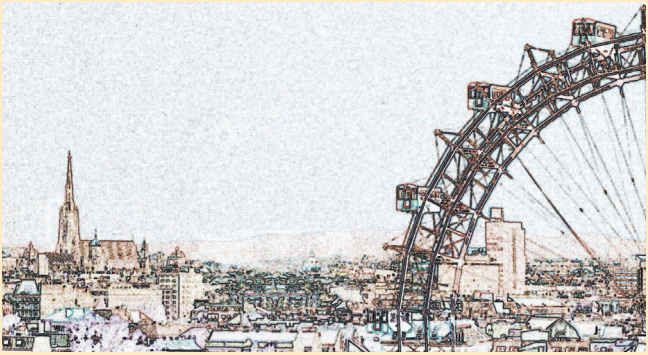
World Telecommunications Congress 2010

Telecommunications: The Infrastructure for the 21st Century

September 13-14 · 2010 Vienna · Austria

Final Program

WTC 2010 VIENNA, AUSTRIA



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Scope of the Conference

A. Network and Technology Development

- Data and network security
- Fixed and mobile access networks
- Future Internet
- Mobile ad-hoc, mesh and sensor networks
- Network and service management
- Next Generation Networks
- Optical networks for access, metro and core networks
- Quality of Service and traffic control

B. Applications & Services

- Ambient-assisted living
- Cloud/Grid computing
- Fixed-Mobile convergence
- Gaming architecture
- New video communications and content distribution
- Service development & deployment platforms

C. Emerging Business Models

- Economics of new generation services
- E-Government, E-Health, E-Learning
- Green Telecoms
- (Mobile) Advertising
- Telecommunications as a productivity enabler
- Vertical applications in different business areas

D. Regulatory and Policy Issues

- Network neutrality
- Bridging the digital divide
- Next-Generation Voice Regulation
- Privacy & personal security
- Spectrum Issues and the Digital Dividend
- Standardisation strategy

E. Other Telecommunications-related Issues

Welcome Message

It is a great pleasure and honour for me to welcome you to the World Telecommunications Congress 2010 in Vienna! I am excited to chair this exceptional gathering of leading experts from industry, academia and government to jointly discuss and share their expertise and viewpoints.

In today's society the prevalent demands and needs have become information - and communication - centred. Telecommunications as the enabling factor of modern lifestyle, where being connected anytime and everywhere has become of paramount importance, and now has become society-changing relevance.

New 'Network and Technology Developments' are needed to support the emerging new 'Application and Services'. 'Emerging Business Models' are needed to fund these developments and deployments and the 'Regulatory and Policy Issues' have to be solved to enable the Telecom Industry to build 'The infrastructure of the 21. Century'. Our hosts, the VDE and the OVE have done an outstanding job in setting up a comprehensive program that addresses in its entirety the significant aspects and pressing questions of the telecommunications environment.

Telecommunications is and will increasingly be playing a major role in enabling and further advancing the way we live and work in the 21st century. The shape and success of tomorrow's societies will depend on what we develop, enhance and build today. As an essential building block in creating and developing technological frameworks as well as influencing the economic and political ecosystem the World Telecommunications Congress is playing an influential and significant role in this venture.

I want to express my hope not only that your participation in the WTC 2010 will be a rewarding and memorable experience but that you also will enjoy your stay in the beautiful city of Vienna!

Rüdiger Köster
General Chair

Keynote Session
Room: Arabella + Boheme

09:30 Keynote:
Telecommunications: The Infrastructure for the 21st Century
Dr. Köster, Technical Director, T-Mobile Austria GmbH

Biography
Rüdiger Köster was born in 1958 in Altena, Germany. After graduating from his studies of electrical engineering at the University of Siegen, he began his professional career at Deutsche Telekom, where from 1990 onwards he was contributing to the introduction of the GSM technology from the very beginning.

In 1998 he moved to Italy on behalf of Deutsche Telekom in order to head system- and service development for the WIND consortium. Three years later he was assigned responsibility for the introduction of business- and product platforms in the technology resort of the Telekom subsidiary T-Mobile USA in Seattle. In 2004 Rüdiger Köster returned to T-Mobile International in Germany where he last was heading product- and terminal development for Europe.

In September 2009 Rüdiger Köster has been appointed Technical Director of T-Mobile Austria.

