Number: CFP1150H-PRT
ISBN: 978-1-69; ;/38: 9/2**

Program

Wednesday, October 5

1a: Business Model Innovation

"The Sending Party Network Pays": a First Step Towards End-To-End Quality of Service

Falk von Bornstaedt (Deutsche Telekom AG, Germany); Max Roettgermann (Deutsche Telekom AG, Germany); Isabelle Korthals (Deutsche Telekom Laboratories, Germany); Finn Tore Johansen (Telenor Corporate Development, Norway); Håkon Lønsethagen (Telenor R&D, Norway)
pp. 1-5

A Few Myths About Telco and OTT Models

Emmanuel Bertin (Orange Labs, France); Noel Crespi (Institut Télécom, Télécom SudParis, France); Michel L'Hostis (Orange Labs, France)
pp. 6-10

Application Enablement: The Business Cases That Drive New Revenue Opportunities Through Business, Technical and Service Innovation

Patricia Hargil (Alcatel-Lucent, USA); Amanda Noz (Alcatel-Lucent, USA)
pp. 11-16

1b: Service Architectures

WiMAX-based Overlay Conferencing Service

Quoc Tuan Tran (Telecom Sud Paris, France); Tien Anh Le (Institut Telecom, Telecom Sud Paris, France); Hang Nguyen (Institut Telecom, Telecom SudParis, France)
pp. 17-22

Service Program Mobility Architecture

Henrik Lundqvist (Docomo Laboratories Europe, Germany); Zoran Despotovic (DOCOMO Communications Laboratories Europe, Germany); Jelena Frtunikj (Technical University of Munich, Germany); Gerald Kunzmann (DOCOMO Communications Laboratories Europe, Germany); Wolfgang Kellerer (DOCOMO Communications Laboratories Europe, Germany)
pp. 23-28

Resolving Ten MVNO Issues with EPS Architecture, VoLTE and Advanced Policy Server

Rebecca Copeland (Core Viewpoint Limited, United Kingdom); Noel Crespi (Institut Télécom, Télécom SudParis, France)
pp. 29-34

2a: M2M and Internet of Things

Service Oriented Network Architecture for Scalable M2M and Sensor Network Services

Kazumine Matoba (Fujitsu Laboratories Ltd., Japan); Kenichi Abiru (Fujitsu Laboratories Ltd., Japan); Tomohiro Ishihara (Fujitsu Laboratories Ltd., Japan)
pp. 35-40

Application-driven Quality of Service for M2M Communication

Niklas Blum (Fraunhofer Institute FOKUS, Germany); Jens Fiedler (Fokus Fraunhofer, Germany); Lajos Lange (Fraunhofer Institut FOKUS, Germany); Thomas Magedanz (Fraunhofer FOKUS, Germany)
pp. 41-45

Towards an Integrated Solution to Internet of Things - a Technical and Economical Proposal

Xiaomeng Su (Telenor, Norway); Reidar Svendsen (Telenor, Norway); Humberto N. Castejón (Telenor Corporate Development, Norway); Erik Berg (Telenor, Norway); Josip Zoric (SINTEF, Norway)
pp. 46-51

2b: Enhancing User Experience

A Comprehensive Framework for Context-Aware Communication Services

Bachir Chihani (Orange Labs & Telecom SudParis (TSP), France); Emmanuel Bertin (Orange Labs, France); Noel Crespi (Institut Télécom, Télécom SudParis, France)
pp. 52-57

Service Differentiation for Enhanced Consumer Experiences

Matthias Lott (Nokia Siemens Networks, Germany); Jouni Karppinen (Nokia Siemens Networks Oy, Finland); Joachim Kroß (Nokia Siemens Networks GmbH & Co. KG, Germany)
pp. 58-63

Smarter Phone Based Live QoE Measurement

Zizhi Qiao (China Unicom & Beijing University of Posts and Telecommunications, P.R. China)
pp. 64-68

3a: Service Innovation

Service Innovation Opportunities in Emerging Markets

Kristofer Kimbler (Azouk Network Ltd., Sweden); Mac Taylor (Morian Group, United Kingdom)
pp. 69-73

