

NGMAST 2008 PROGRAMME

Tuesday 16 September	
14:00 – 18:00	Registration
14:30 – 17:30 (Room CA112)	NGMAST 2008 Tutorial <i>"IP-Oriented QoS in the Next Generation Networks: application to wireless networks"</i> Professor Pascal Lorenz, University of Haute-Alsace, France
18:00 – 19:00	Welcome Reception
Wednesday 17 September	
8:30 – 12:00	Registration
9:00 – 9:10 (The Theatre)	NGMAST '08 Opening Session
9:10 – 10:10 (The Theatre)	Keynote Talk 1 <i>"Mobile Computing 2015 – Law of Large Numbers"</i> Dr. Henry Tirri, VP, Head of System Research, Nokia Research Centre
10:10 – 10:30	Coffee Break
Parallel Technical Sessions	
10:30 – 12:30 (Room CA112)	NGMAST Session A1: IMS Enhancements Session Chair: Dr. Venkatesh Krishnaswamy, Avaya Labs, Avaya Inc., USA IMS 2.0 Service Architecture Menuka Jain (France Telecom, UK); Maria Prokopi (France Teleco, UK) WIMS 2.0, converging IMS and Web 2.0. Designing REST APIs for the exposure of session-based IMS capabilities David Lozano (Telefonica I+D, ES); Luis Angel Galindo (Telefonica España, ES); Luis García (HI Iberia, ES) Cost Control in Service Composition Environments Joerg Niemoeller (Ericsson Corporate Research, DE); Roman Levenshteyn (Ericsson, DE); Ioannis Fikouras (Ericsson, DE) A view-based approach for semantic service descriptions Carsten Jacob (Fraunhofer FOKUS, DE); Heiko Pfeffer (TU Berlin / Fraunhofer FOKUS, DE); Stephan Steglich (TU Berlin / Fraunhofer FOKUS, DE)
10:30 – 12:30 (Room CA115)	NGMAST Session B1: Peer to peer /Energy Consumption Session Chair: Dr. Dirk Thissen, RWTH Aachen University, Germany Energy Consumption of Mobile YouTube: Quantitative Measurement and Analysis Yu Xiao (Helsinki University of Technology, FI); Ramya Sri Kalyanaraman (Helsinki University of Technology, FI); Antti Ylä-Jääski (Helsinki University of Technology, FI) Optimizing Energy Consumption of Mobile Nodes in Heterogeneous Kademia-based Distributed Hash Tables Imre Kelényi (Budapest University of Technology and Economics, HU); Jukka Nurminen (Nokia Research Center, FI) P2P-SIP in Mobile and Highly Volatile Environments Adetola Oredope (University of Essex, UK); Antonio Liotta (University of Essex, UK); Jason Morphet (British, UK); Ivan Roper (British Telecommunications (BT), UK) Interconnecting P2PSIP and IMS Jani Hautakorpi (Ericsson, FI); Arturo Salinas (Ericsson, FI); Erkki Harjula (University of Oulu, FI); Mika Ylianttila (University of Oulu, FI) Partially Decentralised Context Management for P2P Communities Jani Pellikka (University of Oulu, FI)
10:30 – 12:30 (Room CA204)	NGMAST Session C1: WiMax and beyond Session Chair: Dr. Ifiok Otung, University of Glamorgan, UK Fixed Mobile Convergence: A self-Aware QoS Architecture for Converging WiMAX and GEPON Access Networks Brownson Obele; Minh Kang (Information and Communications University, KR) Advanced WiMAX Adapter to Serve Adaptive Applications/ Processes in Converged Manner Tuomas Nissilä; Kostas Pentikousis; Ilkka Harjula; Jyrki Huusko; Marcos Katz (VTT Technical Research Centre of Finland) Propagation effects in WiMAX Systems Sharmini Enoch (University of Glamorgan, UK) Evaluating Time Diversity Performance on an On-Board Processing Satellite to Earth Station Downlink Kufre Udofia (University of Glamorgan, UK)