Abstract
Infrastructural facilities have in all history of humankind been the backbone and foundation for the stability, prosperity and quality of life of a general public. At all times they had to be developed further in order to be and remain an enabler for the progress of society. While on the one hand it is fulfilling our ever growing and changing requirements, by generating new possibilities, infrastructure itself shapes and changes our behaviour and creates demand and needs we have not been aware of before.

In today's society the prevalent demands and needs have become information- and communication- centred. Telecommunications as the enabling factor of modern lifestyle, where being connected anytime and everywhere has become of paramount importance, hand now has become society-changing relevance.

As the need for telecommunication services does not cease to increase and new innovative services and use cases continue to emerge, the data volumes that have to be handled pose substantial challenges to the telecommunication industry, particularly in the wireless area. The infrastructure has to keep up with

the ever-increasing demand for service quality while at the same time cost structures have to be kept at a level that allows non-prohibitive pricing and access to broadband services for everybody. Continuous development and deployment of next generation networks is the prerequisite to prepare the telecommunications ecosystem to address these growing challenges.

New 'Network and Technology Developments' are needed to support the emerging new 'Application and Services'. 'Emerging Business Models' are needed to fund these developments and deployments and the 'Regulatory and Policy Issues' have to be solved to enable the Telecom Industry to build 'The infrastructure of the 21.

09:50 Keynote:
The Governmental Challenges in Light of next Generation Networks
Mag. Dr. August Reschreiter, Austrian Federal Ministry of Transport, Innovation and Technology

Biography
August Reschreiter is heading the office of the Austrian Federal Ministry of Transport, Innovation and Technology (BMVIT).

He is deputy member of the supervisory boards of the Austrian Regulatory Authority for Broadcasting and Telecommunications as well as the Austrian Institute of Technology, member of the board of directors of the VHS Simmering and member of the via donau Austrian Waterways GmbH supervisory board.

He furthermore lectures business law at the University of Applied Sciences, Joanneum and law and management at the University of Applied Sciences, Campus Vienna. He has published several articles in the fields of telecommunication law and has co-authored Der Digitale Wohlfahrtstaat - The Digital Welfare State.

August Reschreiter holds a PhD in law and has completed the personnel management academy of the Vienna University of Economics. He is a certified corporate consultant and has graduated from the Strategic Leadership Training of the Austrian Republic.

Abstract
We now stand at the edge of another rapid development in communications technology. High Speed Broadband is a domestic essential to millions across the world not only in the case of business but also in the case of society. Next Generation Access (NGA) will bring a major change in the services, customers can enjoy. The question today is the right strategy for the transition to highest bandwidth systems. The initial situation with Austrians leading role in e-Government and the strong mobile penetration are distinguished but need more struggles. The Austrian Government has set up ambitious goals in the current government programme. Beside other issues Austrias goal is to catch up to the best ICT nations. For this reason a lot of measures are in transcription. These measures include strategy findings, policy activities, revisions of the telecom law, financial advancements and the implementation of a regulatory environment, which enables investments in high speed networks.

10:10 Keynote:
The Digital Agenda for Europe - The Policy and Regulatory Perspective
Ruprecht Niepold, European Commission, DG INFSO

Biography
Ruprecht Niepold is an adviser on spectrum management at the Directorate General for Information Society and Media of the European Commission (DG INFSO). Dr. Niepold holds a Degree in Electrical Engineering from the Technical University of Karlsruhe and a PhD from the University of Stuttgart. From 1977 he worked at the Fraunhofer Gesellschaft in applied research for industry in the field of industrial automation before joining the European Commission in 1989 where he became responsible for relations with Japan and South East Asia in the field of telecommunications policy. As of 1999 he led the unit dealing mobile and satellite communications regulatory aspects. Between 2003 and 2008 he headed the unit in charge of developing radio spectrum policy from a Community perspective. Since May 2008 he has been advising the Director General of DG INFSO on radio spectrum policy.

Abstract
In May 2010, the European Commission proposed a strategy called "Digital Agenda for Europe" which outlines the path towards delivering sustainable economic and social benefits from a single market based on fast and ultra fast internet and interoperable applications. This policy initiative calls for a wide range of actions aiming at removing today's hurdles preventing a virtuous circle of the digital economy to gain momentum. Implementing the digital economy at EU level hence calls for addressing issues beyond the classical challenges in the area of electronic communications networks and services. However, as a key condition for success, the Digital Agenda for Europe implies moving towards the next generation network offering ubiquitous broadband internet access in conjunction high capacity backbone networks. This includes a wireless access component expected to play a growing importance. A regulatory environment which enables and supports the development of the next generation networks is essential in this context. The presentation will present the main initiatives which underpin the Digital Agenda for Europe, namely in terms regulation for ECS, of a broadband strategy and a strategic approach to a coordinated spectrum management at EU level.