***Building an Effective Location Based Service for Enterprise Customers
Emerging Market Scenario***

Arnab Dey (Wipro Technologies, USA); Harish Ramakrishnaiah (Wipro Technologies, India); John Baptisa (Wipro Technologies, India); Satish Talmale (Wipro Technologies Bangalore, India); Vitesh Patel (Wipro Technologies, India)

pp. 74-79

Architecture and Prototype of Augmented Reality Videophone Service

Atsushi Fukayama (NTT Corporation, Japan); Shunsuke Takamiya (Nippon Telegraph and Telephone Corporation, Japan); Junichi Nakagawa (NTT Corporation, Japan); Noriyasu Arakawa (NTT Cyber Solutions Laboratories, Japan); Naoyoshi Kanamaru (NTT Corporation, Japan); Naoki Uchida (NTT, Japan)

pp. 80-85

3b: Advertising and Beyond

Linking Digital Signage with Mobile Phones

Hiroyuki Sato (NTT Service Integration Laboratories & NTT, Japan); Masakazu Urata (Nippon Telegraph and Telephone, Japan); Kazuhiro Yoguchi (NTT, Japan); Noriyasu Arakawa (NTT Cyber Solutions Laboratories, Japan); Naoyoshi Kanamaru (NTT Corporation, Japan); Naoki Uchida (NTT, Japan)

pp. 86-91

A New Approach to Advertising in Social Networks - Business-Centric Check-ins

Dmitry Namiot (Moscow State University, Russia); Manfred Sneps-Sneppe (AbavaNet, Russia)

pp. 92-96

Analyzing Business Models for Mobile Augmented Reality

Ana M. Bernardos (Universidad Politecnica de Madrid, Spain); Jose R Casar (Universidad Politecnica de Madrid, Spain)

pp. 97-102

4a: Service Ecosystems

The New Role of Developers in the Mobile Ecosystem: an Apple and Google Case Study

Nicolai Schultz (T-Systems & Technical University Berlin, Germany); Jochen Wulf (Berlin Institute of Technology (TU Berlin), Germany); Ruediger Zarnekow (Berlin Institute of Technology (TU Berlin), Germany); Quoc Tuan Nguyen (T-Systems, Germany)

pp. 103-108

Network Infrastructure At the Crossroads the Emergence of Smart Cities

Kostas Pentikousis (Huawei Technologies & European Research Center, Germany); Dongming Zhu (Huawei Technologies, Germany); Hellen Wang (Huawei Technologies, Germany)

pp. 109-114

New Media Services Need Interoperability and Portability

Hans Stokking (TNO, The Netherlands); Victor Klos (TNO, The Netherlands); Ray van Brandenburg (TNO, The Netherlands); Caroline van der Weerdt (TNO, The Netherlands)

pp. 115-120

4b: Service Composition

Towards a Service Composition Language for Heterogeneous Service Environments

Joerg Niemöller (Ericsson Corporate Research, Germany); Konstantinos Vandikas (Ericsson & RWTH Aachen, Sweden); Roman Levenshteyn (Ericsson, Germany); Daniel Schleicher (University of Stuttgart, Germany); Frank Leymann (Universität Stuttgart, Germany)

pp. 121-126

Semantic Web Service Processes Enabling Goal-driven Application Creation

Yoo-mi Park (ETRI, Korea); HyunKyung Yoo (Electronics and Telecommunications Research Institute, Korea); Yuchul Jung (ETRI, Korea); Cinyoung Hur (Electronics and Telecommunications Research Institute, Korea); Hyunjoo Bae (ETRI, Korea)

pp. 127-132

Smart Object Cooperation Through Service Composition

Pierpaolo Baglietto (CIPI - University of Genova, Italy); Massimo Maresca (CIPI - University of Padova, Italy); Michele Stecca (CIPI - University of Genova, Italy); Corrado Moiso (Telecom Italia, Italy)

pp. 133-138

ICIN 2011 Posters / Demonstrations

Energy Optimisation in Heterogeneous Multi-RAT Networks

Nico Bayer (Deutsche Telekom Laboratories, Germany); Dmitry Sivchenko (Deutsche Telekom Laboratories, Germany); Hans Joachim Einsiedler (Deutsche Telekom Laboratories, Berlin, Germany); Andreas Roos (T-Systems, Germany); Abdulkaki Uzun (Deutsche Telekom Laboratories, Germany); Sebastian Göndör (Deutsche Telekom Laboratories, Germany); Axel Küpper (TU Berlin, Germany)

pp. 139-144

Strong Authenticated Mail Service Over NGN

Andrea Vaccani (Swisscom, Switzerland); Antoine Delley (College of Engineering and Architecture of Fribourg, Switzerland); Jean-Frederic Wagen

(University of Applied Science of Fribourg, Switzerland); Reto Caduff (Ericsson AG, Switzerland); Laurent Knoepfli (Ericsson AG, Switzerland); Oezguer Koyun (KOBIL Systems, Germany)
pp. 145-150

Spatial Segmentation for Immersive Media Delivery

Ray van Brandenburg (TNO, The Netherlands); Omar Niamut (TNO, The Netherlands); Martin Prins (NEC, The Netherlands); Hans Stokking (TNO, The Netherlands)
pp. 151-156

Scalable Service Composition Execution by Means of an Asynchronous Paradigm

Konstantinos Vandikas (Ericsson & RWTH Aachen, Sweden); Raphaël Quinet (Ericsson, Germany); Roman Levenshteyn (Ericsson, Germany); Joerg Niemöller (Ericsson Corporate Research, Germany)
pp. 157-162

