ITU-T & ACADEMIA

ITU-ALECSO Smart Learning Forum

14-16 December 2015 - Dubai, UAE



ITU 3 SECTORS





ITU-T HOT TOPICS



- 5G (non-radio) and Future networks
- □ Internet of Things (for smart sustainable cities)
- □ Security, Privacy and Trust
- □ Transport, Access, Home
- □ Video coding, e-everything (e.g., e-health)
- ICT and the environment
- □ Digital Financial Service (e.g., Mobile money)
- ☐ Global roaming, Over The Top



















ITU-T STUDY GROUPS



- SG2 Operational aspects
- SG3 Economic and policy issues
- SG5 Environment and climate change
- SG9 Broadband cable and TV
- □ SG11 Protocols and test specifications

- □ SG12 Performance, QoS and QoE
- SG13 Future networks
- SG15 Transport, Access and Home
- SG16 Multimedia
- □ SG17 Security
- □ SG 20 IoT and its applications including smart cities and communities

ITU-T IN THE ARAB REGION



Regional Group for the Arab Region:

ITU-T SG2 Operational aspects

ITU-T SG3 Economic and policy issues

ITU-T SG5 Environment and climate change

□ ITU-T Meetings:

ITU Regional Standardization Forum for Arab Region, 20 December 2015, Cairo (Egypt)

ITU-T SG3 Regional Group for the Arab Region, 30 Nov - 02 Dec 2015 in in Manama, Bahrain

□ ITU-T Focal Point for the Arab Region:

Bilel Jamoussi, Chief of ITU-T Study Group Department: bilel.jamoussi@itu.int

WHAT'S IN FOR ACADEMIA?



- Access ITU-T meetings and resources
 - Academia attending ITU-T meetings
- □ Engage in standards development
 - Academia developing standards
- □ Learn from ITU experts
 - Academia hosting ITU experts
- Share and disseminate your research
 - Academia publishing with ITU
- □ Take part in ITU Kaleidoscope
 - > Academia participating in ITU Kaleidoscope
- Increase your profile and visibility
 - Academia promoted by ITU



ACCESS ITU-T MEETINGS AND RESSOURCES



- □ Technical Meetings and Policy Meetings (Study Groups, Focus Groups, World Telecom Standardization Assembly)
- Remote participation: webcast for opening and closing plenaries and remote participation for selected sessions
- Electronic Access to Documents: ITU TIES accounts and email address
- Documents Exchange Platform: repository and exchange facility for documents
- Mailing Lists: subscription service for members to advance Study Groups' work remotely



ACADEMIA ATTENDING ITU-T MEETINGS



Example of Academia members who attended ITU-T SG13 on Future Networks, 30 Nov – 11 Dec 2015:

- Centre de Développement des Technologies avancées, Algeria
- Universidad Nacional de Luján Centro de Investigación, Argentina
- Universidad Tecnológica Nacional, Argentina
- Beijing University of Posts and Telecommunications, China
- Nanjing University of Posts and Telecommunications, China
- Waseda University, Japan
- □ Korea Advanced Institute of Science and Technology (KAIST), Korea
- University of Zurich (UZH), Switzerland

ENGAGE IN STANDARDS DEVELOPMENT



- Submit Contributions and proposals for new standards
- Take part in Consensus building process leading to approval of standards
- □ Take on **Leading roles** in Study Groups (Working Party Chair, Rapporteur, Editor)

International Telecommunication Union

ITU-T

G.8262/Y.1362

TELECOMMUNICATION STANDARDIZATION SECTOR (07/2010)

SERIES G: TRANSMISSION SYSTEMS AND MEDIA, DIGITAL SYSTEMS AND NETWORKS

Packet over Transport aspects – Quality and availability targets

SERIES Y: GLOBAL INFORMATION
INFRASTRUCTURE, INTERNET PROTOCOL ASPECTS
AND NEXT-GENERATION NETWORKS

Internet protocol aspects - Transport

Timing characteristics of a synchronous Ethernet equipment slave clock

Recommendation ITU-T G.8262/Y.1362



ACADEMIA DEVELOPING STANDARDS



CPqD Brazil

- Célio Fonseca Barbosa, Chairman of Working Party 1 / SG 5
- Atílio Reggiani, Vice-chairman of SG 15

□ Korea Advanced Institute of Science and Technology (KAIST):

- Gyu Myoung Lee, Rapporteur of Question 11 and Question 16 / SG 13
- Contributions submitted to SG 13

Beijing University of Posts and Telecommunications:

- Zhili Wang, Chairman of Working Party 2 / SG 2

- Contributions submitted to: NGN.GSI (23) SG 13 (66) SG 2 (9) SG 16 (22) SG 11 (7) SG 17 (4) SG 20 (3)

LEARN FROM ITU EXPERTS



- Lectures by ITU experts at your university
- □ Co-organization of ITU-T meetings on your campus or at ITU
- □ Group on Education about Standardization
- □ Internships positions for students at ITU



ACADEMIA HOSTING ITU-T EXPERTS



- □ Bonch-Bruevich St.Petersburg State University for Telecommunications (SPbSUT), Russia: ITU-T Director Chaesub Lee delivered a public lecture to students and teachers on 3 Sept 2015
- □ Chemnitz University of Technology, Germany: hosted Rapporteur meeting of SG 12 in June 2014
- □ **George Mason University, USA**: visit of Malcolm Johnson, former ITU-T Director in Dec 2013
- Kyoto University: hosted the second Workshop on Education about Standardization in April 2013
- Aalborg University, Denmark: hosted the first Standards Education Workshop in Oct 2012
- National Polytechnic Institute, Mexico: hosted the ITU Tutorial on Optical Fibres, Cables and Systems in Sept 2011