Keynote Session
Room: Arabella + Boheme

09:30 Keynote:
The Role of Self-Regulation in the Next Generation Network
Dale Hatfield (University of Colorado, USA)

Biography
Dale N. Hatfield is currently the Executive Director of the Silicon Flatirons Center for Law, Technology, and Entrepreneurship and an Adjunct Professor in the Interdisciplinary Telecommunications Program – both at the University of Colorado at Boulder. Prior to joining the University of Colorado, Hatfield was the Chief of the Office of Engineering and Technology at the Federal Communications Commission (FCC) and, immediately before that, he was Chief Technologist at the Agency. He retired from the Commission and government service in December 2000. Before joining the Commission in December 1997, he was Chief Executive Officer of Hatfield Associates, Inc., a Boulder, Colorado based multidisciplinary telecommunications consulting firm. Before founding the consulting firm in 1982, Hatfield was Acting Assistant Secretary of Commerce for Communications and Information and Acting Administrator of the National Telecommunications and Information Administration (NTIA). Before moving to NTIA, Hatfield was Chief of the Office of Plans and Policy at the FCC. Hatfield has over four decades of experience in telecommunications policy and regulation, spectrum management and related areas. Hatfield holds a BS in electrical engineering from Case Institute of Technology and an MS in Industrial Management from Purdue University. In May, 2008, Hatfield was awarded an Honorary Doctor of Science degree by the University of Colorado for, inter alia, his commitment to the development of interdisciplinary telecommunications studies. Hatfield served on the FCC Agency Review Team for the Obama Presidential Transition and is currently serving as co-chairman of the Commerce Department's Spectrum Management Advisory Committee.

Abstract
The outlines of the Next Generation Network – the Infrastructure for the 21st Century – are now apparent. They are guided by the openness of the Internet and are driven by the increasing ubiquity of wireless technology and the emerging broadband capabilities of both wired and wireless networks. The Internet has already produced enormous benefits and the evolving Next Generation Network promises an even more powerful converged platform that is capable of capturing both economies of

scale and scope and delivering still greater economic and social benefits. Of course, realizing that vision in the face of rapid technological and marketplace change is not without its challenges. One overarching challenge is maintaining the openness of the Internet and the opportunities for innovation it presents in the face of uncertainties regarding current and future degrees of market power and changing business models. From a public policy standpoint, there are dangers of governments both underregulating and overregulating in order to maintain the optimum degree of openness. This presentation will provide a brief overview of techniques for accomplishing this and describe the recent creation in the U.S. of a nongovernmental Broadband Internet Technical Advisory Group ("BITAG") to form consensus on, among other things, how to ensure that the Internet continues to evolve without unfair discrimination.

09:50 Keynote:
FTTH/NGN Service Deployment Strategy in NTT
Dr. Kou Miyake (NTT, Japan)

Biography
Dr. Kou Miyake received B.S. and M.S. degrees in mathematics in 1978 and 1980, and a Dr. Eng. degree on network performance analysis in 1991 from Tohoku University, Sendai, Japan, respectively.

Since joining the NTT Electrical Communication Laboratories in 1980, he has been active in network design and traffic engineering for satellite communications networks, packet-switched networks, and broadband communication networks. From 1998 to 2002, he had responsibility for the research and development of the Next Generation Network architecture and system engineering in NTT R&D Labs. From 2003 to 2007, he was the president of NTT Data Intelli-link Corporation, providing cutting-edge technologies to the telecommunication market. From 2007 to 2009, he was the director for NTT Service Integration Laboratories. Currently, he is Associate Senior Vice President and Executive Director Information Sharing Laboratory Group of NTT.

He had been an active participant in ITU-T Study Group 13 since 1990 as an expert on B-ISDN and ATM systems. Since 2000 to 2002, he was a board member of Multiservice switching Forum (MSF). He is a Senior member of IEEE and a Fellow of IEICE. He was awarded the Young Engineer Award from the IEICE in 1987.