12:30 – 14:00	Lunch in the main foyer (Exhibition)
14:00 – 14:50 (The Theatre)	<p align="center">Keynote Talk 2 <i>Understanding the convergence jungle: putting the buzzwords NGN, IMS, SDP, and SOA into the right context"</i></p> <p align="center">Professor Dr. Thomas Magedanz Professor, TU Berlin and Director, NGNI, Fokus, Germany</p>
14:50 – 15:20	Coffee Break
15:20 – 17:30 (Room CA112)	<p align="center">Parallel Technical Sessions</p> <p>NGMAST Session A2: Services platforms beyond IMS Session Chair: Antonio Cuevas Casado, University of Stuttgart, Germany</p> <p>7DS - A Modular Platform to Develop Mobile Disruption-tolerant Applications Arezu Moghadam Suman Srinivasan; Henning Schulzrinne (Columbia University, US)</p> <p>Simple Mobile Services for IMS Stefano Salsano ; Andrea Polidoro; Giovanni Bartolomeo (Universita di Roma "Tor Vergata", IT)</p> <p>Enterprise Communications Platform Support for Integrated Location-Based Applications John Buford; Xiaotao Wu; Ratan Bajpai; Venkatesh Krishnaswamy (Avaya Labs Research, US)</p> <p>Phone-controlled Delivery of NGN Services into Residential Environments Andreas Fasbender (Ericsson, DE); Stefan Hoferer (RWTH Aachen, DE); Martin Gerdes (Ericsson, DE); Takeshi Matsumura (Ericsson, JP); Frank Reichert (University of Agder, NO)</p>
15:20 – 17:30 (Room CA115)	<p>NGMAST Session B2: M-Commerce Session Chair: Marika Stålnacke, Ericsson Research,</p> <p>A Multi-facet Requirement Assessment of Customer-Oriented Mobile Tourism Services Chien-Chih Yu; Hsiao-ping Chang (National Chengchi University, TW)</p> <p>fairCASH: Concepts and Framework Yen Choon Ching; Heinz Kreft (University of Kiel, DE)</p> <p>Pivot: Automatically Offering Information and Services to Real-World Shoppers Nathan Nichols; Kristian Hammond ; Larry Birnbaum ; Lisa Gandy (Northwestern University, US)</p> <p>Key Distribution Framework for a Mobile Agent Platform Leila Ismail (UAE University, AE)</p>
15:20 – 17:30 (Room CA204)	<p>NGMAST Session C2: Propagation and antennas Session Chair: Tuomas Nissilä, VTT Research Centre of Finland</p> <p>Studies on a Next Generation Access Technology using Radio over Free-Space Optic Links Kamugisha Kazaura; Dat Pham; Mohammad Shah Alam (Waseda University, JP); Toshiji Suzuk; Kazuhiko Wakamori (Engineering, JP); Mitsuji Matsumoto (Waseda University, JP); Takeshi Higashino; Katsutoshi Tsukamoto; Shozo Komaki (Osaka University, JP)</p> <p>Investigation into GPRS Transmission Employing Switched Beam Antenna at Mobile Station Monthippa Uthansakul (Suranaree University of Technology, TH)</p> <p>Restoration of the RET Phase Function Signal using Deconvolution Huajian Cu ; Jürgen Richter (University of Glamorgan, UK)</p> <p>Turbo Codes with Internal Pilot Insertion Abdulkareem Kadhim (Nahrain University, Baghdad, Iraq, IQ); Ahmed Hamad (Engineering College, Babylon University, Iraq, IQ)</p>
18:00 - 20:00	<p align="center">Civic Reception by the Lord Mayor of Cardiff At the Marble Hall of the Historic City Hall</p>



Thursday 18 September

9:00 – 10:00 (The Cinema)	<p><i>Keynote Talk 3</i> <i>“Convergence of Man and Machine Processes in the Emerging Internet”</i> Radoslaw Piesiewicz, Dr.-Ing. Head of Broadband and Wireless Area CREATE-NET</p> <p>and Professor Imrich Chlamtac President of CREATE-NET, Honorary Bruno Kessler Professor at the University of Trento, Italy</p>
10:00 – 10:30	Coffee Break
10:30 – 12:30 (Room CA112)	<p style="text-align: center;">Parallel Technical Sessions</p> <p><i>NGMAST Session A3: QoS mechanisms in NGN</i> <i>Session Chair: Prof. Stephane Coulombe, Ecole de technologie superieure, Canada</i></p> <p>Admission Control in IP Multicast over Heterogeneous Access Networks <i>Pedro Santos (Portugal Telecom Inovacao, PT); Antonio Pinto; Manuel Ricardo (INESC Porto, PT); Francisco Fontes (Portugal Telecom Inovacao, PT); Teresa Almeida (IT Aveiro, PT)</i></p> <p>A Proactive and Distributed QoS Negotiation Approach for Heterogeneous Environments: an Evaluation of QoS Signalling Overhead <i>Anis Zouari; Lucian Suci (France Télécom R&D, FR); Jean-Marie Bonnin (ENST Bretagne, FR); Karine Guillouard (France Telecom R&D, FR)</i></p> <p>QoS-enabled Information Transport: Yet Another Operator Service <i>Antonio Cuevas Casado (Universität Stuttgart, DE); Jose Ignacio Moreno (Universidad Carlos III de Madrid, ES); Rui Aguiar (University of Aveiro, PT)</i></p> <p>NETQOS Policy Management Architecture for flexible QoS Provisioning in Future Internet <i>Ilka Miloucheva (Fraunhofer Institute, DE)</i></p>
10:30 – 12:30 (Room CA115)	<p><i>NGMAST Session B3: Sharing content, Accessing content</i> <i>Session Chair: Jörg Niemöller, Ericsson Corporate Research, Germany</i></p> <p>Palpatine: a P2MP IMS Video Share architecture and implementation <i>Luis Lopez (Universidad Rey Juan Carlos, ES); Micael Gallego Carrillo (Universidad Rey Juan Carlos, ES); Jose Maria Recio Pelaez (Solaimes S.L., ES); Javier López Fernández (Solaimes S.L., ES)</i></p> <p>Mobile Content Sharing Utilizing the Home Infrastructure <i>Petros Belimpasakis (Nokia Research Center, FI); Shahzad Awan ; Eleni Berki (University of Tampere, FI)</i></p> <p>Delivering Services to Residential Appliances by utilizing Remote Resource Awareness <i>Andreas Häber (University of Agder, NO); Martin Gerdes (Ericsson, DE); Frank Reichert (University of Agder, NO); Andreas Fasbender (Ericsson, DE); Ram Kumar (University of Agder, NO)</i></p> <p>User Centered Mobile Applications <i>Luis Angel Galindo (Telefonica España, ES); Joaquin Salvachua (Technical University of Madrid, ES)</i></p>
10:30 – 12:30 (Room CA204)	<p><i>NGMAST Session C3: Ad hoc networks</i> <i>Session Chair: Dr. Kamugisha Kazaura, Waseda University, Japan</i></p> <p>A Reliable Broadcast Method for Vehicular Ad hoc Networks Considering Fragmentation and Intersection Problems <i>Samaneh Khakbaz (IUST, IQ)</i></p> <p>Adding Reliability of Broadcast Methods in Vehicular Ad hoc Networks <i>Samaneh Khakbaz (IUST, IQ)</i></p> <p>Intelligent MANET Routing Protocol Selector <i>Nagham Saeed; Maysam Abbod; Thafar Sulaiman ; Hamed Al-Raweshidy; Heba Kurdi (Brunel University, UK)</i></p> <p>A Technical Framework for Designing Wireless Sensor Networks for Agricultural Monitoring in Developing Regions <i>Jaafar Elmirghani; Amar Kabashi (University of Leeds, UK)</i></p> <p>Experiments in ubiquitous computing for communities of practice using learning resources <i>Sarra Kaddouci (University of Lille 1, FR); Amel Bouzeghoub (Telecom Sud Paris, FR); Pierre-André Caron (LIFL, Université Lille 1, FR); Claire Lecocq (Telecom Sud Paris, FR); Xavier Le Pallec; François-Julien Ritaine; José Rouillard (LIFL, Université Lille 1, FR)</i></p>
12:30 – 14:00	Lunch in the Zen Room (4th floor)
14:00 – 16:00 (Room CA112)	<p style="text-align: center;">Parallel Technical Sessions</p> <p><i>NGMAST Session A4: Services in Cellular Networks</i> <i>Session Chair: Petros Belimpasakis, Nokia Research Center, Finland</i></p> <p>Public Safety Communication using Commercial Cellular Technology <i>Rolf Blom; Peter de Bruin; Jesper Eman; Mats Folke; Hans Hannu; Mats Naslund; Marika Stålnacke; Per Synnergren (Ericsson AB, SE)</i></p> <p>A Generic Framework for Resource Scheduling in Personal Mobile Grids based on Honeybee Colony <i>Heba Kurdi; Maozhen Li ; Hamed Al-Raweshidy (University of Brunel, UK)</i></p>

