



**ISO/IEC JTC 1 N 9433**  
**ISO/IEC JTC 1**  
**Information Technology**

2008-11-24

**Document Type:** Other Document(Defined)

**Document Title:** WTSA Liaison Report to JTC 1 at Plenary in Nara, Japan

**Document Source:** JTC 1 Secretariat

**Reference:**

**Document Status:** For Information

**Action ID:** For Information

**Due Date:**

**No. of Pages:** 43

Source: ITU-T liaison officer to ISO/IEC JTC 1 (H. Bertine)

Title: Highlights of the results of WTSA-08

## **1. Overview**

The ITU-T World Telecommunication Standardization Assembly (WTSA) met 21-30 October 2008 in Johannesburg, South Africa. WTSA is the regular event held every 4-years that defines the next period of study for ITU-T. The WTSA approves working methods including approval processes, the work program, and the structure and leadership of the Study Groups.

A one-day Global Standards Symposium (GSS) was held preceding the WTSA on 20 October 2008. The three main sessions addressed:

- Bridging the standardization gap (disparities in the ability of developing countries, relative to developed ones, to access, implement, contribute to and influence international ICT standards)
- Global standards challenges (future challenges for ICT standards-making community including climate change and accessibility)
- Global standards collaboration round table (debating issues of the day and how their organization is contributing to bridging the standardization gap)

Mr Alan Bryden (Secretary-General, ISO) and Mr. Enno Liess (Vice-President, IEC) participated in the round table. Additional information is available at:

<http://www.itu.int/ITU-T/wtsa-08/gss/index.html>

Three side events were held during the WTSA on:

- ICT Accessibility
- Cybersecurity
- ICT and Climate Change

These events updated participants on the status of the work in ITU and provided an opportunity to discuss future activities. Additional information is available at:

<http://www.itu.int/ITU-T/wtsa-08/se/index.html>

The remainder of this liaison highlights results of WTSA-08 of particular interest to ISO/IEC JTC 1.

## **2. Structure of study groups**

The study group structure for the 2009-2012 study period consists of 10 study groups (a reduction from 13 as related subjects were grouped to facilitate carrying out the work). The titles and mandates of the 10 study groups are given in revised Resolution 2, an extract of which is provided in Annex 1. Lead Study Group designations are also given at the end of Annex 1.

## **3. Study Group leadership**

Chairman and vice chairmen were appointed for the 10 study groups, TSAG and Tariff groups as listed in Annex 2.

## **4. Study Group Questions**

The work program for the 2009-2012 study period is given in the set of Questions. Annex 3 gives the titles of all Questions assigned to each of the 10 study groups.

## **5. Other groups**

Other groups in the ITU-T include Focus Groups, Joint Coordination Activities (JCAs), Global Standardization Initiatives (GSIs), etc. The groups currently in operation are given in Annex 4.

## **6. WTSA-08 Resolutions**

### **6.1 WTSA Resolution 7 – Collaboration with ISO and IEC**

Resolution 7 is the primary resolution setting forth the ITU-T collaboration with the International Organization for Standardization (ISO) and the International Electrotechnical Commission (IEC). The revised text is given in Annex 4. Of particular note is the new text of resolves 3 and 4 on maintaining a database on the ITU-T website of the program of cooperation among ITU-T, ISO and IEC and setting of priorities of the study items. An early attempt by SG 17 to implement the resolves 3 and 4 is available at:

<http://www.itu.int/ITU-T/studygroups/com17/refdocs/relationships.html>

### **6.2 Other WTSA Resolutions of interest to JTC 1**

The WTSA-08 adopted a very large number of Resolutions. Attached are a few that may be of interest to JTC 1. Please note that the Resolution texts given in the Annexes of this liaison are subject to final editing.

- The creation of Technology Watch Function – See Annex 6
- Telecommunication/ICT accessibility for persons with disabilities – See Annex 7
- Studies related to conformance and interoperability testing, assistance to developing countries, and a possible future ITU mark program – See Annex 8
- Information and communications technologies and climate change – See Annex 9
- Cybersecurity – See Annex 10
- Creation of a Standardization Committee for Vocabulary (SCV) – See Annex 11
- Establishment of a workshop and seminar coordination group – See Annex 12

## ANNEX 1

**Extract from WTSA-08 Resolution 2****General areas of Study for ITU-T Study Groups****Study Group 2****Operational aspects of service provision and telecommunications management**

Responsible for studies relating to:

- principles of service provision, definition and operational requirements of service emulation;
- numbering, naming, addressing and identification requirements and resource assignment including criteria and procedures for reservation, assignment and reclamation;
- routing and interworking requirements;
- human factors;
- operational and management aspects of networks including network traffic management, designations, and transport-related operations procedures;
- operational aspects of interworking between traditional telecommunication networks and evolving networks;
- evaluation of feedback from operators, manufacturing companies and users on different aspects of network operation;
- management of telecommunication services, networks, and equipment via management systems, including support for next-generation networks (NGN) and the application and evolution of the telecommunication management network (TMN) framework;
- ensuring the consistency of the format and structure of IdM identifiers; and
- specifying interfaces to management systems to support the communication of identity information within or between organizational domains.

**Study Group 3****Tariff and accounting principles including related telecommunication economic and policy issues**

Responsible, among others, for studies relating to tariff and accounting matters (including costing methodologies) for international telecommunication services and study of related telecommunication economic, accounting and policy issues. To this end, Study Group 3 shall in particular foster collaboration among its members with a view to the establishment of rates at levels as low as possible consistent with an efficient service and taking into account the necessity for maintaining independent financial administration of telecommunication on a sound basis.

**Study Group 5****Protection against electromagnetic environment effects**

Responsible for studies relating to protection of telecommunication networks and equipment from interference and lightning.

Also responsible for studies related to electromagnetic compatibility (EMC), to safety and to health effects connected with electromagnetic fields produced by telecommunication installations and devices, including cellular phones.

Responsible for studies on the existing copper network outside plant and related indoor installations.

### **Study Group 9**

#### **Television and sound transmission and integrated broadband cable networks**

Responsible for studies relating to:

- use of telecommunication systems for contribution, primary distribution and secondary distribution of television, sound programmes and related data services including interactive services.
- use of cable and hybrid networks, primarily designed for television and sound programme delivery to the home, as integrated broadband networks to also carry voice or other time-critical services, video on demand, interactive services, etc.

### **Study Group 11**

#### **Signalling requirements, protocols and test specifications**

Responsible for studies relating to signalling requirements and protocols, including those for IP-based networks, NGN, mobility, some multimedia related signalling aspects, ad hoc networks (sensor networks, RFID, etc.), QoS, and internetwork signalling for ATM, N-ISDN and PSTN networks. This also includes reference signalling architectures and test specifications for NGN and emerging networks (e.g., USN).

### **Study Group 12**

#### **Performance, QoS and QoE**

Responsible for Recommendations on performance, Quality of Service (QoS) and Quality of Experience (QoE) for the full spectrum of terminals, networks and services ranging from speech over fixed circuit-based networks to multimedia applications over networks that are mobile and packet based. Included in this scope are the operational aspects of performance, QoS and QoE.

A special focus is given to interoperability to ensure end-to-end users' satisfaction.

### **Study Group 13**

#### **Future networks including mobile and NGN**

Responsible for studies relating to the requirements, architecture, evolution and convergence of future networks. Also includes NGN project management coordination across study groups and release planning, implementation scenarios and deployment models, network and service capabilities, interoperability, impact of IPv6, NGN mobility and network convergence, public data network aspects and network aspects of IdM. Responsible for studies relating to network aspects of mobile telecommunication networks, including International Mobile Telecommunications (IMT), wireless Internet, convergence of mobile and fixed networks, mobility management, mobile multimedia network functions, internetworking, interoperability and enhancements to existing ITU-T Recommendations on IMT.

### **Study Group 15**

#### **Optical transport networks and access network infrastructures**

Study Group 15 is responsible in ITU-T for the development of standards on optical transport networks and access network infrastructures, systems, equipment, optical fibres and cables, and their related installation, maintenance, test, instrumentation and measurement techniques, and control plane technologies to enable the evolution toward intelligent transport networks. This encompasses the development of related

standards for the customer premises, access, metropolitan and long haul sections of communication networks.

#### **Study Group 16**

##### **Multimedia coding, systems and applications**

Responsible for studies relating to ubiquitous applications, multimedia capabilities for services and applications for existing and future networks, including NGN and beyond. This encompasses accessibility, multimedia architectures, terminals, protocols, signal processing, media coding and systems (e.g. network signal processing equipment, multipoint conference units, gateways, and gatekeepers).

#### **Study Group 17**

##### **Security**

Responsible for studies relating to security including cybersecurity, countering spam and identity management. Also responsible for the application of open system communications including directory and object identifiers, and for technical languages, the method for their usage and other issues related to the software aspects of telecommunication systems.