Tuesday, September 14, 2010 • 09:30 - 10:30

10:10 Keynote:
Convergent Charging, Billing and Care – the increasing importance of Online Cost Control for post-paid subscribers
Prof. Dr.-Ing. habil. Jörg Lange, Nokia Siemens Networks

Biography
Jörg was born in 1949 in Jena, Germany. After graduating from high school he studied Automation Engineering at the Ukrainian National University of Technology in Kiev from 1967 to 1973, which he followed with a PhD in Engineering (Dr.-Ing.) awarded in January 1978.

From February 1978 until 1986 he was first Assistant and later Associated Professor for Telecommunication specialising in digital transmission and system theory at the University of Technology in Ilmenau (Germany). In 1983 he achieved the Postdoctoral Lecture Qualification (Dr.-Ing. habil.)

From 1986 until 1988 Jörg was Head of Department at the Institute of Computer Sciences of the German Academy of Science in Berlin.

From May 1988 until 1991 he held a Professorship for Information Technology at the University of Applied Sciences (later FHTW) in Berlin-Lichtenberg, Germany.

In 1991 he was invited by Siemens AG to take up a leading position in the new Siemens Software Development Centre in Berlin. He was responsible for the testing and customization of the Siemens solutions in the then novel area of Intelligent Networks and Prepaid Services in Mobile Networks. He remained in this post until 2005 playing a major part in the huge growth these services enjoyed.
Since 2005 and after the merger of Siemens Mobile Networks with Nokia Networks to Nokia Siemens Networks he has focused on customer needs in Convergent Charging initially as a Senior Sales Solution Manager, and then as Senior Solution Architect. He now leads the Customer Requirement Engineering team for Convergent Charging, Billing and Care.

Abstract
Online charging is leaving the pre-paid corner. It becomes important also for other payment methods – as the basis for online cost control. The Bill Shock Prevention is just a first example. LTE and the corresponding variety of applications, services and new players will rather increase the need in online cost control than reduce.
This presentation deals with the current and upcoming demand in convergent online and offline rating and charging. It describes the main reasons for the increasing need in online cost control and shows the way how online and offline charging can be combined into convergent charging solutions with significant benefit for both Communication Service Providers (operators) and end users.

It considers the convergent rating and charging solutions as "bridge" between the traditional telco world and the IT world dominating the business environment of each CSP.

The presentation shows on example of convergent charging solutions how the telco world goes IT maintaining at the same time the "telco-grade virtues".

Last but not least the presentation describes the architecture and the main functionality of the NSN convergent charging solution – charge@once unified – together with the advantages any CSP can gain from charge@once in sense of flexibility, cost efficiency, time to market and end user satisfaction.

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Mag. Dr. August Reschreiter, Austrian Federal Ministry of Transport, Innovation and Technology

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Ruprecht Niepold, European Commission, DG INFSO

10:30 - 11:00 Coffee break

S01: Future Mobile
Room: Arabella
Chair: Luigi Licciardi (Telecom Italia, Italy)

11:00 On the way to NGMN - experiences out of trials and tests
Christian Laque (T-Mobile Austria GmbH, Austria)

11:20 Mobile Network evolution: innovative solutions to face the ITC future challenges
Sandro Dionisi (Telecom Italia, Italy)

11:40 Mobile network evolution towards rich communication services
Hiroshi Nakamura (NTT DOCOMO, Inc., Japan)

12:00 Solving Bandwidth Challenges and Providing Reliable, Dependable Connections For Everyone, Everything, Everywhere
Mike Wrape, Naresh Soni (InterDigital, USA)

12:20 - 14:00 Lunch break

S02: Network & Service Management Reliability
Room: Ernani
Chair: David Waring (Telcordia Technologies, USA)

11:00 A Peer-To-Peer-based Storage Platform for StoringSession Data in Internet Access Networks
Peter Danielis (University of Rostock, Germany); Maik Gotzmann (University of Rostock, Germany); Dirk Timmermann (University of Rostock, Germany); Thomas Bahls (Nokia Siemens Networks, Germany); Daniel Duchow (Nokia Siemens Networks, Germany)

11:20 Metallic Line Testing Solution for Next GenerationNetworks
Gerhard Noessing (Lantiq A GmbH, Austria)

11:40 Telecommunication network driven Ecozone: Enable flexible enhanced services and new operator business models via NGOSS managed control points
Joachim Schonowski (Deutsche Telekom Laboratories, Germany); Marc Cimiotti (CGI, Germany)