	<p>A Model Based RL Admission Control Algorithm for Next Generation Networks <i>Silvano Mignanti (University of Rome "Sapienza", IT); Alessandro Di Giorgio (University of Rome "Sapienza", IT); Vincenzo Suraci (University of Rome "La Sapienza", IT)</i></p> <p>Proper Virtual Private Network (VPN) Solution <i>Ahmed Jaha (Higher Institute of Industry, Misurata - Libya, LY)</i></p>
<p>14:00 – 16:00 (Room CA204)</p>	<p><i>NGMAST Session C4: Location techniques</i> <i>Session Chair: Prof. Thomas C Schmidt, HAW Hamburg, Germany</i></p> <p>A Novel WLAN Positioning Technique Employing Time Delay of Successful Transmission <i>Peerapong Uthansaku ; Monthippa Uthansakul (Suranaree University of Technology, TH)</i></p> <p>Significant Location Identification Based on User Behavior Modeling <i>Onoriu Bradeanu (MobiFon S.A., RO); Doru-Petru Munteanu (Military Technical Academy, RO)</i></p> <p>Personalization for Location-Based E-Learning <i>Rui Zhou (University of Freiburg, DE)</i></p> <p>GenXfon: Design and Implementation of an Ubiquitous SIP Video Client <i>Alhad Kuwadekar, Chitra Balakrishna, Khalid Al-Begain (University of Glamorgan, UK)</i></p>
<p>16:00 – 16:30</p>	<p>Coffee Break</p>
<p>16:30 – 17:30 (The Theatre)</p>	<p><i>Expert Panel</i> <i>"Service Platforms: From the Killer Application to the Killer Environment"</i></p>
<p>19:30 - 23:00</p>	<p>Conference Gala Dinner Welsh Banquet in Cardiff Castle</p>