### **Lead Study Groups in specific areas of study**

SG 2	Lead study group for service definition, numbering and routing
	Lead study group on telecommunication for disaster relief/early warning
	Lead study group on telecommunication management
SG 5	Lead study group on electromagnetic compatibility and electromagnetic effects
SG 9	Lead study group on integrated broadband cable and television networks
SG 11	Lead study group on signalling and protocols
	Lead study group on intelligent networks
	Lead study group on test specifications
SG 12	Lead study group on quality of service and quality of experience
SG 13	Lead study group for future networks and NGN
	Lead study group on mobility management and fixed-mobile convergence
SG 15	Lead study group on access network transport
	Lead study group on optical technology
	Lead study group on optical transport networks
SG 16	Lead study group on multimedia coding, systems and applications
	Lead study group on ubiquitous applications ("e-everything", such as e-health)
	Lead study group on telecommunication/ICT accessibility for persons with disabilities
SG 17	Lead study group on telecommunication security
	Lead study group on identity management (IdM)
	Lead study group on languages and description techniques

## ANNEX 2

**Appointment of Chairmen and Vice Chairmen**

<b>Study Group 2</b>	<p>Chairman: Mrs Marie-Thérèse Alajouanine (France)</p> <p>Vice Chairmen Mr James M. Kilaba (Tanzania) Mr Marcos Pérez García (Cuba) Mr Sherif Guinena (Egypt) Mr In-Seop Lee (Republic of Korea) Mr Steven Lind (United States) Mr Bruno Ramos (Brazil) Mr Phil Rushton (United Kingdom) Ms Jie Zhang (China)</p>
<b>Study Group 3</b>	<p>Chairman: Mr Ki-Shik Park (Republic of Korea)</p> <p>Vice Chairmen Mr Leslie Martinkovics (United States) Mr Matano Ndaro (Kenya) Mr Cleveland Thomas (Trinidad &amp; Tobago) Mr Seiichi Tsugawa (Japan) Mr Alexander V. Yokavenko (Russian Federation)</p>
<b>Study Group 5</b>	<p>Chairman: Mr Ahmed Zeddami (France)</p> <p>Vice Chairmen: Mr Tariq H. Al-Amri (Saudi Arabia) Mr Darren Carpenter (United Kingdom) Mr Héctor Carril (Argentina) Mr Philip Day (Australia) Mr Sung-Chul Kang (Republic of Korea) Mr Guy-Michel Kouakou (Côte d'Ivoire) Mr Alexander Tsym (Russian Federation) Mr Li Xiao (China)</p>
<b>Study Group 9</b>	<p>Chairman: Mr Charles Sandbank (United Kingdom)</p> <p>Vice Chairmen: Mr O.V. Gofaizen (Ukraine) Mr Satoshi Miyaji (Japan) Mr Dong Wang (China) Mr Arthur Webster (United States)</p>

<b>Study Group 16</b>	<p>Chairman: Mr Yushi Naito (Japan)</p> <p>Vice Chairmen: Mr Fode Soumah (Guinea) Mr Seong-Ho Jeong (Republic of Korea) Mrs Claude Lamblin (France) Mr Zhong Luo (China) Mr Mark Neibert (United States) Mr Ibaa Quelchek (Syrian Arab Republic)</p>
<b>Study Group 17</b>	<p>Chairman: Mr Arkadiy Kremer (Russian Federation)</p> <p>Vice Chairmen: Mr Jianyong Chen (China) Mr Mohammed. K. Elhaj (Sudan) Mr Antonio Guimarães (Brazil) Mr Koji Nakao (Japan) Mr Patrick Mwesigwa (Uganda) Mr Heung-Youl Youm (Republic of Korea)</p>
<b>TSAG</b>	<p>Chairman: Mr John Visser (Canada)</p> <p>Vice Chairmen: Mr Fabio Bigi (Italy) Mr Dmitry Cherkosov (Russian Federation) Mr Mohammed Gheyath (United Arab Emirates) Mr Jean-Jacques Massima-Landji (Gabon) Mr Haruo Okamura (Japan) Mr Stephen Trowbridge (United States)</p>
<b>TAF</b>	<p>Chairmen: Mr Abossé Akue-Kpakpo (Togo) <b>second 2 years</b> Mr Modibo Traore (Mali) <b>first 2 years</b></p> <p>Vice Chairmen: Ms Joséphine Adou Biendjui (Côte d'Ivoire) Mrs Pauline Tsafak Djoumessi (Cameroon)</p>
<b>TAL</b>	<p>Chairman: Mr Facundo Fernandez Begni (Argentina)</p> <p>Vice Chairmen: Mr Pedro Oliva Brunet (Cuba) Mr Vanderlei Campos (Brazil) Mr Luis E. Monsanto (Venezuela)</p>
<b>TAS</b>	<p>Chairman: Mr Byoung Nam Lee (Republic of Korea)</p> <p>Vice Chairman: Mr Gunawan Hutagalung (Indonesia)</p>



## ANNEX 3

**Allocation of Questions to Study Groups**

<b>Study Group</b>	<b>Temporary Designation</b>	<b>Title of Question</b>
Study Group 2 Operational aspects of service provision and telecommunications management	A/2	Application of numbering, naming, addressing and identification plans for fixed and mobile telecommunications services
	B/2	Routing and interworking plan for fixed and mobile networks
	C/2	Service and operational aspects of telecommunications, including service definition
	D/2	Human factors related issues for improvement of the quality of life through international telecommunications
	F/2	Network and service operations
	A/4	Terms and definitions
	B/4	Service Provider/Network Operator requirements and priorities for telecommunication management
	C/4	Management framework and architecture
	D/4	Requirements for Business-to-Business and Customer-to-Business management interfaces
	E/4	Methodology and generic requirements, analysis and design for management interfaces
	F/4	Specialized Requirements, Analysis and Design for Management Interfaces
	G/4	Protocols and security for management
	H/4	Telecommunications management and OAM project
	I/4	Network and service operations and maintenance procedures
	J/4	Common measurement techniques and results collections for use on NGN telecommunications systems and their constituent parts
Study Group 3 Tariff and accounting principles including related telecommunications economic and policy issues	A/3	Development of charging and accounting/settlement mechanisms for international telecommunications services using the Next Generation Networks (NGNs) and any possible future development, including adaptation of existing D-series Recommendations to the evolving user needs
	B/3	Development of charging and accounting/settlement mechanisms for international telecommunications services, other than those studied in Question A/3, including adaptation of existing D-series Recommendations to the evolving user needs
	C/3	Study of economic and policy factors relevant to the efficient provision of international telecommunication services
	D/3	Regional studies for the development of cost models together with related economic and policy issues

	E/3	Terms and definitions for Recommendations dealing with tariff and accounting principles
Study Group 5 Protection against electromagnetic environment effects	A/5	EMC issues arising from the liberalization of telecommunications networks
	B/5	EMC related to broadband access networks
	C/5	Human exposure to electromagnetic fields (EMFs) due to radio systems and mobile equipment.
	D/5	Resistibility of communication equipment
	E/5	Lightning protection of telecommunication systems
	F/5	Bonding configurations and earthing of telecommunication systems in the global environment
	G/5	Home Networks
	H/5	Interference to telecommunication networks due to power systems and electrified railway systems
	I/5	Safety in the telecommunications networks
	J/5	EMC Telecommunications Recommendations
	K/5	Protective components and assemblies
	L/5	Guides and Terminology
	M/5	Security of telecommunication and information systems regarding the electromagnetic environment
	N/5	EMC requirements for the Information Society
	C/6	Technical aspects of unbundling and sharing of outside plant elements in networks
	E/6	Copper cables, networks and fibre-optic connection hardware for broadband access
Study Group 9 Television and sound transmission and integrated broadband cable networks	A/9	Transmission of television and sound programme signal for contribution, primary distribution and secondary distribution
	B/9	Measurement and control of the Quality of Service (QoS) for television transmission on contribution and distribution networks
	C/9	Methods and practices for conditional access, protection against unauthorized copying and against unauthorized redistribution ("redistribution control" for digital cable television distribution to the home)
	D/9	Application programming interfaces (API) for advanced content distribution services within the scope of Study Group 9
	E/9	Functional requirements for a universal integrated receiver or set-top box for the reception of advanced content distribution services
	G/9	Digital programme delivery controls for multiplexing, switching and insertion in compressed bit streams, possibly encapsulated in TS or IP packets
	H/9	Cable television delivery of digital services and applications that use Internet Protocols (IP) and/or packet-based data
	I/9	Voice and video IP applications over cable television networks

	J/9	The extension of network-based content distribution services over broadband in Home Networks
	K/9	Requirements and methods to delivery sound and television programmes and other multimedia services over IP networks for advanced service platforms
	L/9	Transmission of multichannel analogue and/or digital television signals over optical access networks
	M/9	Objective and subjective methods for evaluating perceptual audiovisual quality in multimedia services within the terms of Study Group 9
	N /9	Transmission of Large Screen Digital Imagery programmes for contribution and distribution purposes
Study Group 11 Signalling requirements, protocols and test specifications	A/11	Network signalling and control functional architectures in emerging NGN environments
	B/11	Application control and signalling requirements and protocols
	C/11	Session control and signalling requirements and protocols
	D/11	Bearer control and signalling requirements and protocols
	E/11	Resource control and signalling requirements and protocols
	F/11	Coordination of signalling requirements and protocol development
	G/11	Signalling and control requirements and protocols supporting network attachment and identification in NGN environment
	H/11	Protocol Test Specifications for NGN
	I/11	Monitoring parameters for NGN protocols
	J/11	Service test specification for NGN
	K/11	QoS tests specification for NGN
	L/11	USN and RFID test specification
	M/11	Coordination of work on Emergency Communications within an NGN environment
	N/11	Security Coordination For NGN Protocols
	F/17	End-to-end Multicast
Study Group 12 Performance, QoS and QoE	A/12	Work programme, QoS/QoE coordination and bridging the standardization gap
	B/12	Multimedia performance considerations for IP gateways
	C/12	Speech transmission characteristics of speech terminals for fixed circuit-switched, mobile and packet-switched (IP) networks
	D/12	Hands-free communication in vehicles
	E/12	Telephonometric methodologies for handset and headset terminals
	F/12	Analysis methods using complex measurement signals including their application for speech enhancement techniques and hands-free telephony
	G/12	Methods, tools and test plans for the subjective assessment of speech, audio and audiovisual quality interactions

