



# ITU Telecom World 09 Forum

## Joint ITU/NGMN Session “Mobile Broadband 2010+”

At the Palexpo, Geneva, Switzerland

Wednesday, 7th October 2009 in Room A



The ITU Telecom World is an unrivalled event for the global Telecommunication and Information Communication Technology (ICT) sector. The renowned Forum is a central element of this event to present and to discuss the major global challenges of the industry and of the information society in general. Industry leaders and decision-makers come together to explore the essential areas and to provide guidance in addressing these challenges and to develop the future global ICT roadmap.

As 2010 is the milestone for the launch of the first next generation mobile networks, the NGMN Alliance will present a joint ITU/NGMN session at the ITU Telecom World Forum on 7th October, dedicated to the future of the mobile industry. Themed “Mobile Broadband 2010+”, the joint ITU/NGMN session is the occasion where the top management of NGMN member companies and representatives of the wider mobile ecosystem will give thorough insight into the status, the challenges, the customer impact and the development of mobile broadband networks in the coming years.

### Highlights:

- **“Open Expert Forum - Infrastructure Innovations”:**  
Session providing an outlook on innovations in the areas of backhaul, open interfaces, trials and testing with experts from partners of the NGMN Alliance.
- **“Open Expert Forum - Future Mobile Applications”:**  
Panel discussion with Wireless Industry Partnership (WIP) and panellists representing mobile application stores, the GSMA One API initiative, open source and media.
- **“Deployment Scenarios and Plans”:**  
NGMN Board members provide a status overview and present the challenges of next generation mobile network deployment.
- **“Operational Excellence”:**  
Executives from operators and vendors give insights into requirements and plans to significantly optimise efficiency and performance in next generation mobile networks.
- **“Customer Impact”:**  
Thought-leaders from all major device manufacturers provide insights into the current status and plans in the area of wireless broadband devices.

**Please register online via  
[www.ngmn.org](http://www.ngmn.org) for this event!**

We recommend an ITU Global Forum Pass!

General pricing information: <http://www.itu.int/WORLD2009/>

For further information, please contact [office@ngmn.org](mailto:office@ngmn.org).

Partners of the NGMN Alliance will receive a 55% discount on the standard price of the ITU Global Forum Pass.

For 1800 CHF/ 1190 EUR this one-week pass covers unlimited access to the ITU Exhibition and all the streams of the Conference over the five days of the Telecom World.

# Programme: Mobile Broadband 2010+

## Open Expert Forum – Infrastructure Innovations, 7th October, 2009

### 09.00 – 10.30 **Open Expert Forum – Infrastructure Innovations: Backhaul, Open Interfaces, Trials and Testing**

Worldwide, many leading mobile operators are planning for the trial and 2010 launch of next generation mobile networks. The launch promises to provide a step-change in user experience as well as network performance.

During the “Open Expert Forum – Infrastructure Innovation” discussion of the joint ITU/NGMN Session “Mobile Broadband 2010+”, international thought-leaders and innovators will present the current status and provide an outlook on selected critical areas for successful next generation mobile network deployment.

The session will be an open forum that allows the audience to raise questions and participate in the discussion.

Experts will offer detailed insights through presentations and panels on infrastructure innovations e.g. in the areas of backhaul, open interfaces, trials and testing.

#### Key Questions

- How will next generation mobile backhaul networks cope with the rising traffic, the increased reliability requirements and the needs for differentiated quality of service treatment?
- What further developments are expected in the area of radio access and how will transition strategies look like?
- What are the greatest challenges in the migration towards access-agnostic, all-IP core networks? What is the impact on the service landscape?