Friday 19 September

9:10 – 10:00 (The Theatre)	<p align="center"><u>Keynote Talk 4</u> <i>“Real Life experiences in the Mobile Value-Added Services”</i> Dr. George Kontopidis CTO, NMS Communications, USA</p>
10:00 – 10:30	Coffee Break
10:30 – 12:30 (Room CA112)	<p align="center">Parallel Technical Sessions</p> <p><i>NGMAST Session A5: Mobility in NGN</i> <i>Session Chair: Dr. John Buford, Avaya Labs., USA</i></p> <p>Adaptive Context Transfer Scheme for Fast Handoff in Proxy Mobile IPv6 <i>Jaejong Baek (University of Yonsei, KR); JooSeok Song (University of Yonsei, KR)</i></p> <p>Fast MIP Handover Amelioration in Wireless Network by Cross-layer Solution <i>Anne Wei (Université Parix XII, FR)</i></p> <p>Transmission Delay Reduction in IMS by Re-registration procedure modification <i>Reza Farahbakhsh (University of Isfahan, IR); Marzieh Varposhti (university of Isfahan, IR); Naser Movahhedinia (University of Isfahan, IR)</i></p> <p>Error Corrected Rectangulation Method for Location Determination of Mobile in GSM Network <i>Muhamad Imran Razzak (Federal Urdu University of Arts, Science and Tech., Islamabad, Pakistan)</i></p>
10:30 – 12:30 (Room CA115)	<p><i>NGMAST Session B5: Service composition/ Context aware services</i> <i>Session Chair: Dr. George Kontopidis, NMS Communications, USA</i></p> <p>A SIP Application Router for Presence-Driven Composition of IMS Services <i>Juan Miguel Espinosa Carlin (RWTH Aachen University, DE); Dirk Thissen (RWTH Aachen University, DE)</i></p> <p>SITUMET: Situation-based meteorological services <i>Michael Klafft (Fraunhofer ISST, DE); Daniela Knorr (MeteoMedia GmbH, AT); Ulrich Meissen (Fraunhofer ISST Berlin, DE); Manfred Spatzierer (MeteoMedia GmbH, AT); Agnes Voisard (Fraunhofer ISST Berlin, DE)</i></p> <p>Mobile Situation-aware Task Recommendation Application <i>Doreen Cheng (Samsung Information Systems America, US); Henry Song (Samsung Electronics R&D Center, US); Hyuk Cho (University of Texas at Austin, US); Sangoh Jeong (Samsung Information Systems America, US); Swaroop Kalasapur (Samsung R&D, US); Alan Messer (Samsung Electronics, US)</i></p> <p>Mobile Learning against Forgetting <i>Yuan Miao (Victoria University, AU)</i></p>
10:30 – 12:30 (Room CA204)	<p><i>NGMAST Session C5: QoS techniques</i> <i>Session Chair: Hans Einsiedler, Deutsche Telekom, Germany</i></p> <p>Real-time Multi-user Transcoding For Push To Talk Over Cellular <i>Stephane Coulombe (Ecole de technologie supérieure, CA)</i></p> <p>An ANFIS-based Hybrid Video Quality Prediction Model for Video Streaming over Wireless Networks <i>Asiya Khan ; Lingfen Sun ; Emmanuel Ifeachor (University of Plymouth, UK)</i></p> <p>Congestion Control and Adaptive Retransmission for Multimedia Streaming over Wireless Networks <i>Kamal Singh (IRISA/INRIA Rennes, FR); Arpad Huszak (Budapest University of Technology and Economics, HU); David Ros (TELECOM Bretagne, FR); César Viho (University of Rennes I, FR); Jeney Gabor (Budapest University of Technology and Economics, HU)</i></p> <p>A Dynamic Buffer Management Scheme for End-to-End QoS Enhancement of Multi-flow Services in HSDPA <i>Suleiman Yerima, Khalid Al-Begain (University of Glamorgan, UK)</i></p>
12:30 – 13:00	Closing Session – Best paper award
13:00– 14:00	Lunch

NGMAST 2008 Co-located Event
1st IEEE International Workshop on
FUTURE MULTIMEDIA NETWORKING (IEEE FMN'08)
Final Programme

Wednesday 17 September 2008	
9:10-10:00	Keynote Talk 1 <u>Mobile Computing 2015 – Law of Large Numbers</u> Dr. Henry Tirri VP, Head of System Research, Nokia Research Centre
10:00 - 10:30	Coffee Break
10:30 - 12:30	Session 1: Multimedia in wired and/or wireless networks Chair: Eduardo Cerqueira, University of Coimbra
	User Centric Media of the Future Internet (invited paper) <i>Janko Calic; Petros Daras; Nick Achilleopoulos; Marianna Panebarco; Oscar Mayora; Peter Stollenmayer; Doug Williams; Tim Pennick; Nadia Magnenat-Thalmann; Carmen Guerrero; Michiel Pelt; Tim McGrath; Eugenia Fuenmayor; Nikolaos Papaoulakis; Federico Alvarez; Elias Kalapanidas; Alex Shani; Jean-Yves Le Moine</i>
	DVC Based Stereoscopic Video Transmission in a Mobile Communication System <i>Anil Fernando (Centre for Communications Research, University of Surrey, UK)</i>
	Enhancing the Serviceability and the Availability of IMS-Based Multimedia Services: Avoiding Core Service Failure <i>Mohamed Boucadair (France Telecom R&D, FR); Pierrick Morand (France Telecom, FR); Isabel Borges (Portugal Telecom, PT); Marco Tomsu (Bell Labs Alcatel Lucent, DE)</i>
	Influence of Routing Protocol on VoIP Quality Performance in Wireless Mesh Network Simulation <i>Arlen Nascimento (Federal University of Amazonas, BR); Saulo Queiroz (Federal University of Amazonas, BR); Edjair Mota (Federal University of Amazonas, BR)</i>
	Towards Seamless Handovers in SSM Source Mobility - An Evaluation of the Tree Morphing Protocol <i>Olaf Christ; Thomas Schmidt (HAW Hamburg, DE); Matthias Wählisch (HAW Hamburg & link-lab, DE)</i>
12:30 - 14:00	Lunch in the main Foyer (Exhibition)
14:00 - 14:50	Keynote Talk 2 <u>Convergence of Man and Machine Processes in the Emerging Internet</u> Dr. Radoslaw Piesiewicz and Professor Imrich Chlamtac CREATE-NET, University of Trento, Italy
14:50 - 15:20	Coffee Break
15:20 - 17:30	Session 2: Quality of service management in multimedia networks Chair: Augusto Neto, Institute of Telecommunications - Aveiro
	Wireless Multicast Cross-Layer Framework for Rate Allocation: Protocol Design <i>Amr Mohamed (Univ. British Columbia, CA); Hussein Alnuweiri (Texas A&M University, Qatar, QA)</i>
	Cross-Layer Joint Optimization of FEC Channel Codes and Multiple Description Coding for Video Delivery over IEEE 802.11e Links <i>Simone Milani (University of Padova, IT); Giancarlo Calvagno (University of Padova, IT); Riccardo Bernardini (University of Udine, IT); Pamela Zontone (University of Udine, IT)</i>
	Cost Efficient Media Streaming Algorithms for Rate-dependent Pricing Strategies in Heterogeneous Wireless Networks <i>Ahmed Zahran (University College Cork, IE); Cormac Sreenan (University College Cork, IE)</i>
	Application-level QoS: Improving Video Conferencing Quality through Sending the Best Packet Next <i>Ian McDonald (University of Waikato, NZ); Richard Nelson (University of Waikato, NZ)</i>