	H/12	E-Model extension towards wideband transmission and future telecommunication and application scenarios
	I/12	Perceptual-based objective methods for voice, audio and visual quality measurements in telecommunication services
	J/12	Transmission planning and performance considerations for voiceband, data and multimedia services
	K/12	Performance interworking and traffic management for Next Generation Networks
	L/12	QoE, QoS and performance requirements and assessment methods for multimedia including IPTV
	M/12	Development of parametric models and tools for audiovisual and multimedia quality measurement purposes
	N/12	Performance of packet-based networks and other networking technologies
	O/12	Objective assessment of speech and sound transmission performance quality in networks
	P/12	Framework for diagnostic functions and their interaction with external objective models predicting media quality
	E/2	Operational aspects of telecommunication network service quality
	A/13	Coordination and planning
Study Group 13 Future networks including mobile and NGN	B/13	Requirements and implementation scenarios for emerging services and capabilities in an evolving NGN
	C/13	Principles and functional architecture for NGN (including ubiquitous networking)
	D/13	Requirements and frameworks for QoS enablement in the NGN
	F/13= F/19	Convergence of existing and evolving IMT and fixed networks
	G/13	Evolution towards integrated multi-service networks and interworking
	H/13	Impact of IPv6 to an NGN
	I/13	Network terminology
	J/13	Public data networks
	K/13	Packet forwarding and deep packet inspection for multiple services in packet-based networks and NGN environment
	L/13	Security and identity management
	M/13	Requirements and framework for enabling COTS components in an open environment
	N/13= C/19	Mobility management
	O/13	Distributed services networking (DSN)
	P/13	Future networks
	Q/13	Service scenarios and deployment models of NGN
	A/19	Applying IMS and IMT in Developing Country mobile telecom networks

Study Group 15 Optical transport networks and access network infrastructures	B/19	Mobile telecom network architecture for NGN
	D/19	Identification of evolving IMT-2000 systems and beyond
	E/19	Step-by-step migration to NGN networks
	G/19	MM mechanisms supporting multi-connections for multiple access technologies
	Q15A-A	Coordination of Access Network Transport standards
	Q15A-B	Optical systems for fibre access networks
	Q15A-C	Transceivers for customer access and in-premises networking systems on metallic conductors
	Q15B1-A	Characteristics of optical systems for terrestrial transport networks
	Q15B1-B	Characteristics of optical components and subsystems
	Q15B1-C	Characteristics of optical fibre submarine cable systems
	Q15B2-A	Characteristics and test methods of optical fibres and cables
	A/6	Environmental Sustainability and Safety Procedures for Outside plant
	B/6	Infrastructure and installation techniques for cables and equipment, including faster techniques in urban areas
	D/6	Support system for infrastructure and network elements management
	F/6	Optical fibre cable network maintenance
	G/6	Optical fibre cable construction types
	H/6	Development of optical networks in the access area
	I/6	Joint closures, termination and distribution frames, enclosures and terminals for application in central office, outside plant and customer premise locations
	J/6	Optical components and subsystems
	Q15C-A	General characteristics of transport networks
	Q15C-B	Transport equipment and network protection/restoration
	Q15C-C	Signal structures, interfaces and interworking for transport networks
	Q15C-D	Transport network architectures
	Q15C-E	Network synchronization and time distribution performance
	Q15C-F	Management and control of transport systems and equipment
	E/13	OAM and network management for NGN
	K/4	Test and measurement techniques and instrumentation for use on telecommunications systems and their constituent parts
	L/4	Jitter and wander test and measurement techniques and instrumentation for use on transmission systems and their constituent parts
Study Group 16 Multimedia coding, systems	A1/16	Voiceband modems and facsimile terminals protocols: specification, performance evaluation and interworking with NGN

and applications	A2/16	Voice gateway signal processing functions and circuit multiplication equipment / systems
	A3/16	Speech enhancement functions in signal processing network equipment
	A4/16	Interaction aspects of signal processing network equipment
	B1/16	Multimedia applications and services
	B2/16	Multimedia architecture
	B3/16	Multimedia systems, terminals and data conferencing
	B4/16	H.323 real-time multimedia system
	B5/16	Advanced multimedia system for NGN and other packet-based networks
	B6/16	Multimedia gateway control architectures and protocols
	B7/16	Advanced functions for H.300-series systems and beyond
	B8/16	Multimedia application platforms and end systems for IPTV
	B9/16	Multimedia functions in NGN and other networks
	B10/16	USN Applications and Services
	C1/16	Visual coding
	C2/16	Generic sound activity detection
	C3/16	Embedded variable bit rate coding of speech signals
	C4/16	Speech and audio coding and related software tools
	C5/16	System and coordination aspects of media coding
	D1/16	Multimedia coordination
	D2/16	Accessibility to Multimedia Systems and Services
	D3/16	Multimedia framework for e-health applications
	D4/16	Vehicle gateway platform for telecommunication/ITS services/applications
Study Group 17 Security	A/17	Abstract Syntax Notation One (ASN.1), Object Identifiers (OIDs) and associated registration
	B/17	Formal Languages and Telecommunication Software
	C/17	Testing Languages, Methodologies and Framework
	D/17	Directory Services, Directory Systems, and Public-key/Attribute Certificates
	E/17	Open Systems Interconnection (OSI)
	I/17	Telecommunications Systems Security Project
	J/17	Security Architecture and Framework
	K/17	Cybersecurity
	L/17	Identity Management Architecture and Mechanisms
	M/17	Telecommunications Information Security Management
	N/17	Telebiometrics
	O/17	Security Aspects of Ubiquitous Telecommunication Services
	P/17	Secure Application services
	Q/17	Countering Spam by Technical Means
	T/17	Service Oriented Architecture Security

## ANNEX 4

### Focus Groups (<http://itu.int/ITU-T/focusgroups>)

Name	Parent group	Established	Term
<a href="#">Focus Group on ICTs and Climate Change (FG ICT&amp;CC)</a>	TSAG	2008-07	2009-04
<a href="#">Focus Group “From/In/To Cars Communication II” (FG CarCom)</a>	SG 12	2008-05	2009-03

### Joint Coordination Activities (<http://itu.int/ITU-T/jca>) and other coordination groups

Name	Established	Reports to
<a href="#">Telecommunications for Disaster Relief and Mitigation - Partnership Co-ordination Panel (PCP-TDR)</a>	2003-02	SG 2
<a href="#">Joint Coordination Activity on Management (JCA-Mgt)</a>	2008-05	SG 2
<a href="#">Joint Coordination Activity-Accessibility and Human factors (JCA-AHF)</a>	2007-12	SG 2
<a href="#">Joint Coordination Activity for Identity Management (JCA-IdM)</a>	2007-12	TSAG
<a href="#">Joint Coordination Activity on Network Aspects of Identification Systems (including RFID) (JCA-NID)</a>	2006-07	TSAG
<a href="#">Joint Coordination Activity on IPTV (IPTV-JCA)</a>	2006-07	SG 13
<a href="#">Joint Coordination Activity on Conformance and Interoperability Testing (JCA-CIT)</a>	2007-05	SG 17
<a href="#">Joint Coordination Activity on Home Networking (JCA-HN)</a>	2005-05	TSAG
<a href="#">Joint Coordination Activity on NGN (NGN-JCA)</a>	2004-10	SG 13

### Global Standards Initiatives (<http://itu.int/ITU-T/gsi>)

Name	Established
<a href="#">IdM-GSI (Identity Management)</a>	2007-12
<a href="#">IPTV-GSI</a>	2008-01
<a href="#">NGN-GSI</a>	2005-11

### Other

Name	Parent group
Service and Network Operations (SNO)	SG2
Quality of Service Development Group (QSDG)	SG 12
<a href="#">Regional Tariff Groups</a>	SG3

## ANNEX 5

**REVISED** RESOLUTION 7

**Collaboration with the International Organization for  
Standardization (ISO)  
and the International Electrotechnical Commission (IEC)**

*(Malaga-Torremolinos, 1984; Helsinki, 1993; Geneva, 1996; Montreal, 2000;  
Florianópolis, 2004; Johannesburg, 2008)*

The World Telecommunication Standardization Assembly (Johannesburg, 2008),  
*considering*

- a) the purposes of the Union set forth in Article 1 of the ITU Constitution relating to the harmonization of telecommunication facilities;
- b) the duties of the ITU Telecommunication Standardization Sector (ITU-T) as set forth in Chapter III of the Constitution;
- c) the interest of both the International Organization for Standardization (ISO) and the International Electrotechnical Commission (IEC) in certain aspects of telecommunications;
- d) the common interest of ISO and IEC on the one hand and ITU-T on the other in the development of standards on telecommunication and information technologies, on cables, wires and optical fibres and on protection measures which take full account of the needs of manufacturers, users and those responsible for communication systems;
- e) the need for mutual agreements on other areas of standardization activity of common interest, along the lines of cooperation in the field of telecommunication security between Study Group 17 and its counterparts in ISO and IEC.