#### Moderator:

Philipp Deibert, Executive Programme Manager, NGMN Alliance

#### Speeches by NGMN Partners:

##### Scaling the Mobile Internet and Evolved Packet Core for Next Generation Mobile Networks

- Delivering end-to-end personalized services for 4G networks
- Architectural considerations and challenges
- Introducing intelligence and QoS into EPC
- Optimizing Next Generation Backhaul
- Evolution of the Mobile Data Center
- Examples of „Best Practices“

Edwin Paalvast, Vice President, Customer Advocacy, Cisco

##### Backhauling the World for Next Generation Mobile Networks

- How to plan for unpredictable traffic growth
- How to cover large geographic areas with 100's of Gb/s of backhaul capacity with a minimum of spectrum
- How to build backhaul that can address the simultaneous challenges of backhauling flat all-IP, hierarchical and legacy mobile networks
- How to build backhaul that can cope with diverse traffic types and the prioritisation demands that brings

Lance Hiley, Vice President Market Strategy, Cambridge Broadband Networks

##### Revolutionary Antenna Embedded Radio for Green Self-Optimizing Networks

- An explosive increase in data consumption, paired with skyrocketing energy costs, is resulting in dramatic traffic growth without an improvement in cost/bit/hertz
- Mobile Operators globally are deploying or expanding their 3G networks and need new sites to expand their coverage to meet the steadily increasing demand
- Ubidyne's innovative Antenna Embedded Radio technology decreases the number of basestation sites by up to 1/3, eliminates coax feeders and electrical tilt motors and reduces energy consumption by approximately 50%
- Operators will experience significant cost savings in network deployment, easing of site acquisition and performance improvements that enhance coverage and capacity

Ken Hawk, CEO, Ubidyne

##### The Realization of 4G - Ubiquitous Wireless Broadband

- Wireless broadband is really extension of broadband
- Ubiquity and seamless coverage critical for wireless broadband
- Cost effective and disruptive technology options for 4G
- Reality of commercialization of advanced wireless technologies and roadmap for the future

Khurram Sheikh, Chief Product and Development Officer, Powerwave

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## Open Expert Forum – Future Mobile Applications, 7th October, 2009

### 11.00 – 12.30 Open Expert Forum – Future Mobile Applications

Consumer demand for mobile applications is taking off while device manufacturers, mobile operators, retailers, software/OS companies and others provide the required distribution platforms and application stores. The challenge for the industry is how to successfully embrace the change that comes with the growing speed and numbers of developers (and their applications).

In the “Open Expert Forum – Future Mobile Applications” of the joint ITU/NGMN Session “Mobile Broadband 2010+”, international thought-leaders and experts will analyse this topic from various angles – business models, marketing strategies, technology, cooperation models with developers, organisational impact and others.

The session will be an open forum that allows the audience to raise questions and participate in the discussion.

#### Moderator:

Thibaut Rouffineau, Vice President Developer Partnerships, Wireless Industry Partnership

#### Panellists:

Dr. Toshitaka Tsuda, Member of the Board, Fujitsu Laboratories

Jérôme Lepeu, CFO, Mobile Distillery

Mike Yonker, Vice President, Wireless Engineering, The Nielsen Mobile

Joe Barret, Senior Director Strategic Marketing, Qualcomm

Emiliano Ceraldi, Senior Project Manager, Business Innovation, Telecom Italia's delegate in GSMA 3rd Party Access Project, Telecom Italia

#### Key Questions

- What business, technology and platform changes are required to address the challenges that come with the growing speed and numbers of mobile application developers?
- How can open source platforms and open networks drive innovation?
- How can the fragmentation of mobile platforms and devices be addressed?

# Programme: Mobile Broadband 2010+

## Deployment Scenarios and Plans, 7th October, 2009

### 13.00 Deployment Scenarios and Plans

14.00 Data capacity constraints in current networks, revenue opportunities with next generation services and the chance to reduce the overall cost per bit of traffic are the key drivers behind the migration towards next generation mobile networks.  
For the individual operator, the right strategy that allows for the best timing and the most cost effective deployment is crucial in order to become successful.

This session of the "Mobile Broadband 2010+" stream with NGMN Board members focuses on vision and reality of next generation mobile broadband with regards to deployment scenarios and plans.