Thursday 18 September 2008	
9:10-10:00	Keynote Talk 3 <u>Challenges in Content Networking</u> Dr. Andreas Mauthe Lancaster University, UK
10:00 - 10:30	Coffee Break
10:30 - 12:30	Session 3: Quality of experience management in multimedia networks Chair: Mikolaj Leszczuk , AGH University of Science and Technology Quality of Experience Evaluation for Multimedia <i>Michal Grega; Lucjan Janowski; Mikolaj Leszczuk; Piotr Romaniak; Zdzislaw Papir (AGH University of Science and Technology, Department of Telecommunication, PL)</i> On the Quality of Experience of SopCast <i>Benny Fallica (Delft University of Technology, NL); Yue Lu (Technology University of Delft, NL); Fernando Kuipers (Delft University of Technology, NL); Robert Kooij (TNO ICT, NL); Piet Van Mieghem (Delft University of Technology, NL)</i> Multi-component Teleservice Model for Multimedia Applications <i>Omar Alani (University of Leeds, UK); Rashid Mehmood (Swansea University, UK)</i> Fast Frame-Based Scene Change Detection in the Compressed Domain for MPEG-4 Video <i>Jens Brandt (Technische Universität Braunschweig, DE); Jens Trotzky (TU Braunschweig, IBR, DE); Lars Wolf (Technische Universität Braunschweig, DE)</i> A Utility-based QoS Model for Emerging Multimedia Applications <i>Mu Mu (Lancaster University, UK); Andreas Mauthe (Lancaster University, UK); Francisco Garcia (Agilent, UK)</i>
12:30 - 14:00	Lunch in the Zen Room (4 th Floor)
14:00 - 16:00	Session 4: Multimedia in peer-to-peer networks Chair: Andreas Mauthe, Lancaster University Data Availability in P2P Streaming Systems <i>Husam Alustwani (University of Franche-Comté, FR); Jacques Bahi (University of Franche-Comté, FR); Ahmed Mostefaoui (University of Franche-Comté, FR)</i> Continuous Scheduling for Data-Driven Peer-to-Peer Streaming <i>Jyrki Akkanen (Nokia Research Center, FI)</i> Enabling Global Multimedia Distributed Services based on Hierarchical DHT Overlay Networks <i>Isaias Martinez-Yelmo (University Carlos III of Madrid, ES); Alex Bikfalvi (IMDEA Networks, ES); Carmen Guerrero (Universidad Carlos III Madrid, ES); Rubén Cuevas Rumin (Universidad Carlos III de Madrid, ES); Andreas Mauthe (Lancaster University, UK)</i> Playback delay in mesh-based peer-to-peer systems with random packet forwarding <i>Viktoria Fodor (KTH, SE); Ilias Chatzidrossos (KTH, Royal Institute of Technology, SE)</i> A Case for Hybrid Content Distribution for Interactive Video-on-Demand <i>Andrew MacQuire (Lancaster University, UK); Andrew Brampton (Lancaster University, UK); Michael Fry (The University of Sydney, AU); Nicholas Race (Lancaster University, UK); Laurent Mathy (Lancaster University, UK)</i>
16:00 - 16:30	Coffee Break
16:30 - 17:30	Expert Panel Service Platforms: From the Killer Application to the Killer Environment
19:30 - 23:00	Gala Dinner – Welsh Banquet – Cardiff Castle