*noting*

- a) that the working methods and timing constraints of the organizations concerned are not the same;
- b) the increasing demands on financial and specialized professional experts in both telecommunication technology and operations as well as computer science and terminal manufacturing and testing;
- c) the coordination meeting newly established between the three organizations through their top management;
- d) the progress made on the basis of existing procedures in the alignment of technical Recommendations with ISO, IEC and ISO/IEC Joint Technical Committee 1 (JTC 1) in areas of joint interest, thanks to the excellent spirit of cooperation which has prevailed;
- e) the principles of collaboration established between ISO and IEC and particularly with ISO/IEC JTC 1 on information technology as contained in Recommendation ITU-T A.23 and in the ISO/IEC JTC 1 Directives;

**Deleted:** Florianópolis, 2004

**Deleted:** , as indicated under recognizing in Resolution 24 (Kyoto, 1994) of the Plenipotentiary Conference;

**Deleted:** ITU-T



f) that other standardization activities of a collaborative nature may require coordination;

g) the increasing cost of developing international standards,  
*resolves*

1 to continue inviting ISO and IEC to examine the ITU-T study programme in the early stages of its studies and vice versa, and to further examine such programmes to take into account ongoing changes, in order to identify subjects where coordination seems desirable, and to so advise the Director of the Telecommunication Standardization Bureau (TSB);

2 to request the Director of TSB, after consultation with the study group chairmen concerned, to reply, and to furnish any additional information requested by ISO and IEC, as it becomes available;

3 to request the Director of TSB to examine and update the programme of cooperation and priority of the study items among ITU-T, ISO, and IEC and highlight this information on the ITU-T website on a regular basis; 4 to request the Director of TSB, the study groups and the Telecommunication Standardization Advisory Group to consider and propose further improvements to the procedures for cooperation between ITU-T and ISO and IEC, including setting the priorities for such cooperation;

Deleted: ¶

Deleted: 3

5 that the necessary contacts with ISO and/or IEC should be at the appropriate levels and coordination methods should be mutually agreed and regular coordination events arranged:

Deleted: 4

- for work where text should be drawn up mutually and kept aligned, procedures in accordance with Recommendation ITU-T A.23 and the Guidelines for Cooperation therein apply;
- for other activities where coordination between ITU-T and ISO and IEC is required (for example in relation to any mutual agreements, such as the Memorandum of Understanding on standardization in the field of electronic business), clear means of coordination shall be established and regular coordination contacts made;

Deleted: ITU-T

6 to request the chairmen of study groups to take into account the related work programmes and the progress of projects in ISO, IEC and ISO/IEC JTC 1; further, to cooperate with these organizations as widely as possible and by appropriate means, in order to:

Deleted: 5

- ensure that the specifications which have been jointly drawn up remain aligned;
- collaborate in drawing up other specifications in fields of joint interest;

7 that, for reasons of economy, any necessary collaborative meetings take place as far as possible in association with other meetings;

Deleted: 6

8 that the report concerning such coordination indicate the status of alignment and compatibility of draft texts on points of common concern, in particular identifying any subject which could be dealt with in a single organization, and cases where cross-referencing would be helpful to users of published International Standards and Recommendations;

Deleted: 7

9 to invite administrations to contribute significantly to the coordination between ITU-T on the one hand and ISO and IEC on the other by ensuring adequate coordination of national activities associated with the three organizations.

Deleted: 8

## ANNEX 6

## NEW RESOLUTION [GG]

**The creation of Technology Watch Function (TWF) in TSB**  
(Johannesburg, 2008)

The World Telecommunication Standardization Assembly (Johannesburg, 2008),

*considering*

- a) That it is desirable for TSB to consider the creation of Technology Watch Function (TWF) to survey new technologies for possible new standardization activities in the ITU and how such new technologies can be included within the ITU-T work programme;
- b) That TWF need to identify emerging technologies as well as their likely impact on future standardization work for both developed and developing countries with the view to identify work items for possible new ITU-T Recommendations;
- c) That the rapid change of telecommunication/ICT environment with related technologies watching and immediate reaction, in order to propose possible ITU-T standardization activities as early as possible;
- d) The TWF should collaborate with other recognized Standards Development Organizations (SDOs) by ITU, universities, academia and other related institutions,

*recognizing*

The encouraging results of this TWF in the last cycle,

*resolves to instruct the Director of the TSB*

- 1 to formalize such function by the Bureau;
- 2 that the output of TWF with relevant findings and analysis, shall be provided as soon as possible to the TSAG and to the Seminar and Workshop Group for their consideration and action in accordance with their mandate,
- 3 to publish the main results of this function as brief summaries in the ITU-T News;
- 4 to report on the implementation of this Resolution to the next WTSA, with a view to review this Resolution and introduce the appropriate amendment in the light of the implementation outcome.

## ANNEX 7

## NEW RESOLUTION [MM]

**Telecommunication/ICT accessibility for persons with disabilities***(Johannesburg, 2008)*

The World Telecommunication Standardization Assembly (Johannesburg, 2008),

*recognizing,*

- a) studies under ITU-T Q.[3/2] *Human factors related issues for improvement of the quality of life through international telecommunications*;
- b) studies under ITU-T Q.[26/16] *Accessibility to multimedia systems and services* including the recent ITU-T Rec. F.790 “Telecommunications accessibility guidelines for older persons and persons with disabilities”
- c) studies under ITU-D Q.[20/1] *Access to telecommunication services for people with disabilities*;
- d) ongoing work in the ITU-R to bridge the digital disability divide;
- e) publication by TSAG of *The Guide for ITU Study Groups – Considering end-user needs in developing Recommendations*;
- f) the creation by ITU-T SG 2 of the Joint Coordination Activity on Accessibility and Human Factors for purposes of awareness, advice, assistance, collaboration, coordination and networking;
- g) the formation by the Internet Governance Forum of the Dynamic Coalition on Accessibility and Disability proposed by the TSB Director,
- h) the partnership between ITU-T and the Dynamic Coalition on Accessibility and Disability for the purpose of maximizing the benefits to all sectors of the global community of electronic communications and online information through the Internet;

*considering*

- a) that the World Health Organization estimates that 10 per cent of the world’s population (more than 650 million people) are persons with disabilities, and that this percentage may increase due to factors such as the greater availability of medical treatment and longer life expectancy and also because people may acquire disability through accident, wars and circumstances of poverty which is mostly prevalent in developing countries;
- b) that over the past 60 years the approach to disability by United Nations agencies, and by many Member States (through a changed emphasis in their laws, regulations, policies and programs), has moved from a health and welfare perspective to a human rights based approach that recognises that people with disabilities are people first and that society places barriers upon them as opposed to their disabilities, including the goal of full participation in society by persons with disabilities;

c) that the United Nations Convention on the rights of persons with disabilities, which came into force on 3 May 2008, requires States Parties (under paragraphs 2(g) and 2(h) of Article 9 Accessibility) to take appropriate measures:

- i) 9(2)(g) “to promote access for persons with disabilities to new information and communications technologies and systems, including the Internet;”
- ii) 9(2)(h) “to promote the design, development, production and distribution of accessible information and communications technologies and systems at an early stage, so that these technologies and systems become accessible at minimum cost.”;

d) that maximizing the accessibility and usability of telecommunication/ICT services, products and terminals through universal design will increase their uptake by persons with disabilities and older persons, and thereby increase revenues;

e) that the United Nations General Assembly Resolution A/RES/61/106 that adopted the Convention on the rights of persons with disabilities requests the Secretary-General (as paragraph 5) “... to implement progressively standards and guidelines for the accessibility of facilities and services of the United Nations system, taking into account relevant provisions of the Convention, in particular when undertaking renovations.”,

*recalling*

a) paragraph 18 of the Tunis Commitment, made at the second phase of the World Summit on the Information Society (Tunis, 2005), “**We shall strive** unremittingly, therefore, to promote universal, ubiquitous, equitable and affordable access to ICTs, including universal design and assistive technologies, for all people, especially those with disabilities, everywhere, to ensure that the benefits are more evenly distributed between and within societies, ...”;

b) the Phuket Declaration on Tsunami Preparedness for Persons with Disabilities (Phuket, 2007), which emphasises the need for inclusive emergency warning and disaster management systems using telecommunication/ICT facilities based on open, non-proprietary, global standards,

