

Radio Spectrum and Technical Standards Advisory Committee

SSAC Paper 9/2013 for Information:

Brief Update on World Telecommunication Standardization Assembly

Office of the Communications Authority
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WTSA 2012

Dubai, UAE

**World Telecommunication
Standardization Assembly**

20-29 NOVEMBER 2012

Background

- The International Telecommunication Union (ITU) holds the World Telecommunication Standardization Assembly (WTSA) every four years to define the next period of study for ITU-T.
- Hosted by the United Arab Emirates and the Telecommunications Regulatory Authority
- Preceded by the Global Standards Symposium held on 19 November 2012.

Global Standards Symposium

- Attended by leading standards development organisations (SDOs), including International Electrotechnical Commission (IEC), International Organisation for Standardization (ISO), China Communications Standards Association (CCSA), Internet Task Force (IETF).
- Risk of overlap and duplication of standards by SDOs.
- Different SDOs should work together in a cooperative manner to develop common international standards.

WTSA-12

- Functions and duties of WTSA-12 laid down in Article 18 of the ITU Constitution and Article 13 of the ITU Convention.

- The core work of the Assembly is to:
 - approve the new or revised Resolutions or Recommendations
 - consider and approve the reports submitted by the Chairmen of various ITU-T Working Groups for the previous study period (2009 - 2012)
 - review the work and structure of the Study Groups
 - appoint Chairmen and Vice-Chairmen for the Study Groups for the next study period (2013-2016)

Participation

- Around 1000 participants from over 100 countries.
- China delegation led by the Ministry of Industry and Information Technology (MIIT).
- Other participants include The State Administration of Radio Film and Television, China Academy of Telecommunication Research of MIIT, China Communications Standards Association, China Mobile, China Unicom, Huawei, ZTE and OFCA, etc.

Resolutions

- More than 50 Resolutions revised and proposed.
- Related to ITU-T house-keeping, collaboration and cooperation, bridging standardization gap.
- Others concerning network operation like number misuse, calling party number delivery, ENUM, cybersecurity and spam.
- Internet related topics like IP address allocation and non-discriminatory access and use of Internet resources.

Resolution on Software Defined Networking (SDN)

- Proposed by the Asia-Pacific Telecommunity Administrations
- Normally switches and routing software of traditional networks remain proprietary and under control of manufacturers
- SDN allows separation of control and data planes so that network operators can control and manage directly their own resources and networks to meet changing requirements
- Under new Resolution 77 “Standardization work in ITU-T for software defined networking” where SG 13 is instructed to expand and accelerate work on SDN architecture and requirements

Resolution on IP address allocation

- Resolution 64 “IP address allocation and facilitating the transition to and deployment of IPv6”
- First adopted by WTSA-08
- Proposed modifications to Resolution 64 to facilitate the transition to and deployment of IPv6
- Instructions to SG 2 and SG 3 to provide support to provide migration from IPv4 to IPv6, including study on IPv6 address allocation and registration for interested ITU Members, especially developing countries

Recommendations

- Adoption of 6 new Recommendations
- Through collaboration with IETF, two Recommendations (G.8113.1 and G.8113.2) on multiprotocol label switching – transport profile (MPLS-TP) were approved
- Y.2770 on requirements for deep packet inspection in next generation network
- G.9901 on power line communications transceiver
- G.9980 on remote management of CPE over broadband network

Study Groups Results

- One of the main tasks of the Assembly was to conclude the results of the previous study period from 2009 to 2012 and present future work planning from 2013 to 2016
- Ten Study Groups in the study period

SG2 – Operational aspects	SG12 – Performance, QoS and QoE
SG3 – Economic and policy issues	SG13 – Future Networks
SG5 – Environment and climate change	SG15 – Transport, Access and Home
SG9 – Broadband cable and TV	SG16 - Multimedia
SG11 – Protocols and test specifications	SG17 - Security

Study Group 5

- Responsible for studies related to environment and climate
- Studies related to:
 - protection of telecommunication networks and equipment from interference and lightning
 - electromagnetic compatibility (EMC) and the safety and health effects connected with electromagnetic fields produced by telecommunication installations and devices like cellular phones
 - environmental protection and recycling of ICT equipment

Study Group 5 – Achievements

- K series Recommendation on protection against interference
- new Recommendation K.79 “Electromagnetic characterization of the radiated environment in the 2.4 GHz ISM band”
- new Recommendation K.80 “EMC requirements for telecommunication network equipment (1 GHz - 6 GHz)”
- new Recommendation K.83 “Monitoring of electromagnetic field levels”
- new Recommendation K.91 “Guidance for assessment, evaluation and monitoring of human exposure to radio frequency electromagnetic field”

Study Group 9

- Responsible for studies related to television and sound transmission and integrated broadband cable networks
- Studies related to:
 - telecommunication systems for broadcasting of TV and sound programs (e.g. IPTV)
 - CATV networks to provide interactive video services, telephone and data services
 - conditional access
 - smart cable television
 - large screen digital imagery (LSDI)

Study Group 9 –Achievements

- Published a number of J series Recommendations related to operation of IPCablecom2, HDTV for digital cable television and IPTV.
- Establishment of a Focus Group on Smart Cable Television with an aim to foster development of global Smart Cable Television future standards for advanced services and technologies for cable networks such as ultra high-definition television and advanced 3D television

Study Group 13

- Responsible for future networks including mobile and NGN
- Studies related to:
 - requirements, function architecture, capabilities for NGN evolution
 - Internet of Things (IoT)
 - future networks and cloud computing
 - Software Defined Networking
 - smart ubiquitous networks

Study Group 13 – Achievements

- Y series Recommendations for development of NGN, including additional requirements, capabilities and functions related to IPv6 based networks
- Recently approved Y.3041 “Smart Ubiquitous Networks - Overview”, Y.3042 “SUN – Smart Traffic Control and Resource Management Functions”
- Y.1901 “Requirements for the support of IPTV services”
- Developed the first Recommendation on IoT Y.2060 “Overview of Internet of Things”
- Developing cloud computing Recommendations, including Y.3501 “Cloud computing framework and high-level requirements”





Way Forward

- Keep track the latest development on the emerging and evolving technologies and the relevant standards development, such as NGN, HDTV, smart grid, SUN and IoT.
- Report to SSAC and develop relevant specifications as necessary.

Thank You