

Radio Spectrum and Technical Standards Advisory Committee

SSAC Paper 4/2016 for Information:

**World Telecommunication
Standardization Assembly 2016**

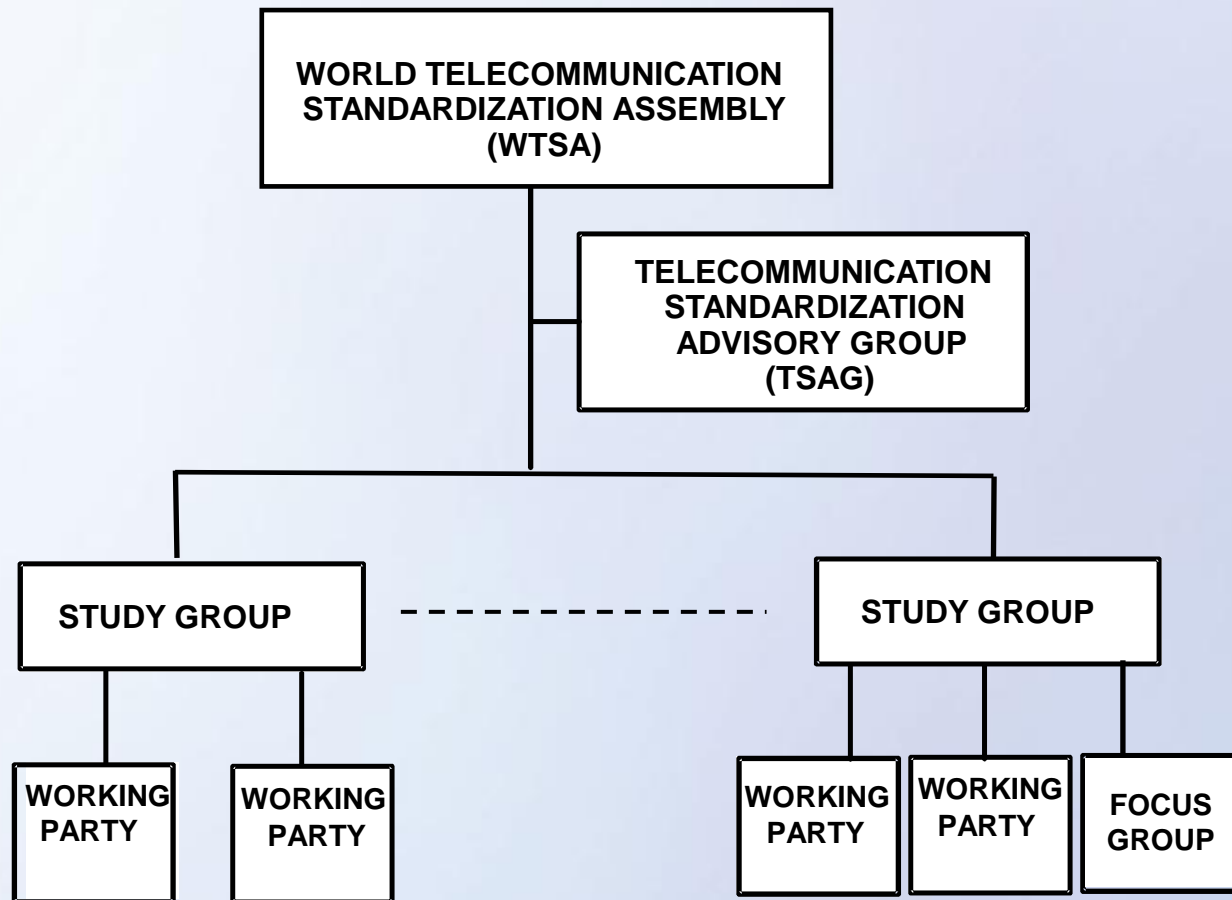
Office of the Communications Authority
18 February 2016

Telecommunication Standardization Sector of ITU

Telecommunication Standardization Sector

- The International Telecommunication Union (ITU) is a United Nations specialized agency on telecommunications
- Telecommunication Standardization Sector (ITU-T) is part of ITU which coordinates the development of telecommunications standards
 - aims to ensure efficient and timely production of telecommunications standards
 - Telecommunications standards produced by ITU-T are referred to as ITU-T Recommendations, and they become mandatory only when they are adopted by individual administrations

Framework of ITU-T



Working Structure of ITU-T

- Study Groups (SGs) /Working Parties (WPs) study questions and develop draft recommendations
 - Focus Groups, which provide flexibility in participation and working methods, may be established to support the work of SGs
- Telecommunication Standardization Advisory Group (TSAG) may establish/restructure Study Groups
 - provides guidelines to the SGs, produces working procedures and follows up with the accomplishment of work programmes
- World Telecommunication Standardization Assembly (WTSA) sets the overall direction for ITU-T
 - considers and approves resolutions and recommendations submitted by SGs
 - establishes SGs, approves their expected work programmes of the next study period and appoints their chairmen and vice-chairmen