**1st International Workshop on
Mobile and Wireless Security (WMS'08)
Final Programme**

Thursday 18 September 2008

9:10 - 10:00 (Room CA321)	<u><i>Invited Presentation</i></u> <i>Cognitive Spectrum and its Security Issues</i> S. Arkoulis; L. Katatzopoulos; C. Delakouridis, G Marias (Athens University of Economics and Business, GR)
10:00 -10:30	Coffee Break
10:30 -12:30 (Room CA321)	<i>Session 1 – Security Applications in Mobile Networks</i> A Simulation Analysis of Routing Misbehaviour in Mobile Ad hoc Networks <i>Abdelaziz Babakhouya (CERIST Center of Research, Algiers, Algeria. University of Bejaia, Algeria, DZ); Yacine Challal (Compiègne University of Technology, Heudiasyc lab., FR); Abdelmadjid Bouabdallah (Universite de Technologie - Compiègne, FR)</i> Performance Evaluation for Remote Access VPNs on Windows Server 2003 <i>Ahmed Jaha (Higher Institute of Industry, Misurata - Libya, LY)</i> Solutions to the GSM Security Weaknesses <i>Mohsen Toorani; Ali Asghar Beheshti (Iran University of Science and Technology, IR)</i> Mobility management with OLSR protocol for fourth generation (4G) mobile networks <i>Shabnam Jazayeri (Iran University of Science and Technology, IR)</i>
12:30 -14:00	Lunch in the Zen Room (4th floor)
14:00 -16:00 (Room CA321)	<i>Session 2 – Foundations of Security in Wireless & Mobile Networks</i> Future Transport and Internet Technologies <i>Eduard Babulak (Fairleigh Dickinson University - Vancouver, CA)</i> S3H: A Secure, Seamless and Soft Handover between WiMAX and 3G Networks <i>Ayesha Altaf; Faiza Iqbal; Muhammad Javed (National University of Sciences and Technology, Pakistan, PK)</i> Identification of Feature Denial of Services <i>Rui Crespo (Technical University of Lisbon, PT)</i> Cryptographic Spread Spectrum Relay Communication <i>Zahoor Ahmed (ENSIL University of Limoges France, FR); Jean-Pierre Cances (XLIM, FR)</i>
16:00 -16:30	Coffee Break
16:30 – 17:30 (The Theatre)	<u><i>Expert Panel</i></u> <i>“Service Platforms: From the Killer Application to the Killer Environment”</i>
19:30 - 23:00	Conference Gala Dinner Welsh Banquet in Cardiff Castle

NGMAST 2008 Co-located Event
 1st International Workshop on
 Next Generation Networking: Open Platforms and Services (NGNOPS)
 Final Programme

Wednesday 17 September	
9:10 – 10:00 (The Theatre)	<u>Keynote Talk 1</u> <i>“Mobile Computing 2015 – Law of Large Numbers ”</i> Dr. Henry Tirri, VP, Head of System Research, Nokia Research Centre
10:00 – 10:30	Coffee Break
Parallel Technical Session	
10:30 – 12:30 (Room CA321)	<i>NGNOPS Session 1 (Invited Talk)</i> Open Source Web Application Development Stack for Symbian-based Mobile Phones <i>Johan Wikman (Nokia Research Center, FI); Jukka Nurminen (Nokia Research Center, FI)</i> Towards a Capability Repository For Java-ME enabled Devices <i>Fatima Elsayed (University of Glamorgan, UK)</i> CAPgets: Mobile Web Runtime Environment for Community Applications <i>David Linner (Fraunhofer Institute FOKUS, DE)</i>
12:30 – 14:00	Lunch in the main foyer (Exhibition)
14:00 – 14:50 (The Theatre)	<u>Keynote Talk 2</u> <i>Understanding the convergence jungle: putting the buzzwords NGN, IMS, SDP, and SOA into the right context”</i> Professor Dr. Thomas Magedanz Professor, TU Berlin and Director, NGNI, Fokus, Germany
14:50 – 15:20	Coffee Break
Parallel Technical Sessions	
15:20 – 17:30 (Room CA321)	<i>NGNOPS Session 2</i> JAIN SLEE and Sip-Servlets Interoperability with Mobicents Communication Platform <i>Jean Deruelle (Individual, FR)</i> Deploying Open Source IP Telephony in Rural Environments <i>Lambros Lambrinos (Cyprus University of Technology, CY)</i> Embracing Open Source Methods for the <i>Standardisation</i> of NGN Services and Enablers <i>Catherine Mulligan (University of Cambridge, UK)</i> Enhanced SIP for Reducing IMS Delay under WiFi-to-UMTS Handover Scenario <i>Hoyeon Lee (Dongguk University, KR)</i>
18:00 - 20:00	Civic Reception by the Lord Mayor of Cardiff At the Marble Hall of the Historic City Hall

NGMAST'08 Keynotes



Mobile Computing 2015 – Law of Large Numbers

**Dr. Henry Tirri,
VP, Head of System Research,
Nokia Research Centre**

Abstract

In the evolution of computing we have witnessed the trend of moving from centralized mainframes to networked, highly distributed heterogeneous computing devices. At each evolutionary phase in this timeline - time-sharing mainframes to minicomputers, minicomputers to personal desktop computers, desktop computers to laptops, laptops to mobile handsets and PDAs – a new scale challenge has emerged: scaling in memory capacity, scaling in computational speed, scaling in networking architecture and protocols, scaling in energy consumption. Such scaling challenges are not driven only by technology; they are deeply intertwined with new usage patterns and applications of the computing devices in a complex feedback cycle of global macrotrends and enabling technologies. In this talk we will discuss the interesting scaling challenges we are facing during the next decade of evolution in the so-called mobile computing era and their impact on emerging applications and services enabled by solving these challenges. In other words: What will the next 5 Billion computing devices enable us to do?