12:00 An 80-kWh-class Telecommunications Backup Systems with Large-scale Nickel Metal Hydride Batteries
Keita Takahashi (NTT Corporation, Japan); Akira Yamashita (NTT Corporation, Japan); Akihiro Miyasaka (NTT Corporation, Japan); Keiichi Saito (NTT Corporation, Japan); Takahisa Shodai (NTT Corporation, Japan)

12:20 - 14:00 Lunch break

S03: Next Generation Networks
Room: Arabella
Chair: Joachim Fabini (Vienna University of Technology Austria)

14:00 Implementation of NGN/IMS Technologies into Legacy Network Infrastructures
Andrey Krendzel (Centre Tecnològic de Telecomunications de Catalunya (CTTC), Spain)

14:20 Fixed Mobile Convergence application services using ID mapping database on IMS (IP multimedia subsystem)
Akira Kurokawa (NTT Network Service Systems Laboratories., Japan); Ichiro Inoue (NTT, Japan); Naoki Takaya (NTT Service Integration Labs., Japan)

14:40 Analyzing the Internal Processing of IMS-based and traditional VoIP systems
Yuheng He (Ruhr University Bochum, Germany); Attila Bilgic (Ruhr-Universität Bochum, Germany); Johannes Veerkamp (Ruhr University Bochum, Germany)

15:00 Drivers, Barriers and Threats for the Integration of QoE Enhancing Technologies within the Aggregation and Access Network
Tobias Heger (European Center for Information and Communication Technologies (EICT), Germany); Mario Kind (Deutsche Telekom AG, Germany); Thomas Monath (Deutsche Telekom AG, Germany)

15:20 3GPP Evolved Packet Core – the Next Generation Mobile Networks all-IP architecture
Marius Corici (Fraunhofer FOKUS, Germany); Thomas Magedanz (Fraunhofer FOKUS, Germany); Dragos Vingarzan (Fraunhofer-FOKUS Institute, Germany)

15:40 - 16:00 Coffee break

S04: Mobile Ad-Hoc
Room: Ernani
Chair: Lukas Wallentin (Vienna University of Technology Austria)

14:00 On the Suitability of Using the Residual Lifetime as a Routing Metric in MANETs
Eduardo Casilari-Perez (Universidad de Malaga, Spain)

14:20 IEEE 802.15.4a Low-Rate UWB based Multi-hop Relay System in Sensor Network
Hong Zhang (Inha University, Korea); SungHyun Hong (Inha University, Korea); KyungHi Chang (Inha University, Korea); Dong-Beom Shin (ETRI, Korea); Heyung-Sub Lee (ETRI, Korea)

14:40 IPv6 solutions enabling mobile services for the "Internet of Things"
Francesca Lo Piccolo (University of Roma "Tor Vergata", Italy); Lorenzo Bracciale (University of Roma "Tor Vergata", Italy); Donato Battaglino (Universita' di Roma Tor Vergata, Italy); Nicola Blefari-Melazzi (University of Rome "Tor Vergata", Italy); Maura Turolla (Telecom Italia, Italy); Andrea Bragagnini (Telecom Italia, Italy)

15:20 - 16:00 Coffee break

S05: QoS & Traffic Control
Room: Arabella
Chair: Kohei Shiomoto (NTT, Japan)

16:00 Adjustments for QoS of VoIP in the E-Model
Tadeus Uhl (FH Flensburg, Germany)

16:20 A Novel 2-step Radio Resource Management for the Downlink of Multiuser OFDMA System with Heterogeneous QoS Requirements
YuPeng Wang (Inha University, Korea); Bing Hui (Inha University, Korea); KyungHi Chang (Inha University, Korea)

16:40 An IP based Test System for Improved Radio Link Quality Measurements by Multi-Layer Modelling
Baris Güzelarslan (Munich University of Applied Sciences, Germany); Michael Dippold (Munich University of Applied Sciences, Germany); Manfred Paul (Munich University of Applied Sciences, Germany); Thomas Michael (Munich University of Applied Sciences, Germany)

17:00 Video Stream Splitting and Merging using Dual Mobile-IP Tunnels in Wireless Handoffs
Tsang-Ling Sheu (National Sun Yat-Sen University, Kaohsiung, Taiwan, Taiwan); Yang-Shun Hsu (National Sun Yat-Sen University, Taiwan)