ITU-T Study Groups (2013 – 2016)

| SG | Title |
|----|--|
| 2 | Operational aspects of service provision and telecommunications management |
| 3 | Tariff and accounting principles including related telecommunications economic and policy issues |
| 5 | Environment and climate change |
| 9 | Broadband cable and TV |
| 11 | Signalling requirements, protocols and test specifications |

| SG | Title |
|----|--|
| 12 | Performance, quality of service and quality of experience |
| 13 | Future networks including cloud computing, mobile and next-generation networks |
| 15 | Networks, technologies and infrastructures for transport, access and home |
| 16 | Multimedia coding, systems and applications |
| 17 | Security |
| 20 | Internet of Things and its applications including smart cities and communities |

World Telecommunication Standardization Assembly

World Telecommunication Standardization Assembly

- WTSA is held every four years
 - Defines general policy for ITU-T
 - reviews working methods including approval process, work programmes and structure of SGs
- The most recent WTSA-12 was held in Dubai in November 2012
- The coming WTSA-16 will be held in 4Q/2016
 - date and venue to be announced

Objectives of WTSA

- To promote cooperation among ITU-T members in decision-making on standardization matters and collaborate with other ITU Sectors and standardization bodies to avoid work duplication and inconsistencies
- To develop in a timely manner ITU-T Recommendations
- To provide support and assistance to developing countries in bridging the gap in relation to standardization matters
- To disseminate information and know-how through ITU-T Recommendations and relevant materials

Outcomes of the recent WTSA-12 (1)

- Approved 6 new technical standards
 - Multiprotocol Label Switching - Transport Profile (G.8113.1 and G.8113.2)
 - Remote management of customer premises equipment over broadband network (G.9980)
 - Power line communication transceivers (G.9901)
 - Deep packet inspection in next generation network (Y.2770)
 - Time-scale for settlement of accounts for international telecommunication services (D.195)

Outcomes of the recent WTSA-12 (2)

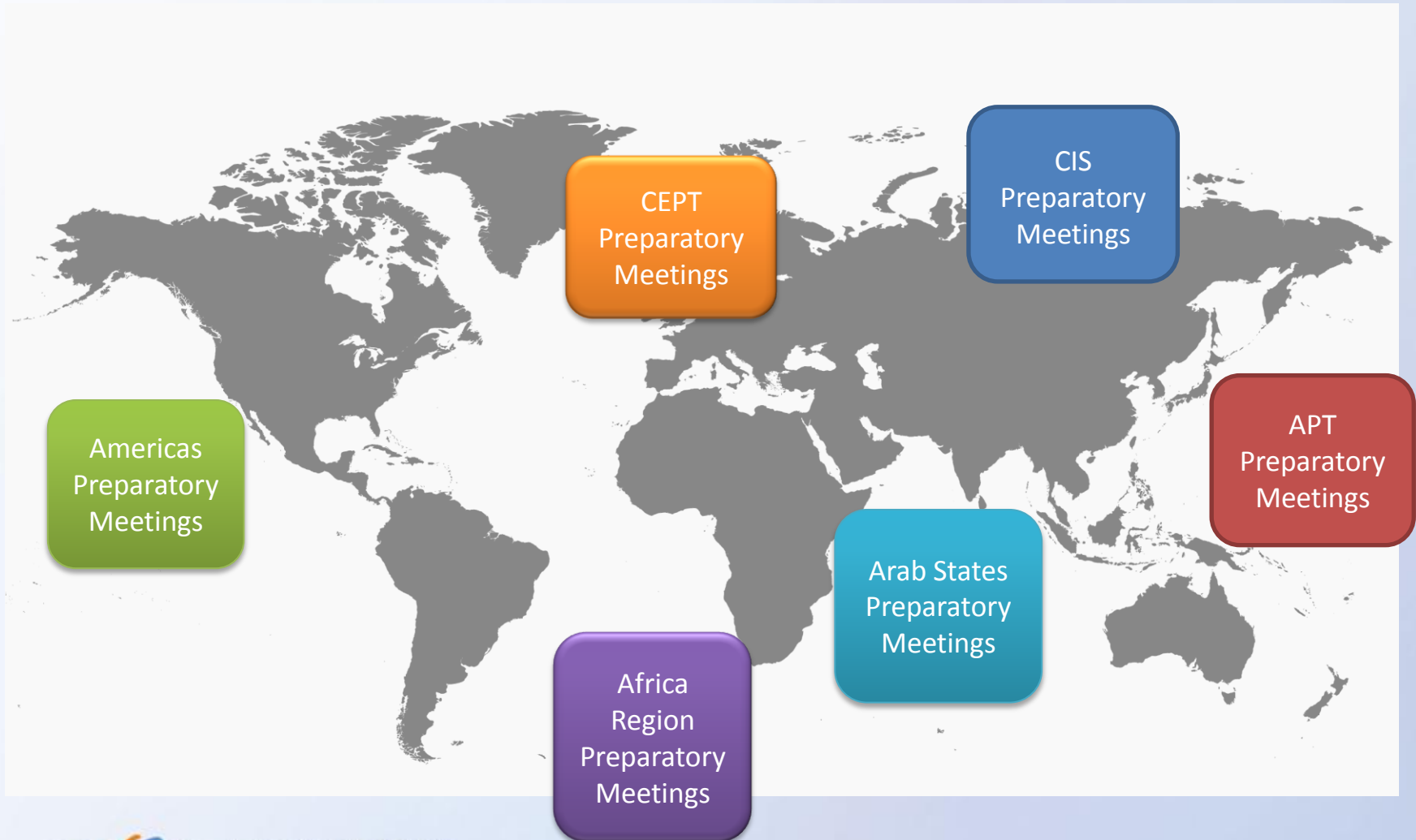
- Adopted 6 new resolutions
 - New resolutions related to e-health, software-defined networks and non-discriminatory access to Internet
 - Resolution 82 calls for Strategic and Structural Review of ITU-T
- Adopted 44 revised resolutions
 - Strengthen these resolutions in areas of climatic change, cyber-security, IP address space, bridging the standardization gap, accessibility to ICT, conformity and interoperability
 - House keeping activities of ITU-T