Henry Tirri Biography

Dr. Henry Tirri is Research Fellow and VP, Head of Systems Research in the Office of the CTO. Systems Research is the unit of NRC (Nokia Research Center) intent on driving breakthroughs that will reach far into the future, enabling new business opportunities for Nokia. As Head of Systems Research, Henry is responsible for labs worldwide that pursue disruptive innovation. Systems Research interacts closely with all Nokia functional units and promotes open innovation, working on research projects in collaboration with universities and research institutes around the world.

Henry joined Nokia in 2004 as Research Fellow at Software and Applications Laboratory. He has extensive experience in running both research activities in the fields of intelligent systems and networking. Before joining Nokia he was the Head of Graduate School at University of Helsinki, Head of Intelligent Systems Laboratory and was leading a large world-class research group in probabilistic modeling. Among other distinctive positions, he has served as Research Scientist at MCC, MTS at At&T Bell Laboratories, Visiting Scientist at NASA AMES, and Visiting Professor at Stanford University and UC Berkeley. He was also Vice President of Scientific Operations and Co-Founder of Ekahau.

Henry holds a Ph.D. in Computer Science from University of Helsinki, Finland. He is also a Professor of Computer Science at the University of Helsinki and an Adjunct Professor of Computational Engineering at the Helsinki University of Technology. His interests lie in various subfields of Artificial Intelligence, information theory, search technologies and wireless sensor networks.

Henry is the author and co-author of more than 175 academic papers in various fields of Computer Science, Social Sciences and Statistics. He has five patents.



Understanding the convergence jungle: putting the buzzwords NGN, IMS, SDP, and SOA into the right context

**Professor Dr. Thomas Magedanz
Professor, TU Berlin and Director,
NGNI, Fokus, Germany**

Abstract

Next Generation Networks (NGNs) are representing an important milestone in the evolution of fixed and mobile telecommunication networks towards an all-IP based multimedia services network environment. Positioned in the centre of the convergence of telecommunications and the internet, a major question arising is what kind of future multimedia killer applications will justify the huge investments to be undertaken for NGN introduction. Based on the success of the internet under the banner of Web 2.0 the hard lesson learned by the telecoms industry is, that there won't be any single killer application in the future but rather a multitude of the niche services have to be provided to a broadening spectrum of user groups also called communities. The IP Multimedia Subsystem (IMS) is supposed as international standard to provide as a structured over the top (OTT) service control architecture these kinds of presence-based community communication and information services.

However, the IMS is not standardising how services have to be developed and provided in an efficient way. The notion of Service Delivery Platforms (SDPs) is addressing this spectrum of needed functionalities on top of various network types, including emerging NGN and IMS infrastructures. This means that SDPs and IMS are considered today as important platforms on top of NGNs for the efficient implementation of an open set of multimedia services. Efficiency in this context is enabled by the concept of reusable service components designed independently of underlying network technologies, which brings us to the notion of Service oriented Architectures (SOA) considered today as holy grail for future proof system design.

This talk introduces the main buzzwords of converging networks and puts them into context by outlining a target SOA Telco architecture, which is forming the base of the FOKUS Open SOA Telco playground, an extensible technology testbed for prototyping innovative multimedia applications on top of converging networks. Application examples, such as an IMS-enabled Facebook application as well as an IMS-based Community IPTV service will be shown.

Thomas Magedanz Biography

Thomas Magedanz (PhD) is full professor in the electrical engineering and computer sciences faculty at the Technische Universität Berlin, Germany, leading the chair for next generation networks (www.av.tu-berlin.de). In addition, he is director of the "next generation network infrastructure" division of the Fraunhofer Institute FOKUS (www.fokus.fraunhofer.de/ngni), which also provides various testbeds and tools in the context of Next Generation Networks and Open Converged Service Environments.. The most popular ones include the Open Source IMS Core (www.openimscore.org) and the Open IMS Playground (www.open-ims.org) established in 2004. In 2007 he opened the new Open SOA Telco Playground (www.opensoaplayground.org) for IMS/Web2.0/SOA service prototyping and the Media Interoperability Laboratory (www.fokus.fraunhofer.de/go/mil/) for converged IPTV services.

Since more than 20 years Prof. Magedanz is working in the convergence field of fixed and mobile telecommunications, the internet and information technologies, which resulted in many international R&D projects centred around Next Generation Service Delivery platforms based on the aforementioned testbeds. In 2007 Prof. Magedanz joined the European FIRE (Future Internet Research Environment) Expert Group.

In the course of his research activities he published more than 200 technical papers/articles. In addition, Prof Magedanz is senior member of the IEEE, and editorial board member of several journals.

In 2006, Prof Magedanz has been assigned as Extraordinary Professor at the Department of Electrical Engineering of the University of Cape Town, South Africa (www.ee.uct.ac.za). Since 2007, he is also Visiting Professor to the Department of Mathematics, Physics and Computing at the Waterford Institute of Technology in Ireland (<http://www.wit.ie>).



