

WTSA-08 Preparatory

Summary results – First Kaleidoscope Academic Conference “Innovations in NGN”

Simao Campos
Counselor ITU-T Study Group 16
ITU

Brasilia, Brazil, 21-22 May
2008



Committed to connecting the world

Conference objectives

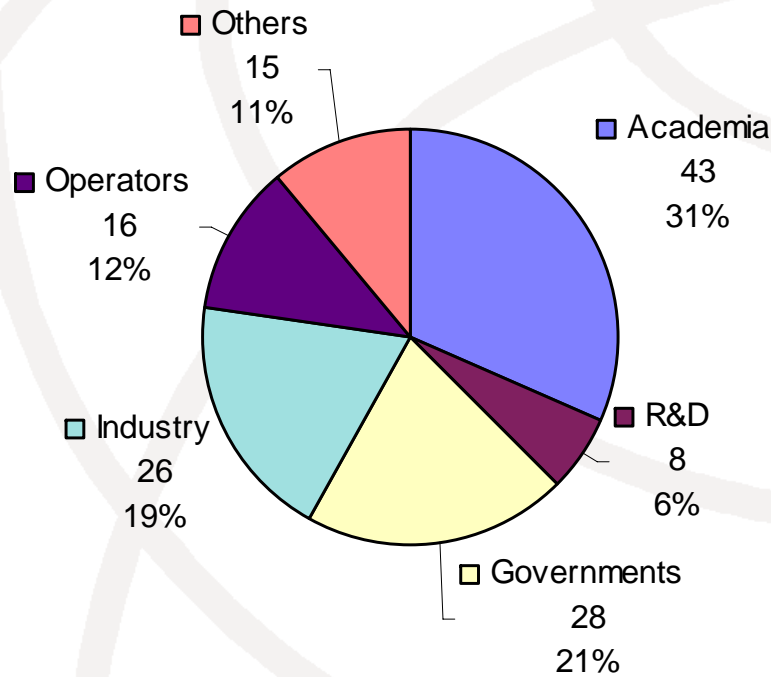
- Increase the **dialogue** between academia and experts working on the standardization of ICTs
- Identify **visionary ideas** on the future of NGN through a kaleidoscopic view of communication habits for the future, which can eventually lead to new topics for standardization concerning:
 - new services,
 - how NGN will affect the marketplace for ICTs, and
 - how society will be affected
- **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
- Address **multidisciplinary aspects** related to the deployment of NGN, including analysis of regulatory and societal challenges

Background

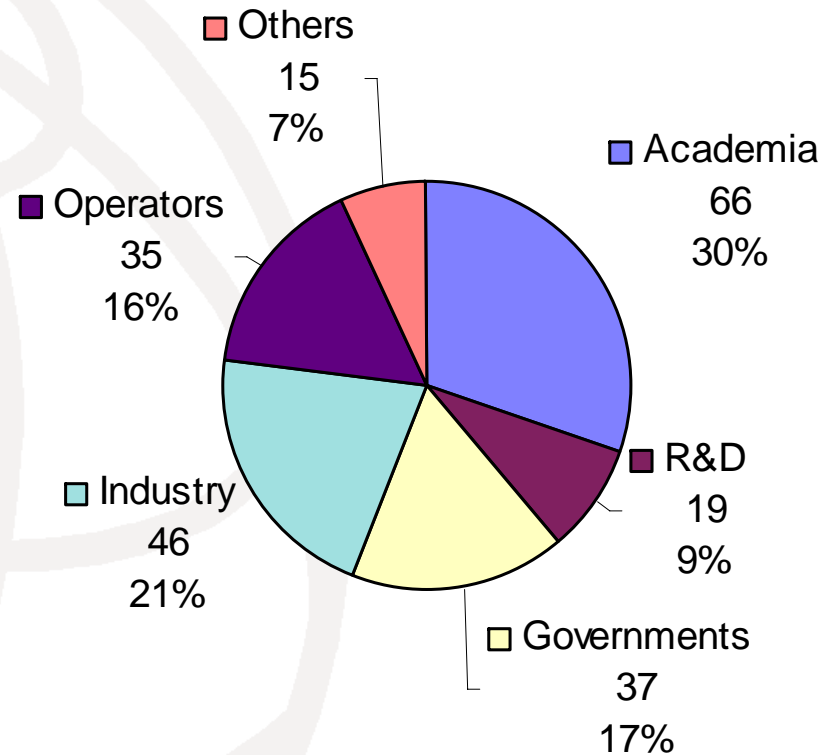
- Double-blind, peer-reviewed
- Paper proposals: 141
- Accepted papers: 32 Lecture, 22 Poster
- Best paper award
 - US\$10,000 cash prize donated by Cisco Systems
 - Other sponsors: *Platinum*: Intel; *Gold*: ICF (Japan); *Silver*: Sun Microsystems
- Printed proceedings, but with electronic distribution via the IEEE Xplore channel
- 223 attendees, 48 countries
- Programme, presentations, etc:
<http://itu.int/ITU-T/uni/kaleidoscope>