*taking into account,*

a) Resolution GSC-13/26: (UWG) *User needs, considerations and involvement* (Revised) of the Twelfth Global Standards Collaboration (Boston, 2008);

b) publications and ongoing work of the ISO/IEC JTC1 Special Working Group on Accessibility, as well as the Mandate 376 project teams in identifying user needs and in developing a comprehensive inventory of existing standards as part of the ongoing effort to identify areas where research or new standards work is needed;

c) activities relating to the development of new standards (e.g., ISO TC 159, JTC1 SC35, IEC TC100, ETSI TC HF, and W3C WAI), and the implementation and maintenance of existing standards (e.g. ISO 9241-171);

d) formation of the G3ICT *Global Initiative for Inclusive ICTs*, a flagship partnership initiative of UN-GAID (the United Nations Global Alliance for ICT and Development);

- e) various regional and national efforts to develop or revise guidelines and standards for telecommunication/ICT accessibility, compatibility and usability by persons with disabilities,

*resolves that*

1. Study Group 2, Study Group 16 and the Joint Coordination Activity on Accessibility and Human Factors shall give high priority to the working of the relevant questions in accordance with the accessibility guidelines as shown in The Guide for ITU-T Study Groups – Considering end-user needs in developing Recommendations and the Telecommunications Accessibility Checklist for standards writers and accessibility guidelines as shown in Recommendation ITU-T F.790;
2. to emphasize to all Study Groups the importance of universal design of accessible telecommunication/ICT services, products and terminals and to request their Chairmen, at the start of each Study Group meeting, to remind meeting participants to take appropriate account of the Guide and Checklist;

*invites Member States and Sector Members*

1. to consider developing, within their national legal frameworks, guidelines or other mechanisms to enhance the accessibility, compatibility and usability of telecommunication/ICT services, products and terminals;
2. to consider introducing telecommunication relay services<sup>14</sup> to enable persons with hearing and speech disabilities to utilize telecommunication services that are functionally equivalent to telecommunications services for persons without disabilities.
3. to participate actively in accessibility-related studies in ITU-T, ITU-R and ITU-D, and to encourage and promote self representation by persons with disabilities in the standardization process to ensure their experiences, views and opinions are taken into account in all the work of Study Groups.

*invites the TSB Director*

1. to identify and document examples of best practice for accessibility in the field of telecommunication/ICT for dissemination among ITU Member States and Sector Members;
2. to review the accessibility of ITU-T services and facilities and to consider making changes, where appropriate, pursuant to General Assembly Resolution A/RES/61/106, and to report to Council on these matters;
3. to work collaboratively on accessibility-related activities with the Directors of BR and BDT, in particular concerning awareness and mainstreaming of telecommunication/ICT accessibility standards, reporting findings to Council as appropriate,
4. to work collaboratively on accessibility-related activities with the ITU-D, in particular developing programs that enable developing countries to introduce services that allow persons with disabilities to utilize telecommunication services effectively,

---

<sup>14</sup> Telecommunication relay services enable users of different modes of communication (e.g., text, sign, speech) to interact by providing convergence between the modes of communication, usually by human operators.

5. to work collaboratively and cooperatively with other standardization organizations and entities in particular, in the interest of ensuring that ongoing work in the field of accessibility is taken into account, in order to avoid duplication.

6. to work collaboratively and cooperatively with disability organisations in all regions to ensure that the needs of the disabled community are taken into account in all standardisation matters.

7. to consider the development of an internship programme for people with disabilities with expertise in the field of ICTs to build capacity amongst people with disabilities in the standards making process and to raise awareness within ITU-T on the needs of persons with disabilities;

8. to create a disability coordination point within ITU-T to assist the Director in reporting the findings of the review of ITU-T services and facilities.

*instructs TSAG*

to revise *The Guide for ITU Study Groups – Considering end-user needs in developing Recommendations* and relevant guidelines for end user needs in order to specifically include the needs of persons with disabilities and to update this Guide on a regular basis, based on the contributions from Member States and Sector Members as well as the ITU-T Study Groups, as appropriate.

## ANNEX 8

## NEW RESOLUTION [I&amp;I TESTING]

**Studies related to conformance and interoperability testing,  
assistance to developing countries, and a possible future ITU mark  
programme**

The World Telecommunication Standardization Assembly (Johannesburg, 2008),

*recognizing*

- a) that interoperability of international telecommunication networks was the main reason to create the ITU in the year 1865 (International Telegraph Union) and that this remains one of the main goals in the ITU Strategic Plan;
- b) that conformity assessment is the accepted way of demonstrating that a product adheres to an international standard and is increasingly important in the context of World Trade Organisation members' international standardization commitments under the Agreement on Technical Barriers to Trade;
- c) that ITU-T Recommendations X.290 to X.296 specify a general methodology for conformance testing of equipment to ITU-T Recommendations;
- d) that conformance testing would increase the chance of interoperability of equipment conforming to ITU standards;
- e) that very few of the current ITU-T Recommendations identify interoperability or conformance testing requirements;
- f) that Resolution 123 (Antalya, 2006) of the Plenipotentiary Conference instructs the Secretary-General and the Directors of the three Bureaux to work closely with each other in pursuing initiatives that assist in bridging the standardization gap between developing and developed countries;
- g) that technical training and institutional capacity development for testing and certification are essential issues for countries to improve their conformity assessment processes, to promote the deployment of advanced telecommunications networks and increase global connectivity;
- h) that it is not appropriate for ITU itself to enter into certification and testing of equipment and services that many regional and national standards bodies also provide for conformance testing;
- i) that Article 17 of the ITU Constitution states that while providing that the functions of ITU-T shall fulfill the purposes of the Union relating to telecommunication standardization, stipulates that such functions are to be performed "bearing in mind the particular concerns of the developing countries";
- j) the excellent results achieved by the ITU in implementing the ITU Mark for Global Mobile Personnel Communications Systems (GMPCS);



*further recognizing*

that providing for interoperability should be the ultimate aim of future ITU-T Recommendations;

*considering*

- a) there is an increasing number of complaints that often equipment is not fully interoperable with other equipment;
- b) that some countries, especially the developing countries, have not yet acquired the capacity to test equipment and provide assurance to consumers in their countries;
- c) that increased confidence in the conformance of ICT equipment with ITU-T Recommendations would increase the chances of end-to-end interoperability among equipment from different manufacturers, and assist developing countries in the choice of solutions;

*noting*

- a) conformance and interoperability requirements to support testing are essential components to developing interoperable equipment that are based on ITU-T Recommendations;
- b) considerable practical experience exists within the ITU-T membership regarding the production of the relevant testing standards and the testing procedures on which the actions proposed in this Resolution are based;
- c) the need to assist developing countries in facilitating solutions which will exhibit interoperability and reduce the cost of systems and equipment procurement by operators, particularly in the developing countries, whilst improving product quality;
- d) that when interoperability experiments or testing have not been performed, users may have suffered from the lack of interconnection performance between equipment from different manufacturers;

*taking into account*

- a) that ITU-T has in the past occasionally initiated conformity and interoperability tests as reported in ITU-T A-series Recommendation, Supplement 2;
- b) that the ITU standardization resources are limited and interoperability testing requires specific technical infrastructure;
- c) that a different set of experts are required for interoperability testing standardization, product development, and its testing;
- d) that it is of advantage if interoperability testing is done by users of the standard, who were not involved in the standardization process itself, rather than the standardization experts who have written the specifications;
- e) that collaboration with external testing bodies is therefore necessary;

*resolves*

- 1 that ITU-T Study Groups develop the necessary conformance testing ITU-T Recommendations for telecommunications equipment as soon as possible;
- 2 that ITU-T Recommendations to address interoperability testing shall be progressed as quickly as possible;

3 that ITU-T in collaboration with the other Sectors as appropriate, shall develop a programme to:

- a) assist developing countries in identifying human and institutional capacity-building and training opportunities in conformity and interoperability testing;
- b) assist developing countries in establishing regional or sub-regional conformity and interoperability centres suitable to perform conformity and interoperability testing as appropriate;

4 that conformance and interoperability testing requirements shall provide for verification of the parameters defined in the current and future ITU-T Recommendations for telecommunication/ICT equipment and services

*instructs the Director of the Telecommunication Standardization Bureau*

1 in cooperation with the Radiocommunication Bureau and the Telecommunication Development Bureau, to conduct exploratory activities in each region to identify and prioritize the problem faced by developing countries related to achieving interoperability of ICT equipment and services;

2 based on results of instructs the Director of TSB 1 above, to study the items below:

- a) the overall effect on ITU and manufacturers
- b) legal and national and international regulatory implications
- c) cost of set up of facility
- d) location of testing facility
- e) measures to be taken to build the necessary human resource capacities

3 to carry out the necessary studies with the view to introduce the use of ITU Mark for possible future ITU-T Mark programme as a voluntary programme permitting manufacturers and service providers to make a visible declaration that their equipment conform to ITU-T Recommendations, and to increase the probability of interoperability; and to consider its possible application as an indication of a degree of interoperability capability in the future;

4 to study the financial and legal implications for the ITU-T and ICT industries, and all other concerns raised with regard to this proposal regarding the possible introduction of the ITU-T Mark for possible future ITU-T Mark programme;

**5 to involve experts and external entities as appropriate;**

6 to submit the result of these studies to Council-09 for its consideration and required actions;

*instructs the study groups*

1 to identify as soon as possible existing and future ITU-T Recommendations that would be candidates for interoperability taking into account the needs of membership (e.g. interoperability of NGN equipment, terminals, audio video codecs, access and transport network) that are capable of providing end-to-end interoperable services on a global scale, adding to their content if necessary specific requirements within their scope;

2 to prepare those ITU-T Recommendations, identified in “*Instructs the Study Groups*” 1 above, with a view to conducting conformity and interoperability tests as appropriate;

*invites the Council*

1 to consider the report of the TSB Director referred to in “instructs the Director of the Telecommunication Standardization Bureau” 6 above,

2 to report as appropriate on this matter to the 2010 Plenipotentiary Conference taking into account Resolution 158 (Antalya, 2006) “Financial issues for consideration by the Council”;

*invites Member States and Sector Members*

1 to contribute to the implementation of this Resolution;

2 to encourage national and regional testing entities to assist ITU-T in implementing this Resolution.