The CTO-level speakers from global leading operators representing the regions Europe, Asia, USA and Canada provide an overview on different regional or market-specific deployment scenarios as well as specific regional challenges and the ways to address them.

Furthermore, the audience will gain first-hand insights into technology status, trial results, deployment plans and the challenges encountered on the way to fulfilling the NGMN Alliance milestones for the initial launch of next generation mobile networks as early as 2010.

Moderator:

Dr. Peter Meissner, Operating Officer, NGMN Alliance

### Speeches by NGMN Board members:

#### LTE Deployment Strategy

- Objectives of LTE introduction
- Deployment time plan
- Deployment scenarios on coverage, spectrum, etc.

Mitsunobu Komori, Executive Vice President, CTO, Member of the Board of Directors, Managing Director of R&D Center, NTT DOCOMO

#### Challenges and Opportunities for Mobile Operators

- Management of QoS
- Solving capacity and cost per Mbyte issues
- Adding intelligence to the network
- Openness to third party innovation
- Distributing content efficiently

Cayetano Carbajo Martin, Director of Technology, Telefonica

#### Surfin' USA – Riding the Crest of the Mobile Broadband Wave

- The age of data is here as consumers have embraced mobile broadband
- The huge growth in data usage requires carriers to upgrade networks
- AT&T's path to next generation mobile broadband
- Both GSM and CDMA carriers are embracing LTE

Kristin S. Rinne, Senior Vice President, Architecture and Planning, AT&T

#### Drivers and Challenges for Mobile Broadband Deployment

- Broadband Everywhere: Consolidation of IP-based network infrastructure and paradigm shift in network deployment utilizing capacity-centric small cell structure
- Connect Everything: Expansion in 'tethering' and the role of Wi-Fi as a complementary network
- Cost Efficiency: CAPEX/OPEX issues in multi-network operation and the importance of cost efficiency amidst aggravation in traffic and revenue decoupling

Dr. Jae W. Byun, Senior Vice President, Head of Institute of Network Technology, SK Telecom

### Key Questions

- What are the major challenges of successfully launching next generation mobile networks in 2010?
- Which deployment scenarios are prevalent for mature and emerging markets? And: what are the major drivers?
- What specific challenges are operators facing and which key enablers need to be in place for a successful deployment (e.g. interoperability, security, roaming, etc.)?
- What role does the availability of spectrum play?

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## Operational Excellence, 7th October, 2009

### 14.30 Operational Excellence

-  
16.00

Deployment of next generation technology will effectively address the capacity constraints in current mobile networks. Furthermore, next generation mobile networks will provide customers with a step-change in user experience and therefore will act as an enabling platform for future services - promising top-line growth for operators, vendors and service providers.

However, as the financial crisis currently shapes many strategic decisions, the focus for next generation business cases also has to be shifted to demonstrate tangible cost and efficiency improvements in network deployment and operations – this means going beyond capacity and service considerations.

In the three introductory presentations of this session, Executives from Operators will give insights into their requirements and current plans to significantly optimise efficiency and performance in next generation mobile networks. In the following panel discussion, leading global ICT vendors will provide an overview of latest solutions and innovations to approach these challenges.

Major items for discussion will include levers for increasing operational efficiency (e.g. self-optimising networks and operation & maintenance enhancements), and new measures to enhance the overall network performance (e.g. backhaul solutions, open network interfaces, bandwidth aggregation solutions and roaming).