18:00 Conference dinner in the "Weingut Wolff"

S06: Ambient Assisted Living
Room: Ernani
Chair: Geza Gordos (Budapest University of Technology and Economics & Bay Zoltán for Applied Research - IKTI, Hung›ary)

16:00 A Maintenance-free Wireless Sensor Network Based System for AAL Applications
Tamás Helfenbein (Bay Zoltán Foundation for Applied Research, Hungary); Lóránt Vajda (Bay Zoltán Foundation for Applied Research, Hungary); Randall Claywell (Bay Zoltán Foundation for Applied Research, Hungary)

16:20 A system prototype description for Health Services and Ambient Assisted Living
András Tóth (Bay Zoltan Foundation for Applied Research, Hungary); Gyula Bakonyi-Kiss (Bay Zoltán Foundation for Applied Research, Hungary); Lóránt Vajda (Bay Zoltán Foundation for Applied Research, Hungary)

16:40 Integrating Mobile Devices into AAL-Environments using Knowledge based Assistance Systems
Ralph Welge (Universität Lüneburg, Germany); Alexander Kujath (Leuphana University Lüneburg, Germany); Oliver Opel (Leuphana University Lueneburg, Germany)

17:00 Global healthcare in the 21st century: ICT's and the virtualisation of hospitals
Georgi Graschew (Max-Delbrueck-Centrum/Robert-Roessle-Klinik, Charité-University Medicine Berlin, Germany); Theo A. Roelofs (Charité - University Medicine Berlin, Germany); Stefan Rakowsky (Max-Delbrueck-Centrum/Robert-Roessle-Klinik, Charité-University Medicine Berlin, Germany); Peter M. Schlag (Max-Delbrueck-Centrum/Robert-Roessle-Klinik, Charité-University Medicine Berlin, Germany)

18:00 Conference dinner in the "Weingut Wolff"

Keynote Session
Room: Arabella + Boheme

09:30 **Keynote:**
The Role of Self-Regulation in the Next Generation Network
Dale Hatfield (University of Colorado, USA)

09:50 **Keynote:**
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Dr. Kou Miyake (NTT, Japan)

10:10 **Keynote:**
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Prof. Dr.-Ing. habil. Jörg Lange, Nokia Siemens Networks

10:30 - 11:00 Coffee break

S07: **Optical Networks**
Room: Arabella
Chair: Harald Orlamünder (Consultant, Germany)

11:00 **Requirements and Solutions of 100 GbE for Metro- and Transport Networks from an Operator point of view**
Sascha Vorbeck (Deutsche Telekom AG, Germany); Malte Schneiders (Deutsche Telekom AG, Germany); Werner Weiershausen (Deutsche Telekom AG, Germany)

11:20 **Setting the stage for 100GbE serial standard - the HECTO project**
Rainer H. Derksen (Nokia Siemens Networks GmbH & Co. KG, Germany); Ke Wang (Royal Institute of Technology, Sweden); Jie Li (Acreo AB, Sweden); Anders Djupsjöbacka (Acreo, Sweden); Gunnar Jacobsen (Acreo AB, Sweden); Marek Chacinski (Kista Photonic Research Centre (KPRC), Royal Institute of Technology (KTH), Sweden); Urban Westergren (Kista Photonic Research Centre (KPRC), Royal Institute of Technology (KTH), Sweden); Sergei Popov (Royal Institute of Technology, Sweden); Volker Hurm (Fraunhofer Institute for Applied Solid State Physics, Germany); Robert Makon (Fraunhofer Institute for Applied Solid State Physics, Germany); Rachid Driad (Fraunhofer Institute for Applied Solid State Physics, Germany); Josef Rosenzweig (Fraunhofer Institute for Applied Solid State Physics, Germany); Herbert Walcher (Fraunhofer Institute for Applied Solid State Physics, Germany); Andreas Gerhard Steffan (U2T photonics AG, Germany); G. Giorgis Mekonnen (Fraunhofer Institute for Telecommunications/Heinrich-Hertz-Institut, Germany); Heinz-Gunter Bach (Fraunhofer-Institut fuer Nachrichtentechnik, Germany); Colja Schubert (Fraunhofer Heinrich-Hertz-Institut, Germany)

11:40 **A Dynamic Clock Operation Technique for Drastic Power Reduction in WDM-based Dynamic Optical Network Architecture**
Hideaki Kimura (NTT Access Network Service Systems Laboratories, Japan); Hisaya Hadama (NTT, Japan)