## ANNEX 9

## NEW RESOLUTION [ICT&amp;CC]

**Information and communications technologies and climate change***(Johannesburg, 2008)*

The World Telecommunication Standardization Assembly (Johannesburg, 2008),

*considering*

- a) that the issue of climate change is rapidly emerging as a global concern and requires global collaboration;
- b) that the United Nations Intergovernmental Panel on Climate Change (IPCC) estimated global greenhouse gas (GHG) emissions had risen by more than 70 per cent since 1970, having an effect on global warming, changing weather patterns, rising sea-levels, desertification, shrinking ice cover and other long-term effects;
- c) that ITU, at the United Nations Conference on Climate Change in Bali, Indonesia, on 3-14 December 2007, highlighted the role of information and communications technologies (ICTs) as both a contributor to climate change, and an important element in tackling the challenge;
- d) the work being undertaken following agreement to the Bali roadmap, and the importance of reaching international agreement on an effective post-2012 outcome;
- e) the role that ICTs and ITU can play in contributing to the implementation of such an agreement;
- f) the importance of promoting sustainable development and the ways in which ICTs can enable clean development;
- g) the initiatives taken in some regions,

*considering also*

- a) the ITU Telecommunication Standardization Sector (ITU-T) Technology Watch Briefing Report No 3 (2007), which highlighted the issue of climate change and the role of ICTs;
- b) in addition to ITU-T, the ITU Radiocommunication Sector and ITU Telecommunication Development Sector initiatives in considering climate change and the role of ICTs;
- c) that ITU Recommendations, which focus on energy-saving systems and applications, can play a critical role in the development of ICTs;
- d) the leadership of ITU-R, in collaboration with the ITU membership, in identifying the necessary radio-frequency spectrum for climate monitoring and disaster prediction, detection and relief, including the establishment of cooperative arrangements with the World Meteorological Organization (WMO) in the field of remote-sensing applications;
- e) the report entitled, "Strategy for a climate-neutral United Nations", prepared by the Environment Management Group, and the endorsement by the Chief

Executives Board (CEB) in October 2007 of the strategy committing the United Nations system to attain climate neutrality within three years;

- f) the standards development activities on ICTs and climate change by, for example, relevant ITU-T study groups in work related to ubiquitous sensor networks (USN), which allow the detection, storage, processing and integration of situational and environmental information gathered from sensor devices connected to telecommunication networks;
- g) the outcomes of the Symposia on "ICTs and Climate Change", held in Kyoto, Japan, on 15-16 April 2008, and in London, United Kingdom, on 17-18 June 2008;
- h) the establishment of a Focus Group on ICTs and Climate Change by the Telecommunication Standardization Advisory Group (TSAG) at its July 2008 meeting,

*noting*

that, in the report of the conclusions from the Global Standards Symposium (GSS), it was recognized that the ICT industry and its members can set an example by committing to specific programmes, with objectives, that reduce overall GHG emissions (e.g., the power consumption of ICT devices) and to ensuring that the expansion of the global communications network is done in an environmentally-friendly manner,

*recognizing*

- a) that ICTs can make a substantial contribution to mitigating and adapting to the effects of climate change;
- b) that ICTs play a vital role in monitoring and addressing climate change by supporting basic scientific research, which has helped to bring the issue of climate change into the public domain and to raise awareness of future challenges;
- c) that a future high-bandwidth, lower-carbon information society offers a platform for economic, social and cultural development that is sustainable;
- d) that the adverse effects of climate change may be uneven in their impact and may fall disproportionately on the most vulnerable countries, mainly the developing countries<sup>1</sup>, given their limited capacity to adapt;
- e) that ICTs contribute approximately 2 - 2.5 per cent of GHG emissions, which may grow as ICTs become more widely available;
- f) that ICTs can, however, be a major mitigating factor in efforts to moderate climate change and to limit and ultimately reduce GHG emissions through, for example, the development and introduction of energy-efficient devices, applications and networks;
- g) that the use of ICTs as a key component of energy-efficient work methods could include the reduction of emissions through, for example, paperless meetings, virtual conferencing, teleworking, etc, which in turn would be beneficial in terms of reducing the need to travel,

---

<sup>1</sup> These include the least developed countries, small island developing states and countries with economies in transition.

*resolves*

- 1 to continue and further develop the ITU-T work programme initially launched in December 2007 on ICTs and climate change, as a high priority, in order to contribute to the wider global efforts to moderate climate change, as part of the United Nations processes;
- 2 to take into account the progress already made in the international symposia on ICTs and climate change, held in Kyoto, Japan, 15-16 April 2008 and in London, United Kingdom, 17-18 June 2008, by distributing their outcomes as widely as possible;
- 3 to create, within ITU-T, a repository and knowledge base on the relationships between ICTs and climate change;
- 4 to promote the adoption of Recommendations for enhancing the use of ICTs to serve as a potent and cross-cutting tool to measure and reduce GHG emissions across economic and social activities;
- 5 to increase awareness and promote information sharing on the role of ICTs in combating climate change, in particular by promoting the use of more energy-efficient<sup>2</sup> devices and networks and more efficient working methods, as well as ICTs that can be used to replace or displace higher energy consuming technologies/uses;
- 6 to work towards the reductions in emissions of GHGs arising from the use of ICTs that are necessary to meet the goals of the United Nations Framework Convention on Climate Change (UNFCCC),

*instructs the Telecommunication Standardization Advisory Group*

- 1 to review the results of the Focus Group on ICTs and Climate Change and take appropriate actions in accordance with Resolution 22, including, for example, the identification of possible structural mechanisms (such as a Lead Study Group), and to progress the work on this topic by encouraging the involvement of all ITU-T study groups;
- 2 to ensure by requesting study groups to carry out a review of both the appropriate existing ITU-T Recommendations and all future Recommendations to assess their implications and the application of best practices in the light of climate change;
- 3 to consider possible changes to working procedures in order to meet the objective of this Resolution, including considering contributions from non-ITU members and extending the use of electronic working methods to reduce the climate change impact, such as paperless meetings, virtual conferencing, teleworking, etc,

*invites all ITU-T study groups*

- 1 to develop appropriate Recommendations on climate change issues within the mandate and competency of ITU-T, including telecommunication networks used for monitoring climate change, for example signalling and quality of service issues, taking into account any economic impact on all countries and in particular on developing countries;

---

<sup>2</sup> With respect to efficiency, promotion of efficient use of materials used in ICT devices and network elements should also be a consideration.

2 to identify best practices and opportunities for new applications using ICTs to reduce the impact of climate change and to identify appropriate actions;

3 to commence such studies prior to the approval of the necessary Questions, taking into consideration the output of the Focus Group, in accordance with Resolution 1 of this assembly;

4 to liaise with the relevant ITU-R and ITU-D study groups and promote liaison with other standards development organisations in order to avoid duplication of work and to optimize the use of resources,

*instructs the Director of the Telecommunication Standardization Bureau*

1 to report on progress on the application of this resolution annually to the Council and to WTSA-12;

2 to establish a calendar of events relevant to ICTs and climate change based on proposals by TSAG and in close collaboration with the other two sectors;

3 to organize, in close collaboration with the Directors of BDT and BR, workshops and seminars for developing countries, to raise awareness and identify their needs in this domain, as they are the most vulnerable countries affected by climate change;

4 to report to TSAG on the progress regarding *invites the Secretary-General* below,

*invites the Secretary-General*

1 to bring the content of this Resolution to the attention of the Council and invite them to study the issue of climate neutrality for all ITU activities and take appropriate actions, taking into consideration the United Nations commitment to lead by example achieving climate-neutral status within three years;

2 to continue to cooperate and collaborate with other entities within the United Nations in formulating future international efforts for the effective addressing of climate change,

*invites Member States, Sector Members and Associates*

1 to continue to contribute actively to the ITU-T work programme on ICTs and climate change;

2 to continue or initiate public and private programmes that include ICTs and climate change, giving due consideration to relevant ITU-T Recommendations and relevant work;

3 to support and contribute to the wider United Nations process on climate change, such as the United Nations Climate Change conferences in Poznan, Poland (1-12 December 2008) and Copenhagen, Denmark (30 November - 11 December 2009).