Convergence of Man and Machine Processes in the Emerging Internet

Professor Imrich Chlamtac

President of CREATE-NET, Honorary Bruno Kessler

Professor at the University of Trento, Italy

And

Radoslaw Piesiewicz, Dr.-Ing.

Head of Broadband and Wireless Area

CREATE-NET



Abstract

The convergence of biology and engineering is one of the fast growing phenomena in IT research currently.

The emerging networks, characterized by billions of simple, inexpensive devices, do not lend themselves to classical networks optimization and management. To reach efficient operation and equilibria these networks need to develop effective collaboration strategies in the absence of central control, autonomously.

Inspiration for these systems can be drawn from biology.

Based on autonomic local interactions these novel models of system design and control are a candidate for providing integrated communication service environments with the scaling and adaptation needed to face the constantly changing, growing and unpredictable user expectations in cost, services and response quality.

Imrich Chlamtac Biography

Imrich Chlamtac is the President of CREATE-NET, a non-profit international research institute and the Honorary Bruno Kessler Professor at the University of Trento, Italy. In the past he was with Technion and UMass, Amherst, DEC Research and helped found several successful technology firms, including Consip Ltd and BCN Inc, one of the largest System Integrators in central Europe.

In his academic life he has held various chaired professorships in USA and Europe including the Distinguished Chair in Telecommunications Professorship at the University of Texas at Dallas, Sackler Professorship at Tel Aviv University, "University Professorship" at the Budapest University of Technology and Economics, and Honorary Professorship from the Beijing University of Posts and Telecommunications.

Dr. Chlamtac is the recipient of various professional award including Fellow of the IEEE, Fellow of the ACM, Fulbright Scholar, the ACM Award for Outstanding Contributions to Research on Mobility and the IEEE Award for Outstanding Technical Contributions to Wireless

Personal Communications. Dr. Chlamtac published over four hundred refereed journals and conference articles and is listed among ISI's Highly Cited Researchers in Computer Science. He is the co-author of several books, including the first book on Local Area Networks (1980) and the Amazon.com best seller, Wireless and Mobile Network Architectures (John Wiley and Sons). He has widely contributed to the scientific community as Chair of ICST Scientific Council, founder and Chair of ACM Sigmobility, founder and steering committee chair of several leading conferences, including ACM Mobicom, and various conference in collaboration with Create-Net, ICST and IEEE including Broadnets, Tridentcom, Securecom, WiOpt and Mobiquitous. He also serves as the founding Editor in Chief of the ACM/Springer Wireless Networks (WINET), and the ACM/Springer Journal on Special Topics in Mobile Networks and Applications (MONET).

Radoslaw Piesiewicz Biography

Radoslaw Piesiewicz is heading Broadband & Wireless area at CREATE-NET, where the main topics of interest are cognitive and reconfigurable radio systems, short-range communications with UWB, hybrid optical-wireless solutions and dynamic reconfiguration aspects in mesh optical networks. He is Work Package leader on Cognitive UWB Radio and Coexistence within FP7 IP EUWB and a member of WG3 Functional Architecture and Cognitive Pilot Channel inside ETSI TC Reconfigurable Radio Systems (RRS). He also represents EUWB consortium within the Radio Access Spectrum cluster of FP7 projects. Before joining CREATE-NET he worked in the Terahertz Communications Lab and in the Institute for Communications Technology, Mobile Radio Systems Department at the Technical University of Braunschweig. Earlier, he was with Fraunhofer IZM, Advanced Systems Engineering, Paderborn, Germany and before that with Axis in Gdansk, Poland. He received his Dr.-Ing. degree from the Technical University of Braunschweig with summa cum laude and MSEE from the Technical University of Gdansk with golden badge distinction. He holds more than 40 publications. He is also active as an expert evaluator for the projects financed by the European Commission in FP7 and for the National Centre for Research and Development in Poland.



Real Life experiences in the Mobile Value-Added Services

Dr. George Kontopidis
CTO, NMS Communications, USA

Abstract

Behind every successfully launched mobile value-added service is not only innovative technology but also a sound business model that incorporates local culture, user behavior or need. Even the best technology cannot guarantee a positive return on investment to the operator and a tangible value to the consumer. Dr. George Kontopidis, Vice President Engineering and Strategic Direction at NMS Communications, will provide several real world examples of application innovation in mobile value-added services and describe both the technology and business model that lead to their success.

George Kontopidis Biography:

Vice President of Engineering

As vice president of engineering, George Kontopidis directs the company's product and technology activities including hardware and software development. During his nearly 20-year tenure with NMS, he has participated in the architecture, design and implementation of many of the company's flagship products, helping NMS grow into an industry leader in media and signaling products, with a global presence and hundreds of OEMs customers. Prior to joining NMS, he worked for several startup companies and consulting firms in the U.S. and Europe, including Sea Data Corp, Philips, and General Automation. George also taught engineering courses at the Harvard Extension School for 10 years. He has a degree in electrical and mechanical engineering from the National Technical University of Athens, and an MSEE in computer engineering and automatic control and a PhD in signal processing from the University of New Hampshire. He is an active member of various professional groups including IEEE, ACM, MIT Enterprise Forum, Tie Group and Mobile Mondays.

NGMAST'08 Exhibitors