12:00 **Optically Transparent Core Nodes for Burst-Switched Networks with Channel Bonding**
Slavisa Aleksic (Vienna University of Technology, Austria)

12:20 - 14:00 Lunch break

S08: Mobile Access & PAN
Room: Ernani
Chair: Gerhard Kadel (Deutsche Telekom Laboratories. Germany)

11:00 Enhancing Customer quality of life through the evolution of Mobile and Personal area Networks
Maura Turolla (Telecom Italia, Italy)

11:20 Transmission Range Analysis of IEEE 802.15.3c Technology in Residential Environments
Paolo Gallo (Telecom Italia, Italy); Simone Loi (Telecom Italia, Italy); Paolo Priotti (Telecom Italia, Italy)

11:40 A novel signalling scheme for OFDM
Mario Huemer (Klagenfurt University, Austria); Christian Hofbauer (Klagenfurt University, Austria); Johannes B. Huber (University of Erlangen-Nürnberg, Germany)

12:00 Next Generation WLAN - more than just higher data rates
Michael Grigat (Deutsche Telekom Laboratories, Germany); Gerhard Kadel (Deutsche Telekom Laboratories, Germany)

12:20 - 14:00 Lunch break

S09: New Approaches and Enablers for Future Internet
Room: Arabella
Chair: Prosper Chemouil (Orange Labs, France)

14:00 Network of Information: an information-centric approach to the future Internet
Vinicio Vercellone (Telecom Italia, Italy)

14:20 The role of self-management in a context of convergence
Martin Vigoureux (Alcatel-Lucent, France)

14:40 Programmable Flow-Based Networking with OpenFlow
Marcus Brunner (NEC Europe Ltd., Germany)

15:00 Resource management of multi-layer networks for network virtualization
Kohei Shiomoto (NTT, Japan); Takashi Miyamura (NTT, Japan); Akeo Masuda (NTT, Japan)

15:20 - 16:00 Coffee break

Tuesday, September 14, 2010 • 14:00 - 15:20

S10: Regulatory & Policy Issues
Room: Ernani
Chair: Klaus-D. Kohrt (KKK, Germany)

14:00 Cross-Domain Management of Distributed User Profiles
Florian Winkler (NEC Europe Ltd., Germany); Joao da Silva (NEC Europe Ltd., Germany)

14:20 Techno-economical evaluation of COS-enabled NGNs
Thomas Martin Knoll (Chemnitz University of Technology, Germany)

14:40 Models for the Deployment of Broadband Access Networks – Observations and Possible Solutions from the Austrian Market
Ernst-Olav Ruhle (SBR Juconomy Consulting AG, Germany)

15:00 Current challenges for lawful interception (LI)
Bernhard Spalt (OVE, Austria)

15:20 - 16:00 Coffee break

Tuesday, September 14, 2010 • 16:00 - 17:20

S11: Enhanced Services and Applications
Room: Arabella
Chair: Luigi Licciardi (Telecom Italia, Italy)

16:00 Experience Convergence – the User Perspective on Convergence
Franziska Haemmerle (USECON, Austria); Tina Thron (USECON, Austria); Markus Murtinger (USECON, Austria); Manfred Tscheligi (University of Salzburg, Austria)

16:20 Consolidation – moving towards unified media architectures
Joseph Noronha (Detecon, USA); Martin Pieperhoff-Sauter (Detecon International GmbH, Germany)

16:40 Novel Scheme and System for Mobile Services' Advertisement and Discovery in the Future Telecommunications World
Zhanlin Ji (University of Limerick, Ireland); Ivan Ganchev (University of Limerick, Ireland); Mairtin O'Droma (University of Limerick, Ireland)

17:00 Driving Mobile eCommerce Services using Identity Management
Florian Winkler (NEC Europe Ltd., Germany)

17:20 Closing Ceremony

S12: Security in Future Networks
Room: Ernani
Chair: Helmut Leopold (Austrian Institute of Technology (AIT), Austria)

16:00 Threat and Security Issues in the Future Internet
Thomas Mandl (IT Security Consulting, Austria); Joe Pichlmayer (IKARUS Security Software, Austria)