## ANNEX 10

## REVISED RESOLUTION 50

**Cybersecurity***(Florianópolis, 2004; Johannesburg, 2008)*

The World Telecommunication Standardization Assembly (Johannesburg, 2008),

*considering*

- a) the crucial importance of the information and communication technology infrastructure to practically all forms of social and economic activity;
- b) that the legacy public switched telephone network (PSTN) has a level of inherent security properties because of its hierarchical structure and built-in management systems;
- c) that IP networks provide reduced separation between user components and network components if adequate care is not taken in the security design and management;
- d) that the converged legacy networks and IP networks are therefore potentially more vulnerable to intrusion if adequate care is not taken in the security design and management of such network;
- e) that the type and number of cyberincidents, including attacks from worms, viruses, malicious intrusions and thrill-seeker intrusions are on the increase,

*considering further*

- a) that Recommendation ITU-T X.1205 “*Overview of Cybersecurity*” provides a definition, description of technologies, and network protection principles;
- b) that Recommendation ITU-T X.805 provides a systematic framework for identifying security vulnerabilities that together with many new security-related deliverables from the ITU and other organizations can assist in risk assessment and in the development of mechanisms to mitigate the risks; and
- c) that the ITU-T and ISO/IEC JTC 1 already have a significant body of published materials and ongoing work that is directly relevant to this topic, that needs to be taken into account;

*recognizing*

- a) the relevant results of the World Summit Information Society identified the ITU as the facilitator and moderator for Action Line C5 (Building confidence and security in the use of ICTs);
- b) the *resolves* of Resolution 130 (Rev. Antalya, 2006) of the Plenipotentiary Conference to strengthening the role of ITU in building confidence and security in the use of information and communication technologies, and the instruction to intensify work within the ITU study groups;
- c) that Programme 3 adopted by the 2006 World Telecommunication Development Conference (Doha, 2006) includes cybersecurity as one of its priority



activities, and that ITU-D Question 22/1 addresses the issue of securing information and communication networks through the identification of best practices for developing a culture of cybersecurity; and

- d) that the ITU Global Cybersecurity Agenda (GCA) promotes international cooperation aimed at proposing strategies for solutions to enhance confidence and security in the use of ICTs,

*recognizing further*

- a) that new cyber attacks such as phishing, pharming, botnets, distributed denials of service, etc. are emerging and having serious impacts; and  
b) that the source of attack for spoofed IP addresses needs to be identifiable,

*noting*

- a) the vigorous activity and interest in the development of security standards and Recommendations in ITU-T Study Group 17 and in other standardization bodies, including the Global Standards Collaboration group;  
b) that there is a need for national, regional and international strategies and initiatives to be harmonized to the extent possible to avoid duplication and to optimize the use of resources; and  
c) that cooperation and collaboration among organizations addressing security issues can promote progress and contribute to building and maintaining a culture of cybersecurity.

*resolves*

1 that ITU-T continue to evaluate existing and evolving new Recommendations, and especially signalling and telecommunications protocol Recommendations, with respect to their robustness of design and potential for exploitation by malicious parties to interfere destructively with their deployment in the global information and telecommunication infrastructure;

2 that ITU-T continue to raise awareness, within its area of operation and influence, of the need to defend information and telecommunication systems against the threat of cyberattack, and continue to promote cooperation among appropriate international and regional organizations in order to enhance exchange of technical information in the field of information and telecommunication network security;

3 that ITU-T should work closely with ITU-D, particularly in the context of Question 22/1;

4 that ITU-T Recommendations, including X.805 and X.1205, ISO/IEC products/standards and other relevant deliverables from other organizations be used as a framework for assessing networks and protocols for security vulnerabilities and to share experiences;

5 that concerned parties are invited to work together to develop standards and guidelines to protect against cyber attacks such as bonet etc. and facilitate tracing the source of an attack;

6 that global, consistent, and interoperable processes for sharing incident-response related information should be promoted;

7 that ITU-T study groups continue to provide updates of the progress in evaluating existing and evolving new Recommendations regularly to TSAG; and

8 that ITU-T study groups continue to liaise with other bodies active in this field, such as the ISO/IEC joint technical committee for information technology (JTC1), the Organisation for Economic Co-Operation and Development (OECD), Asia-Pacific Economic Cooperation Telecommunication and Information (APEC-TEL) and the Internet Engineering Task Force (IETF);

*instructs the Director of the Telecommunication Standardization Bureau*

1 to prepare, in building upon the information base associated with the *ICT Security Standards Roadmap* and the ITU-D efforts on cybersecurity, and with the assistance of other relevant organizations, an inventory of national, regional and international initiatives and activities to promote, to the maximum extent possible, the worldwide harmonization of strategies and approaches in this critically important area; and

2 to report annually to the Council as specified in Resolution 130 (Rev. Antalya, 2006) of the Plenipotentiary Conference on progress achieved in the actions outlined above;

*further instructs the Director of the Telecommunication Standardization Bureau*

1 to continue to follow up WSIS cybersecurity activities in co-operation with relevant stakeholders as a way to share information on national, regional and international and non-discriminatory cybersecurity-related initiatives globally; and

2 to continue to cooperate with the Secretary-General's initiative on cybersecurity, and with the Telecommunication Development Bureau in relation to any item concerning cybersecurity in accordance with the WTDC Resolutions 45 (Doha, 2006), and to ensure coordination among these different activities;

*invites Member States, Sector Members and Associates, as appropriate,*  
to participate actively in the implementation of this resolution and the associated actions.

## ANNEX 11

## NEW RESOLUTION (SCV)

**Creation of a Standardization Committee for Vocabulary (SCV)***(Johannesburg, 2008)*

The World Telecommunication Standardization Assembly (Johannesburg, 2008),

*recognizing*

- a) the adoption by the Plenipotentiary Conference of Resolution 154 (Antalya, 2006) on the use of the six official languages of the Union on an equal footing; which instructed the Council and the General Secretariat on how to achieve the equal treatment of the six languages;
- b) the decisions by the ITU Council centralizing the editing functions for languages in the General Secretariat (Conferences and Publications Department), calling upon the Sectors to provide the final texts in English only (this applies also to terms and definitions),

*considering*

- a) that it is important for the work of ITU, and in particular of the Standardization Sector (ITU-T), to continue liaising with other interested organizations about terms and definitions, graphical symbols for documentation, letter symbols and other means of expression, units of measurement, etc., with the objective of standardization such elements, etc.;
- b) the difficulty of achieving agreement on terms of definitions when more than one Standardization Study Group is involved as well as to update the existing SANCHO Data-Base, for terms and definitions already frozen at the end of the year 2005;
- c) that there is a continuing need for the publication of terms and definitions appropriate to the work of ITU-T;
- d) that unnecessary or duplicated work can be avoided by effective coordination and adoption of all work on vocabulary and related subjects carried out by the Standardization Study Groups and other ITU-T relevant Groups;
- e) that the long-term objective of the terminology work must be the preparation of a comprehensive vocabulary of telecommunications in the official languages of ITU;
- f) that it is essential that the terminology work done within ITU should be widely disseminated, as regards both terms and definitions;
- g) that texts on vocabulary and glossaries are not as a rule directly available to users interested in a particular ITU-T publication;
- h) that there are definitions contained in the Annexes to the ITU Constitution and Convention;
- i) the importance of avoiding misunderstanding within ITU and in particular with the ISO and the IEC, respectively, in the use of common terms and definitions;

j) the excellent work carried out by the CCITT in the past regarding terms and definitions,

*resolves*

1 that the Standardization of work on vocabulary within ITU-T shall be based on the proposals by the Study Groups in the English language, with the consideration, resolution and adoption of the translation into the other five official languages as proposed by the General Secretariat, and shall be ensured by the Standardization Committee for Vocabulary (SCV), comprising of experts in the various official languages and members designated by interested administrations and other participants in the work of ITU-T, as well as the Rapporteurs for Vocabulary of the Standardization Study Groups, the representative of the ITU General Secretariat (Conferences and Publications Department) and the Telecommunication Standardization Bureau (TSB) Editor for the English language;

2 that the terms of reference of SCV is given in Annex 1;

3 that SCV should review and revise where necessary the existing data base for terms and definitions in the ITU and in particular those used by SANCHO and any relevant update by ITU-T Study Groups which was adopted as of the beginning of 2006;

4 that the Chairman and the six Vice-Chairmen, each representing one of the official languages, should be nominated by the World Telecommunication Standardization Assembly;

5 that, when proposing terms and definitions, the Standardization Study Groups shall use the guidelines given in Annex 2 hereto and invites the ITU General Secretariat to review these guidelines and provide any useful comments to SCV for its consideration and after approval it will be sent to the Study Groups for implementation;

6 that the Standardization Study Groups, within their terms of reference, should continue their work on technical and operational terms and their definitions in English only;

7 that each Standardization Study Group should appoint a permanent Rapporteur for Vocabulary to coordinate efforts regarding terms and definitions and related subjects and to act as a contact person for the Study Group in this domain;

8 that the responsibilities of the Rapporteur for Vocabulary are given in Annex 3;

9 that where more than one Standardization Study Group is defining the same terms and/or concept, efforts should be made to select a single term and a single definition which is acceptable to all of the Standardization Study Groups concerned;

10 that, when selecting terms and preparing definitions, the Standardization Study Group, shall take into account the established use of terms and existing definitions in ITU in particular those appearing in SANCHO as well as those found in the International Electrotechnical Vocabulary (IEV);