Participants

Types of organization



Participants per type of organization



WTSA-08 Preparatory Meeting for the America's Region
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Invited paper – Track 1

A new generation network – beyond NGN

- Tomonori Aoyama, Research Institute for Digital Media and Content, Keio University, Japan
- This paper discusses requirements and several research activities of new generation networks (NwGN) coming after Next Generation Network (NGN) currently driven by ITU-T. The detailed research profiles of Japanese governmental projects such as AKARI project are introduced with possible future applications. Photonic technology has been applied for high speed communications, possible high speed communication services are also investigated in this paper. This paper addresses that photonic technology is also important for energy reduction of these services, which is one of the keenest issues in the world for the next decade. Among other concerns to increase power consumption of communication services, network appliances and sensors are not negligible because of their number and the penetration rate in ubiquitous or pervasive network services. This paper also introduces the maximum power consumption of these sensor devices required for keeping sustainable services.

Invited papers – Track 2

Evolution of open IPTV standards and services

- Martin Körling, Ericsson
- IP-based TV services bring opportunities for interactivity and personalization. They also bring challenges in delivery quality and interoperability. Open standards are essential to ensure market success but also to enable innovation of future services and applications. We give an overview of the current status of IPTV standardization, especially how specifications complement each other to achieve a complete system. Some key challenges and opportunities are described, including how to enable 3rd party innovation on top of IPTV platforms.

Invited paper – Track 3

Open standards: a call for action

- Ken Krechmer, University of Colorado
- Digital communications is both pervasive and vital across society. This creates a growing public interest in the technical standards that proscribe public communications. The public is demanding, "Open Standards." The rallying cry, "Open Standards," means different things to different groups. This paper reviews the different needs of specific groups of society and develops ten different requirements of Open Standards. To implement these requirements, actions by standardization organizations, international bodies (e.g., WIPO, WTO) and national patent office rules are proposed. Interestingly, technical changes, in the form of new standards, rather than legal or policy changes, appear to be the most important mechanism to meet the requirements of open standards.

Three best paper laureates

- Architecture and business model of open heterogeneous mobile network
 - Yoshitoshi Murata^{†,††}, Mikio Hasegawa^{††, †††}, Homare Murakami^{††}, Hiroshi Harada^{††}, Shuzo Kato^{††}
† Iwate Prefectural University, Japan; †† Ubiquitous Mobile Communication Group, National Institute of Information and Communications Technology, Japan; ††† Department of Electrical Engineering, Faculty of Engineering, Tokyo University of Science, Japan
- Differential phase shift quantum key distribution
 - Hiroki Takesue; Toshimori Honjo; Kiyoshi Tamaki; Yasuhiro Tokura; *NTT Basic Research Laboratories, Japan*
- Open API standardisation for the NGN platform
 - Catherine Mulligan, *University of Cambridge*

Observations at closing panel: General (1)

- Very successful event
- Excellent quality papers
- Excellent attendance: *both Lecture and Poster sessions*
- It should be repeated yearly
- Highlight existence of best paper awards
- Emphasize recognition of best student papers (and define eligibility criteria)
- Stress low acceptance rate for full papers (<30%).
- Use a more visible web site (e.g. www.kaleidoscope.org)

Observations at closing panel: General (2)

- Advertise 'IEEE explore' prominently
- Try to have proceedings published directly by IEEE
- Improve conference visibility in academic circles
 - Publish reports in suitable outlets
 - Have 2009 CfPs published/printed *early* and let OC/PC members distribute them
- Don't under-estimate the 'tourism' aspect
 - Pick future venues wisely
 - Offer 'spouse programmes'
 - Identify options for back-to-back events
- Charge registration fees (at least outside Geneva)

Observations at closing panel: increasing cooperation

- Cooperation with academia needs to be reinforced
- ITU should try to find a way for Universities to join or participate by means which they can afford
- Representatives of two Member States proposed the creation of a special, low fee for qualified institutions of higher education
 - They mentioned proposals would be submitted to WTSA-08
- Recognition of contribution into standards would be useful to attract academia
 - E.g. introductory clause or a list on the Recommendation web page (together with Summary and Table of Contents)
 - Clear criteria are needed for acknowledgement of individuals
- The idea of pre-standards environments, suggested at the ITU & Academia Consultation meeting (Geneva, January 2007) was also supported
- Relevant papers submitted at the conference should be made available to the study groups, for consideration as inputs in their standards development work

Conclusions

- The initiative has been very well received by both academia and ITU members
 - Participation statistics show that the target public (academia and R&D) was well represented
- KE#2 should attract more participants, leveraging on the success of the first event
- TSAG should consider the impact of these research topics on future ITU-T standardization work