Broadband Wireless Service Provisioning Through a Wireless Mesh Backhaul

Cigdem Sengul (TU-Berlin, Germany); Lars Kollecker (T-Systems GmbH / Deutsche Telekom Labs, DTAG, Germany); Nico Bayer (Deutsche Telekom Laboratories, Germany); Hans Joachim Einsiedler (Deutsche Telekom Laboratories, Berlin, Germany); Dmitry Sivchenko (Deutsche Telekom Laboratories, Germany); Dirk V Hugo (Deutsche Telekom Laboratories, Germany)
pp. 163-168

M2M Service Enablement for the Enterprise

Konstantinos Vandikas (Ericsson & RWTH Aachen, Sweden); Nicolas C Liebau (SAP AG & Motionet AG, Germany); Markus Döhring (SAP Research, Germany); Leonid Mokrushin (Ericsson, Sweden); Ioannis Fikouras (Ericsson, Sweden)
pp. 169-174

Business Transformation of the Provisioning Process for Machine-to-Machine

Harald Bender (Nokia Siemens Networks, Germany); Mikko Kolehmainen (Nokia Siemens Networks, Finland); Gerald Lehmann (Nokia Siemens Networks, Germany); Janne Parantainen (Nokia Siemens Networks, Finland); Markus Staufer (Nokia Siemens Networks GmbH Co. KG, Germany); Marcos Tong (Nokia Siemens Networks, Finland)
pp. 175-180

Thursday, October 6

5a: IMS and RCS

Operator-independent Public User Identities for IP Multimedia Communication Services for Enterprises

Rogier Noldus (Ericsson Telecommunications, The Netherlands); Martien Huysmans (Ericsson, The Netherlands); Gert Öster (Ericsson Telecommunications, Sweden); Per Öberg (Ericsson, The Netherlands)

pp. 181-186

Rich Communication Suite: the Challenge and Opportunity for MNOs

Min Lin (China Unicom & University of Cambridge, P.R. China); Javier Arias (Telefonica Espana, Spain)

pp. 187-190

CSNA: a Social Networking Solution for RCS and Mobile User

Kuldeep Singh (Nokia Siemens Networks, India); Pankaj Goyal (Nokia Siemens Networks, Noida India, India)

pp. 191-195

5b: Regulation

If You Can't Beat 'Em, Join 'Em Cooperative and Non-Cooperative Games in Network Sharing

Fieke Offergelt (TNO, The Netherlands); Frank Berkers (TNO, The Netherlands); Gijs Hendrix (TNO, The Netherlands)

pp. 196-201

Liberalization, Regulation and Privatization (LRP): Telecommunication Reform Challenges in Zambia

Mbuyu Sumbwanyambe (University of Johannesburg, South Africa); Andre Nel (University of Johannesburg, South Africa)

pp. 202-206

6a: Future Internet

AFICUS: an Architecture for a Future Internet of User Generated Contents

Luis López Fernández (Universidad Rey Juan Carlos, Spain); Diego González (Telefonica I+D, Spain); David Lozano (Telefonica I+D, Spain); Carlos Maestre Terol (Amaris España, Spain)

pp. 207-212

Construction, Instantiation and Analysis of a Business Ecosystem for Autonomic Future Networks

Vânia Gonçalves (IBBT-SMIT, Vrije Universiteit Brussel, Belgium); Gerasimos Stamatelatos (University of Athens, Greece); Antonio Manzalini (Telecom Italia, Italy); Beatriz Fuentes (Telefónica ID, Spain); Markus Gruber (Alcatel-Lucent, Bell Labs, Germany); Christian Destré (Orange Labs, France); Simon Delaere (IBBT-SMIT, Vrije Universiteit Brussel, Belgium); Laurent Ciavaglia (Alcatel-Lucent, France)

pp. 213-218

Self-optimization of Resource Allocation in Decentralised Server Farms

Antonio Manzalini (Telecom Italia, Italy); Corrado Moiso (Telecom Italia, Italy)

pp. 219-224

6b: New Service Enablers

Enabling Information Push for Network- and Device-agnostic Internet Services

Niklas Blum (Fraunhofer Institute FOKUS, Germany); Junnosuke Yamada (NTT Service Integration Laboratories, Japan); Naoki Uchida (NTT, Japan); Thomas Magedanz (Fraunhofer FOKUS, Germany)
pp. 225-230

Seeking New Social Networking Models

Claudio Venezia (Telecom Italia, Italy); Carlo Alberto Licciardi (Telecom Italia, Italy)
pp. 231-235

On the Benefits of a Network-Centric Implementation for Context-Aware Telecom Services