11 that the Standardization Bureau (TSB) should collect all new terms and definitions proposed by the Standardization Study Group, and provide them to SCV, which shall act as an interface with IEC;

12 in close collaboration with the ITU General Secretariat (Conferences and Publications Department), SCV shall communicate with individual Rapporteurs for Vocabulary and, if necessary, promote meetings of experts where inconsistencies are

found between terms and definitions in the Standardization Sector, the Telecommunication Standardization Sector and IEC; these mediation efforts should seek agreement to the extent that such agreement is feasible, with remaining inconsistencies duly noted;

13 that Rapporteurs for Vocabulary should take into account any available ITU Sector lists of emerging terms and definitions and draft IEV chapters, to seek consistency of the Sector terms and definitions wherever practicable;

14 the SCV should carry its responsibility by organizing its work electronically with a possible face to face short meeting once per year. In such meeting in addition to the chairman, and the vice-chairmen, the representatives of C & P Department, the TSB Editor for English language and the Study Group Rapporteurs for Vocabulary shall be invited,

*instructs the Director of the Telecommunication Standardization Bureau*

1 to nominate an Editor for the English language which will act as the secretary for the SCV;

2 to facilitate the work of the SCV by providing its chairman with the necessary support for organizing the electronic meeting of the SCV and the yearly face to face meeting;

3 to collaborate with the General Secretary in order for the output of the CCV to be integrated in the Data-Base of terms and definitions of the whole ITU.

## ANNEX 1

### Terms of reference for the Coordination Committee for Vocabulary

**1** To adopt terms and definitions for vocabulary work for ITU-T in the six languages, in close collaboration with the General Secretariat (Conferences and Publications Department), with the TSB Editor in English as well as the relevant Rapporteurs of Study Groups for Vocabulary (see Annex 3), including graphical symbols for documentation, letter symbols and other means of expression, units of measurements etc., within the Standardization Sector and to seek harmonization among all concerned Standardization Study Groups regarding terms and definitions;

**2** To liaise with the Conferences and Publications Department, and with other organizations dealing with vocabulary work in the telecommunications field, for example with the ISO and IEC as well as the ISO/IEC Joint Technical Committee for Information Technology (JTC 1), in order to eliminate duplication of terms and definitions;

**3** To provide Study Groups with relevant unified graphical symbols to be used in documentation, letter symbols, and other means of expression, units of measurements, etc., in order to be used in all Study Group documents as well as with any updating of the Guidelines shown in Annex 2.

## ANNEX 2

### Guidelines for the preparation of terms and definitions

#### 1 Terms

##### 1.1 What is meant by a term?

A term is a word or a group of words used to express a definite concept.

##### 1.2 Conciseness of terms

The term should be selected to be as concise as possible, without impairing the understanding of the text containing the term.

When a term is used in more than one field in a general vocabulary, the field of application may be added between brackets if justified,

##### 1.3 Ambiguous terms

The occurrence of terms with more than one meaning is occasionally inevitable.

When one term has several meanings, confusion can arise in the following cases:

- The meanings are very similar;
- The terms appearing in the same text with different meanings.

In such cases different terms should be found to express the different meanings of such ambiguous terms unless its use is limited to the text of a Recommendation (s) or a Supplement and not needed for any Regulatory needs or being generalized for the whole ITU.

##### 1.4 Complex terms

A complex term should reflect the combination of concepts included in the definition. However, it need not include every constituent of the combination of concepts shown in the definition.

Care should be taken to avoid the unnecessary proliferation of terms and definitions where an already-defined qualifying term, used in conjunction with a simpler term, would suffice.

#### 2 Definitions

##### 2.1 What is meant by definition?

To define is to state clearly, accurately and precisely what is a concept.

##### 2.2 Use of terms in definitions

The following general principles may be adopted for the terms used in a definition:

- all the terms which appear in a definition must either be well known or defined elsewhere in the text,
- the term or terms representing a concept to be defined should not appear in the definition,
- the meaning of a term must not be expressed using another term which is itself defined by means of the first term.

### **2.3 Accuracy of definitions**

The degree of accuracy of definitions may depend on their intended use. Attempts to achieve greater accuracy may lengthen the text unnecessarily. This may involve the use of more specific and hence less familiar terms, thereby making the definition harder rather than easier to understand.

### **2.4 Formulation of definitions**

The wording of the definition should clearly indicate whether the term is a substantive noun, a verb or an adjective.

### **2.5 Definitions with more than one term**

Where more than one term applies to the same concept, the alternative term(s) may also be mentioned (separated by a semicolon), to the extent that this does not cause confusion.

### **2.6 Illustrations**

Illustrations can often be used to clarify or explain a definition. The type of illustration used will depend on each specific case; examples of such illustration could be found in the CCITT Blue Book Volume 1, Fascicule 1.3 of the IX Plenary Assembly 1988. In addition, this Volume contains a lot of agreed terms and definitions by this Assembly.

## **3 Further references**

For further and more specific guidance on the drafting of terms and definitions, reference may be made to ISO International Standard 704 "Principles and methods for terminology" (1987), and any relevant update of these principles as well as any principles adopted by other recognized organizations by ITU for such purposes.



**ANNEX 3****Responsibilities of Rapporteurs for Vocabulary**

- 1** The Rapporteurs should study vocabulary and related subjects referred to them by:
  - Working Parties of the same Standardization Study Group;
  - the Standardization Study Group as a whole;
  - the Rapporteur for Vocabulary of another Standardization Study Group;
  - the SCV.
- 2** The Standardization Rapporteurs should be responsible for coordination of vocabulary and related subjects within their own Standardization Study Groups and with other Standardization Groups; the objective being to achieve the agreement of the Study Groups concerned on the proposed terms and definitions;
- 3** The Rapporteurs shall be responsible for liaison between their Standardization Study Group and SCV and encouraged to participate in any face-to-face meeting of the SCV that may be held.

## ANNEX 12

## REVISED RESOLUTION 53

**Establishment of a workshop and seminar coordination group***(Florianópolis, 2004; Johannesburg, 2008)*

The World Telecommunication Standardization Assembly (Johannesburg, 2008),

*considering*

- a) that it is a priority for countries, particularly developing countries<sup>1</sup>, to participate in, and to have access to detailed information on, seminars and workshops organized by the ITU Telecommunication Standardization Sector (ITU-T);
- b) that such events are crucially important for the effective dissemination of all information designed to provide detailed and up-to-date knowledge of developments in the field of technical standardization;
- c) that mechanisms should be identified to encourage developing countries to participate more actively in the definition and organization of these events;
- d) that ITU-T should maintain its pre-eminence by attracting new and forward-looking studies in telecommunications and information technology;
- e) the approval of Recommendation A.31 by the WTSA,

*noting*

- a) the difficulties that countries, particularly developing countries, encounter in terms of being aware of the latest standardization trends and in terms of their effective and efficient participation in such activities;
- b) the need to prioritize the themes and issues of interest to the ITU membership in order to optimize the use of allocated resources for the implementation of workshop and seminar activities,

*recognizing*

- a) that there is a need to identify an appropriate mechanism for improving the process for the holding of seminars and workshops, which play a significant role in disseminating information about ITU-T's activities for the benefit of the ITU-T membership;
- b) that ITU-T's current structure does not include a standing group specifically responsible for supervising the organization of workshops and seminars and for disseminating the related outcomes and documentation;
- c) the need to continuously monitor user needs and advances and trends in telecommunications and information technology,

---

<sup>1</sup> These include least developed countries, small island developing states and countries with economies in transition.

*bearing in mind*

- a) that, in accordance with Nos. 197E and 197F of the ITU Convention, the Telecommunication Standardization Advisory Group (TSAG) shall provide guidelines for the work of study groups and recommend measures to foster cooperation and coordination with other standardization bodies;
- b) that Nos. 191A and 191B of the Convention empower the World Telecommunication Standardization Assembly (WTSA) to create “other groups” and to appoint their chairmen and vice-chairmen;
- c) that, in accordance with Resolution 22 of this assembly, TSAG shall issue advice on study group schedules to meet standardization priorities;
- d) that, in Resolution 123 (Marrakesh, 2002), the Plenipotentiary Conference resolved to instruct the Secretary-General and the Directors of the three Bureaux to work closely with each other in pursuing initiatives that assist in bridging the standardization gap between developing and developed countries,

*resolves*

to establish a workshop and seminar coordination group (WSG), under the supervision of TSAG, to be specifically responsible for agile monitoring of technological evolution, transparent oversight of the organization of seminars and workshops, and continued dissemination of outcomes and related documentation,

*instructs the Telecommunication Standardization Advisory Group*

to implement this Resolution, to continue to refine the WSG working methods and to appoint the WSG management team, composed of a chairman, and six vice-chairmen from: the Americas, Europe, Commonwealth of Independent States (CIS), Africa, Asia Pacific, and the League of Arab States to provide regional balance,

*instructs the Director of the Telecommunication Standardization Bureau*

to work closely with the Directors of the other Bureaux and provide all necessary support and advice to the group in its task of encouraging and strengthening the participation of countries in the workshop and seminar activities of ITU-T within the existing budgetary allocation.

---