Works of WTSA-16

- WTSA-16 will consider, among other things,
 - reports, draft resolutions and recommendations submitted by SGs and TSAG
 - ITU-T Director Report on ITU-T activities
 - proposals from Regional Preparatory Groups
- WTSA-16 will also
 - define the next period of study for ITU-T
 - appoint SG Chairmen and Vice-chairmen of the study period 2017 - 2020

Regional Preparatory Works For WTSA

Regional Preparatory Meetings for WTSA-16



APT Preparatory Group for WTSA-16

- Asia-Pacific Telecommunity (APT) is an intergovernmental organization founded on the joint initiatives of ITU and UNESCAP (United Nations Economic and Social Commission for Asia-Pacific)
- APT aims to foster the development of telecommunication services and information infrastructure in the Asian region
- APT has established the APT Preparatory Group for WTSA-16
 - Made up of a Plenary and 3 Working Groups
 - Aims to develop the APT Common Proposals representing the interests of APT members
 - Two meetings held in 2015, two meetings to be held in 2016

WG1
ITU-T Working
Methods

WG2
ITU-T Work
Organisation

WG3
Standardization
Related Issues

Work Progress of APT Preparatory Group

Identifies the following topics of interest with a view to developing APT Common Proposals

- Improvement of the current working mechanism of ITU-T SGs including remote participation
- Revisions to resolutions including bridging the standardization gap, software-defined network, ICT on climatic changes and environmental related issues, conformance and interoperability
- Proposals on new resolutions and recommendations including Internet of Things, Green ICT, Software-defined network, IMT-2020 (non-radio) network

Topics of interest in ITU-T Standardization

Topics in ITU-T standardization

ITU-T covers a wide range of standardization works, including -

- Conformance and interoperability
- IMT-2020 (non-radio) network
- Internet of Things
- Software-defined networking
- Cybersecurity
- Numbering and addressing

Topics of interest (1)

Conformance and Interoperability

- Proposed “ITU Conformity Mark” programme
 - to avoid multiple testing and certification
 - to support international recognition of test results and certificates
- SG 11 issues “Guideline for Testing Laboratories recognition procedure” about recognition of testing agencies which have competence to test against ITU-T Recommendations
- ITU-T establishes Conformity Assessment Steering Committee to manage the guideline on recognition procedure

Topics of interest (2)

IMT2020 (non-radio) network

- SG13 establishes a Focus Group on IMT-2020 (5G) to identify network standardization requirements for non-radio elements of 5G networks covering
 - network architecture
 - fixed-mobile convergence
 - fronthaul and backhaul networks
 - traffic models and the associated QoS management
- Complement the works of ITU-R on IMT-2020 (radio) network

Topics of interest (3)

Internet of Things

- Internet of Things (IoT) hinge on the existence and effective operation of global standards for successful implementation
- A new Study Group SG 20 on IoT established in June 2015
- SG 20 is working on the framework and roadmaps for harmonized and coordinated development of IoT, including machine-to-machine communications and ubiquitous sensor networks

Topics of interest (4)

Software-defined Networking

- Software-defined networking (SDN) technology plays an important roles in the future development of telecommunications networks
- A shift of network functions from hardware to software, providing greater flexibility and openness of network configuration
- SG 13 is working on the standardization works of SDN architecture requirements, network aspects of IoT and mobile telecommunication networks including IMT networks

Way Forward

Way Forward

- OFCA will continue to
 - Monitor the development on ITU-T standardization works
 - Attend APT Preparatory Group meetings and WTSA to keep track of the activities, progress and outcomes on relevant individual topics
 - Update SSAC on the development and outcomes of APT Preparatory Group and WTSA-16 in due course

Thank You