### Moderator:

Reinhard Kreft, Head of Standardisation and Industry Engagement, Head of R&D Consumer, Vodafone

### Speeches by NGMN operator members:

#### Motivations for Innovations in Operational Excellence

- Serving the emerging Mobile World demands a multi-fold improvement in cost efficiency
- Operational excellence has to be viewed from an end-to-end perspective
- Future enablers of operational excellence must be flexible to accommodate operator and ecosystem uniqueness

Bruce Rodin, Vice President, Wireless Technology, Bell Canada

#### Next Generation Chance: Self Organising Networks?

- The operations challenge
- The SON vision
- Drivers for SON
- The SON approach and use cases
- Example for SON use cases coming soon
- SON needs

Günther Ottendorfer, Technology Director Europe, Deutsche Telekom

#### Building Competitive Next Generation Networks for Mobile Internet

- Spectrum efficiency improvement
- Smooth migration
- Global scale and roaming
- Flexible spectrum solution
- Green BS
- Global ecosystem

Dawei Zhang, Director Wireless, China Mobile

### Panellists:

Paul Larbey, Vice President, Next Generation Mobile Access, Alcatel-Lucent

Erik Ekudden, Vice President, Head of Technology and Industry, Ericsson

Ying Weimin, President, LTE Product Line, Huawei

Marc Rouanne, Head, Radio Networks, Nokia Siemens Networks

Jonathan Morgan, Senior Director of Product Marketing, Starent Networks

Richard Lau, Chief Scientist, Telcordia

### Key Questions

- What are the main challenges to be addressed to ensure successful deployment and improved operations?
- What are the solutions and innovations vendors can provide in the areas of operational efficiency?
- What other technology enhancements are planned to improve network performance and capabilities (e.g. measures to enhance spectral efficiency and multi-vendor networks)?

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## Customer Impact, 7th October, 2009

### 16.30 Customer Impact

Smartphones continue to be the device industry's fastest growing segment with, compared to the rest of the market, on average 15 times higher data traffic per device. At the same time, new mobile broadband device segments emerge with Consumer Electronics (CE) equipment and Netbooks. In addition, mobile broadband Machine-to-Machine (M2M) services promise to further increase the addressable market.

This means therefore, that the proliferation and increasing adoption of mobile broadband wireless devices are major drivers behind the industry transition towards next generation networks.

Furthermore, the early availability and the right feature set of wireless devices, for the network launch in 2010, are essential to ensure a successful starting phase.

In this session, senior management representatives from all major device manufacturers will provide insights into the current status and plans in the area of wireless broadband devices.

Major items for discussion will be device availability, feature set and form factor for launch of next generation mobile networks in 2010, emerging device segments and services (CE, Netbooks, M2M) and (open) device platforms (e.g. Symbian, Android).

### Key Questions

- How does the vendor device portfolio look for 2010 and what are the features and capabilities?
- What are the major challenges to ensure availability of devices and handsets?
- How can the industry provide a fruitful environment for future service development and innovation given the ongoing fragmentation of device platforms?
- Which services will leverage the capabilities of next generation mobile networks?
- What is the device roadmap years looking ahead?

Moderator:

Dr. Karim Taga, Managing Director, Arthur D Little

### Opening Speech:

#### Back on the Road But Who's Got The Map

- Operator's requirements - new opportunities and challenges
- Sharing with new „players“ - friends or enemies?
- Looking forward but manage legacy

Dr. Karim Taga, Managing Director, Arthur D Little

### Statements by panellists of the NGMN membership:

#### Shaping the Future with Multi-Mode Chipsets for LTE: What Challenges Lie Ahead?

- Deployment models for early launches: the role of legacy networks and impact on devices
- New and refarmed spectrum opportunities: the proliferation of RF bands
- Back to the basics: voice how to enable voice and legacy services over LTE?

Vieri Vanghi, Senior Director, Product Marketing, Qualcomm

#### Enabling CE Devices with LTE

- Trends in mobile broadband market
- Key requirements for market adoption
- Challenges to globalization

Dr. Joonho Park, Vice President, Head of Standards & Industry Initiatives, Samsung

#### Smartphones: Key Enablers for Wireless Broadband Success

- User expectation in business and consumer
- Fulfill the promise: the framework around the smartphone
- One size fits all

Atul Asthana, Vice President Global Standards, Research in Motion

#### Broadband in Nokia Devices

- Customer benefits
- Key enablers for adoption
- Device evolution

Mikko Mäkinen, Director, LTE Business Program, Nokia