16:20 Detecting Anomalous Traffic using Communication Graphs
Keisuke Ishibashi (NTT, Japan); Tsuyoshi Kondoh (NTT, Japan); Shigeaki Harada (Nippon Telegraph and Telephone West Corporation, Japan); Tatsuya Mori (NTT, Japan); Ryoichi Kawahara (NTT Service Integration Laboratories, Japan)

16:40 Efficient Security Implementations in eGovernment Workflows: a Practical Application
Thomas Bleier (AIT Austrian Institute of Technology GmbH, Austria); Arndt Bonitz (AIT Austrian Institute of Technology GmbH, Austria); Christian Wagner (AIT Austrian Institute of Technology GmbH, Austria)

17:00 Security in the Net - Why everything used to be better, bad things happen today and the future looks bright
Erwin P. Rathgeb (Universität Duisburg-Essen, Germany)

17:20 Closing Ceremony

General Information

WTC 2010 website

www.wtc2010.at

Registration

Regular Fees	590 EUR
Student fees* (Undergraduate)	400 EUR

(all prices are subject to 10% VAT)

Full registration includes entry to all the technical sessions. Coffee Breaks, and Conference Proceedings as well as Conference Dinner on Monday evening at the "Weingut Wolf" (Departure by bus from the hotel at 18:00).

*Student card copy required!

Payment

Payment for registration must be made in EUR. The congress fee has to be fully paid in advance.

The following method of payment is accepted:

- By credit card authorization
- Cash on-site

Badges

Participants are kindly requested to wear their badge throughout the congress, even at social events. Lost badges will not be replaced. A new registration will be mandatory.

Proceedings

All accepted papers will be published in the electronic proceedings (CD-ROM) and will be provided to the conference delegates. Additional proceedings will be on sale during the conference (upon availability).

Venue

WTC 2010 will be held at the
Arcotel Wimberger
1070 Vienna
Neubaugürtel 34-36
http://www.arcotel.at

Conference language

All sessions will be held in English. There will be no simultaneous translation.

Destination Vienna

Welcome to Vienna, which has always been and continues to be a place where European history is made. Throughout the centuries, Viennese culture has exerted a strong influence on European arts and lifestyle. Among many others, the works of Strauss, Mozart, Beethoven and Schubert have made Vienna the musical capital of the world.

In addition to its rich cultural heritage, from Lippizaner horses and famous museums to Hofburg and Secession, modern-day Vienna boasts the vibrant cultural scene of a 21st century metropolis. www.vienna.at

Currency

The official currency in Austria is the euro (EUR). Standard credit cards (Mastercard, American Express, VISA) are accepted in hotels, department stores and restaurants. Currently (August 2010) the exchange rate is approx. 1 EUR = 1,27 USD

Electricity

Power supply is 230 V AC, 50 Hz. It is recommended to have a suitable plug-in for Austrian standard when charging your laptop

Emergency services

Police call 133, Ambulance 144 and Fire Brigade call 122

Insurance

The organizer may not be held responsible for any injury to participants or damage, theft and loss of personal belongings. Participants should therefore make their own insurance arrangements.

Shopping

Vienna is an ideal city to go on a leisurely stroll through the shops - on Vienna's famous Kaerntner Strasse - the noble shopping street you will discover an immense variety of pleasurable shopping opportunities. For more details please visit www.vienna.at.

Time Zone

GMT (UTC) +01:00

Weather

The weather in Vienna in September is usually beautiful and mostly warm. However, there might be chilly and rainy days. The temperature can range between 10C° and 20C°. Please check the actual weather on **www.weather.com**

Program Overview

Time	Arabella	Ernani
Monday, September 13, 2010		
09:30	*Keynote Session*	
10:30	Coffee break	
11:00	S01: *Future Mobile*	S02: *Network & Service Management Reliability*
12:20	Lunch break	
14:00	S03: *Next Generation Networks*	S04: *Mobile Ad-Hoc*
15:20	Coffee break	
16:00	S05: *QoS & Traffic Control*	S06: *Ambient Assisted Living*
18:00	Conference dinner	

Tuesday, September 14, 2010		
09:30	*Keynote Session*	
10:30	Coffee break	
11:00	S07: *Optical Networks*	S08: *Mobile Access & PAN*
12:20	Lunch break	
14:00	S09: *New Approaches and Enablers for Future Internet*	S10: *Regulatory & Policy Issues*
15:20	Coffee break	
16:00	S11: *Enhanced Services and Applications*	S12: *Security in Future Networks*
17:20	Closing ceremony	