

# INNOVATIONS IN NGN – FUTURE NETWORK AND SERVICES

AN ITU-T KALEIDOSCOPE EVENT TECHNICALLY CO-SPONSORED BY IEEE COMMUNICATIONS SOCIETY

## Third Call for Papers

*Innovations in Next Generation Networks* is the first in a series of peer-reviewed academic conferences that aims at increasing the dialogue between academia and experts working on the standardization of information and communications technologies (ICT). By viewing technologies through a *Kaleidoscope*, these forward looking conferences will also seek to identify new topics for standardization.

Arguably no industry undergoes faster changes than the ICT industry. So looking five, ten or more years into the future – What will the network look like? Which services will be offered? How will it affect people's lives?

NGN represents one of the most complex transitions ever to have occurred in telecoms. Taking into account new realities in the ICT industry such as the need to converge and optimise operating networks and the extraordinary expansion of digital traffic, NGN will enable a richer set of applications to the end user, as well as allowing operators to benefit from a far simpler architecture and the economies of scale associated with standards. In addition, in NGN, new services can be added far more quickly and easily, without the need to add any new network infrastructure.

### Objectives

*Innovations in NGN* will bring together visionary ideas on the future of NGN. It will highlight technologies, services and applications five years and beyond that will capitalize on the NGN infrastructure and lead to the ubiquitous network society in which information can be accessed anywhere and anytime by anyone and anything. The event will also cover multidisciplinary aspects related to the deployment of NGN, including analysis of regulatory and societal challenges.

*Innovations in NGN* is to inspire contributions towards a kaleidoscopic view of communication habits for the future. We know what NGN is in terms of the underlying technology, but we don't know what services will emerge, how NGN will affect the marketplace for ICT, and how society will be affected. To this end ITU, together with technical co-sponsor IEEE Communications Society, is issuing this second call for papers.

### Audience

*Innovations in NGN* is targeted at all researchers, academics, students, engineers, regulators and thinkers who go "beyond the next quarter". No participation fee will be charged.

### Date and venue

12-13 May 2008, Geneva, Switzerland.

### Submission of papers

Prospective authors are invited to submit complete, original papers with up to 6000 words including summary and references using the template at the conference website. (The camera-ready version will be limited to a maximum of eight pages). Main themes are suggested below. All papers will be handled electronically and reviewed through a double-blind, peer-review process. Please note that the submission dates for papers are strict deadlines. **The online paper submission tool is now available from the conference website.**

### Deadlines

Submission of complete papers: *15 October 2007*

Notification of paper acceptance: *15 January 2008*

Submission of camera-ready paper: *29 February 2008*

Registration for the event: *18 April 2008*

### Publication

Accepted papers will be published in the proceedings, presented during the conference and made available in the IEEE Xplore.

### Awards

Awards **provided by Cisco Systems** will be granted to selected best papers, as judged by the organizing and programme committees. See conference website for details.

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## Keywords

Accessibility, NGN, object to object communication, applications, services, innovation, ICT, convergence, telecommunications, Internet Protocol, IPTV, USN (Ubiquitous Sensor Networks), security, standardization research, economics of standardization, ubiquitous societies, multimedia, interoperability, QoS, mobility, virtual communities, network operation.

## For additional information

Additional info can be found at the event website: <http://itu.int/ITU-T/uni/kaleidoscope>. Inquiries should be addressed to [kaleidoscope@itu.int](mailto:kaleidoscope@itu.int).

## Suggested (non-exclusive) list of topics

### Track 1: NGN architecture evolution

- Evolution of the NGN architecture
- Open service interfaces, service interaction and interoperability in future scenarios
- Interworking of advanced services between legacy networks and NGN
- Seamless handover, multihoming and mobility
- Converged multimedia emergency communications
- Future packet-based, ultra-high speed transport networks
- Advanced network security, network identification, biometrics, localization techniques and USN
- Digital rights management
- NGN and the next generation internet

### Track 2: Applications and services over the NGN

- Enhancing telecoms accessibility for all
- Broadcasting, multicasting, unicasting and peer-to-peer in NGN: IPTV, Interactive TV, Mobile TV, and others
- Guaranteed QoS in end-to-end, inter-provider real time multimedia services
- Innovative multimedia applications and content delivery using all-IP converged fixed/mobile
- Future virtual communities & social networking services
- New programming models and service creation
- Creative combinations of web and network services
- Services and experiences using location, presence, context awareness and personalization
- Advanced smart terminals
- NGN-enabled public services e.g. telemedicine and distance learning

### Track 3: Social, economic and policy issues in the ubiquitous societies

- Innovations in NGN to overcome the digital divide
- Evolution of legislative and regulatory frameworks towards converged networks
- Security and ubiquity: what's the right balance?
- NGN standardization: stifle or encourage innovation?
- Business models for the information society (including accounting, billing and charging)
- Analysis of NGN standardization processes
- Economics of NGN standardization
- Societal impact of NGN and of virtual, collaborative environments

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