Ahmed Bouabdallah (Institut Telecom - Telecom Bretagne, France); Francois Toutain (France Télécom Orange Labs, France); Michal Szczerbak (France Telecom Orange Labs, France); Jean-Marie Bonnin (Telecom Bretagne & Institut Telecom, France)
pp. 236-240

7: Cloud Computing

Exploiting Cloud Computing - a Proposed Methodology for Generating New Business

Per Nesse (Telenor Research and Innovation, Norway); Astrid Undheim (Telenor Corporate Development, Norway); Fredrik Solsvik (Telenor Corporate Development, Norway); Michel Dao (Orange-ftgroup, France); Eliot Salant (IBM Haifa Labs, Israel); Jose M Lopez (Telefonica I+D, Spain); Javier Elicegui (Telefonica I+D, Spain)
pp. 241-246

Evolution of Telco Services Utilising Infrastructure-as-a-Service

Stephen Hall (Nokia Siemens Networks, South Africa)
pp. 247-252

Cloud Computing in Mobile Networks - Case MVNO

Yrjo Raivio (Aalto University, School of Science, Finland); Rushil Dave (Aalto University School of Science, Finland)
pp. 253-258

Towards a Dynamic Cloud-enabled Service Eco-system

Humberto N. Castejón (Telenor Corporate Development, Norway); Anastasius Gavras (Eurescom GmbH, Germany); João Gonçalves (PT Inovação, Portugal); Corrado Moiso (Telecom Italia, Italy); Astrid Undheim (Telenor Corporate Development, Norway); Josip Zoric (SINTEF, Norway)
pp. 259-264

Friday, October 7

Workshop: BMMP: Innovation and Control of Mobile Platforms

Standardisation Strategies for the Android Platform: The Politics of the Stack

Catherine E A Mulligan (University of Nottingham, United Kingdom); Richard Mortier (University of Nottingham & Horizon Digital Economy Research, United Kingdom); Robert Houghton (University of Nottingham, United Kingdom); Hanif Rahemtulla (University of Nottingham, United Kingdom); Martin Flintham (The University of Nottingham, United Kingdom); Christian Nord (Sony Ericsson Mobile Communications AB, Sweden)
pp. 265-270

Control as a Strategy for the Development of Generativity in Business Models for Mobile Platforms

Silvia Elaluf-Calderwood (The London School of Economics and Political Science, United Kingdom); Benjamin Eaton (London School of Economics and Political Science, United Kingdom); Carsten Sørensen (The London School of Economics and Political Science, United Kingdom); Youngjin Yoo (Temple University, USA)
pp. 271-276

Platforms in the Palm of Your Hand: Mobile Value Chain Evolution

Richard Mortier (University of Nottingham & Horizon Digital Economy Research, United Kingdom); Catherine E A Mulligan (University of Nottingham, United Kingdom)
pp. 277-282

The City as a Platform

Nils Walravens (Vrije Universiteit Brussel, Belgium)
pp. 283-288

Workshop: BMMP: New Mobile Infrastructure Platforms

Optimizing Rollout of LTE-Based Triple Play Services Through Efficient Network Information Management

Kristofer Kimbler (Azouk Network Ltd., Sweden); Elizabeth Pamieta (ITPP SA, Poland); Piotr Sączuk (Suntech SA, Poland)
pp. 289-294

Modelling Multi-MNO Business for MVNOs in Their Evolution to LTE, VoLTE & Advanced Policy

Rebecca Copeland (Core Viewpoint Limited, United Kingdom); Noel Crespi (Institut Télécom, Télécom SudParis, France)
pp. 295-300

Has the Time to Commercialize Satellite Navigation Signals Come?

Danai Skournetou (Tampere University of Technology, Finland); Elena Simona Lohan (Tampere University of Technology, Finland); Mark de Reuver (Delft University of Technology, The Netherlands)

pp. 301-306

Competitive Assessments for HAP Delivery of Mobile Services in Emerging Countries

Laurent Reynaud (Orange Labs, France); Salim Zaïmi (Orange Labs, France); Yvon Gourhant (Orange Labs, France)

pp. 307-312

Workshop: BMMP: Adoption of Mobile Platform Features and Services

Substitution in Smartphone Communication Services

Juuso Karikoski (Aalto University, Finland); Sakari Luukkainen (Aalto University, Finland)

pp. 313-318

From "Security for Privacy" to "privacy for Security"

Riccardo Bonazzi (University of Lausanne, Switzerland); Boris Fritscher (University of Lausanne, Switzerland); Zhan Liu (University of Lausanne & HEC, Switzerland); Yves Pigneur (University of Lausanne, Switzerland)

pp. 319-324

Mobile Handset Features as Service Enablers - Conceptual Model of Feature Diffusion

Antti Riikonen (Aalto University, Finland); Timo Smura (Aalto University, Finland); Antero Juntunen (Aalto University, Finland)

pp. 325-330