SHARE AND DISSEMINATE YOUR RESEARCH



- Author an ITU-T Recommendation (acknowledgement)
- Publish an article in ITU News or ITU Blog
- Contribute to ITU-T toolkits and reports
- ☐ Give **tutorial** at ITU-T Study Group meetings



INTERNET OF THINGS: THE NEED FOR COLLABORATION IN CROWDED SPACE

February 28, 2014 · by itu4u · in Alain Louchez, Bilel Jamoussi · 1 Comment



The emergence of the Internet of Things (IoT) represents a dramatic twist in societal evolution; 'things' of any nature have the potential to interconnect and, in the process, they are bound to change how we think and go about our daily lives.

An ITU workshop, "Internet of Things: Trends and challenges in standardization", held at ITU

headquarters in Geneva, 18 February 2014, gathered a multi-disciplinary selection of experts to take stock of progress in the IoT arena with a view to highlighting priorities for its future development.

ACADEMIA PUBLISHING WITH ITU



Authors of ITU Blogs:

- ☐ **GeorgiaTech**, USA: *IOT*, the need for collaboration in crowded space
- □ **University College London**, UK: Will patent wars disrupt innovation

Authors of ITU News Articles:

- □ **Tokai University**, Japan: Telecommunications for pandemics and nuclear disasters
- Aalborg University, Denmark: Challenges to 5G standardization
- □ **Kyoto University**, Japan: Chaos theory as the answer to limited spectrum?
- Czech Technical University in Prague: Small cell cloud

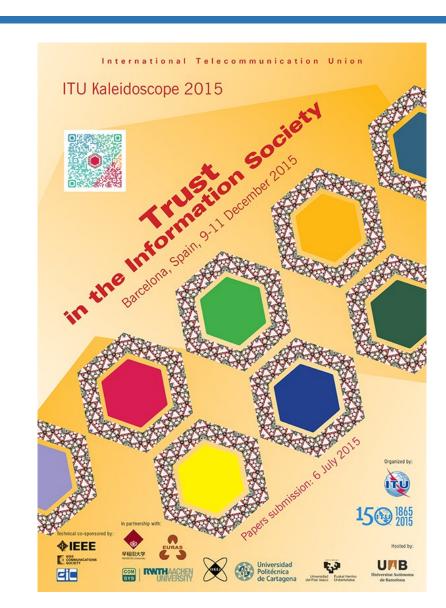
Contributors to ITU reports on ICTs and Climate change:

- □ Imperial College London, UK
- □ Scuola Superiore Sant'Anna of Pisa, Italy
- University of Zagreb, Croatia

TAKE PART IN ITU KALEIDOSCOPE



- Peer-reviewed academic conferences since 2008
- ☐ Brainstorming on **future trends** in ICTs standardization
- □ Total prize of **USD 10,000** for top 3 papers
- □ Best papers published in **IEEE Communications** Magazine
- Kaleidoscope 15: 9-11 December 2015, Barcelona: Trust in the Information Society
- □ Kaleidoscope 16: November 2016, Bangkok



ACADEMIA PARTICIPATING IN KALEIDOSCOPE



Papers selected and presented in 2015:

Universidad Tecnológica Nacional, Argentina; University of Tokyo, Japan; University of Geneva, Switzerland

Best paper awards:

Keio University, Japan: 1st best paper in 2013

Tsinghua University, China: 3rd best paper in 2013

Universidad Del Pais Vasco, Spain: 2nd best paper in 2009, 1st best paper in 2010

Host of ITU Kaleidoscope:

The Bonch-Bruevich Saint-Petersburg State University of Telecommunications (SPbSUT) in 2014 Kyoto University, Japan in 2013

Member of the Technical Programme Committee in 2015:

- Chulanlongkorn University, Thailand
- □ Universidad Del Pais Vasco, Spain
- Waseda University, Japan

INCREASE YOUR PROFILE AND VISIBILITY



- □ Your contribution featured in **ITU Newslog**
- Speaking opportunities at ITU events
- Hosting or Sponsorship of ITU events
- □ **Testimonials** on ITU websites



Thomas Knoll and Marcus Ecker from Chemnitz University of Technology, Germany ITU NEWSLOG: Academic Contribution Focuses on Video Quality in SG 12

ACADEMIA PROMOTED BY ITU





"ITU is a wonderful place where different actors especially from academia and industry can meet together and collaborate to achieve valuable technical work. It is also a great opportunity for academic and research institutions from developing countries to be able to participate actively in the development of future standards"

Centre de développement des technologies avancées (CDTA), Algeria



" In addition to falling closely in line with Georgia Tech's strategic vision...our collaboration with ITU also aims at fostering productive relationships with industry, academia and other organizations actively working in the ICT arena "

Georgia Institute of Technology (GeorgiaTech), USA



"As a world-class technical research university promoting science-based innovation, we are proud to partner with ITU in the areas of information technology and telecommunication policy where ITU is the uncontested international leader. ITU plays an important role in shaping the ICT sector and we are happy to assist this international agency in achieving its mission and vision. "

EPFL, Switzerland

JOIN ITU!



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