Preparing for the World Telecommunication Standardization Assembly (WTSA-12)

ARB Preparatory Meeting for WTSA-12
Cairo, Egypt
30 April 2012

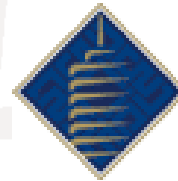Bilel Jamoussi
Chief, Study Groups Department
TSB/ITU

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WTSA-12: Date and venue

- 20-29 November 2012
  - 19 Nov GSS and 3-14 Dec WCIT
- Dubai World Trade Centre, UAE

مركز دبي التجاري العالمي
DUBAI WORLD TRADE CENTRE

Outline

- Guide to WTSA-12
- GSS and Preparatory Process
- WTSA-08 Resolutions and Action Plan
- Hot Issues
- Work Program Issues

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What is WTSA?

- WTSA sets direction, policy and structure for ITU-T

  - Meets every four years

  - Defines the general policy for the Sector

  - Establishes the ITU-T study groups

  - Approves work program of study groups

  - Appoints chairmen and vice-chairmen of ITU-T study groups, TSAG, and SCV

  - Reviews existing WTSA Resolutions (49)

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Main objectives of WTSA

- Underline ITU-T's role as the most effective venue for international standardization

- Pick up new work on emerging technologies

- Increase efficiency in order to make best use of delegate time and resources

- Avoid duplication and overlap of work

- Increase participation and relevance

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Who can participate?

- Member States and Sector Members

- Observers:

  - Regional telecom organizations

  - Intergovernmental organizations operating satellite systems

  - Any other regional or international organizations dealing with matters of interest

  - UN and specialized agencies of UN and IAEA

- ITU elected officials in advisory capacity

- Director TSB can make proposals

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WTSA Proposed Structure

- COM 1: Steering Committee

- COM 2: Budget Control

- COM 3: Working methods of ITU-T

- COM 4: Work programme and organization

- COM 5: Editorial Committee

- The Plenary may set up other Committees

Practical Matters

- Contributions requested preferably two months in advance (20 Sept.) and no later than 14 calendar days before opening of Assembly (6 Nov.)

- Paperless meetings, but MS can request two and SM can request one paper copy

- Joint registration system for WTSA and WCIT through focal points starting 20 August

- One full or two partial fellowships for eligible countries

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WTSA Side Events and Exhibition

- Three Side Events:

  - e-Health

  - ICT innovation and standards (coupled with academia event)

  - Network resilience and disaster relief

- Exhibition

  - Goal: 5-10 companies

  - Showcase IPTV, others

ITU-T Snapshot in 2012

- 10 study groups

- 6 focus groups (3 established at Jan 2012 TSAG)

- 9 Joint Coordination Activities

- 2 Global Standards Initiatives (IPTV, IoT)

- 250 standards/year

- 250 Rapporteurs

- 1000 Editors

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Candidatures

WTSA Resolution 35 on appointment of chairmen:

- ✓ Knowledge and experience
- ✓ Continuity in participation in the study group;
- ✓ Managerial skills;
- ✓ Availability and commitment for 4 year period; active in the work of the study group;

- TSB Circular 251 sent on 24 January inviting candidates by 20 September

- Should be submitted to TSB Director 3 months before WTSA

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Prior to WTSA-12

Regional preparation meetings

- ITU organizing back-to-back meetings for WTSA/ WCIT Preparations (March-May 2012)

- APT

  - RCC/Tashkent: 2-6 April

  - Arab States/Egypt: 28 April–1 May

  - Americas/Buenos Aires: 14-15 May

  - Africa/Durban: 21-24 May

- Fellowships available for RPMs

Global Standards Symposium

- Monday, 19 Nov 2012

- Themes:

  - Bridging the standardization gap: from innovation to standards

  - Global Standards Challenges: Intersection of ICTs with other sectors: e.g., e-health; Smart Grid, Intelligent Transportation Systems (ITS)

  - Global Standards Collaboration: Roundtable

- GSS Report input to WTSA

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Implementation of WTSA-08 Resolutions

WTSA-08

- ICTs and climate change
- Deployment of IPv6
- Accessibility to ICTs
- Conformance and interoperability
- Encouraging academic and developing country participation
- Major reorganization of the Study Groups
- Reduced fees for SMs from developing countries

WTSA-08 Action Plan where are we?

- Reporting tool to keep membership informed

- Now at Version 7 (Sept 2011)

- Lists responsible TSB staff member, deadlines

- Details actions taken and results achieved

- URLs

  - itu.int/dms_pub/itu-t/oth/26/01/T260100504E0007XLSE.xls

  - itu.int/dms_pub/itu-t/oth/26/01/T260100504E0007MSWE.doc

WTSA-08 Action Plan – Metrics

- 49 Resolutions (21 new, 28 revised)

- 189 Action Items for 49 Resolutions, under 22 TSB staff

  - 40 Resolutions have 120 Action Items for TSB & Director

  - 24 Resolutions have 41 Action Items for SGs

  - 18 Resolutions have 30 Action Items for TSAG

  - 24 Resolutions have 46 Action Items in coop with sectors/GS

- Status Report (September 2011)

  - 103 Action Items are completed (54%)

  - 54 with ongoing activities are progressing on target (29%)

  - 22, mostly for WTSA-12, to be initiated (12%)

  - 10 pending (5%)

WTSA-08 Action Plan Supporting Sector Objectives

- Bridging the Standardization Gap Action Items on:
  - Workshops; regional groups, activities and coordination; Conformance and Interoperability; Computer Incident Response Teams (CIRTs); training; remote participation

- Standardization Action Items on:
  - EWMs; security; ICT and Climate Change; external and internal cooperation; strategic activities (e.g. new FGs, JCAs); accessibility; academia participation

- Disseminating Information Action Items on:
  - Allocation and management of network resources (e.g. numbering); accessibility; IPv6; Seminar Coordination Committee; Technology Watch; Vocabulary Committee

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Bridging the Standardization Gap

- One of the three strategic goals of ITU-T

- BSG Fund for 2011: CHF 239,000

(Korean Communications Commission, NSN, Microsoft, Cisco)

- Reduced membership fees (CHF 3,975 PA)

- Manuals and handbooks on ITU-T Recommendations

  - Handbook on Testing (2011), Convergent Networks (2010), ITU-T Manual on Optical Transport Networks from TDM to Packet (2010) , DSL Story (2010)

- Standards Q&A Online Forum and New Focus Group

- Mentoring program for newcomers, fellowships

- Remote participation and meetings in region

- 40 new countries participating

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ITU-T: Study Groups

SG#	Area of ICT
SG2	Operational aspects of service provisioning and telecom management
SG3	Tariff and accounting principles (including economic and policy issues)
SG5	Environment and climate change
SG9	Television and sound transmission and integrated cable networks
SG11	Signaling requirements, protocols and test specifications
SG12	Performance, QoS and QoE
SG13	Future networks, including mobile and NGN
SG15	Optical transport networks and access network infrastructures
SG16	Multimedia coding, systems and applications
SG17	Security

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Traditional areas of strength

- Network infrastructure: optical transport
- Access technologies
- Quality of Service (QoS) and network management
- Numbering
- Economic and policy issues
- Emergency telecoms
- Multimedia codecs (voice, video)
- NGN and FN Architecture and Requirements

ITU-T should strengthen presence in certain areas

- e-Health

- Internet of Things/M2M

- Intelligent Transport Systems

- Disaster Relief Systems, Network Resilience and Recovery

- Smart Grid

- Smart Water Management

- Conformity and interoperability

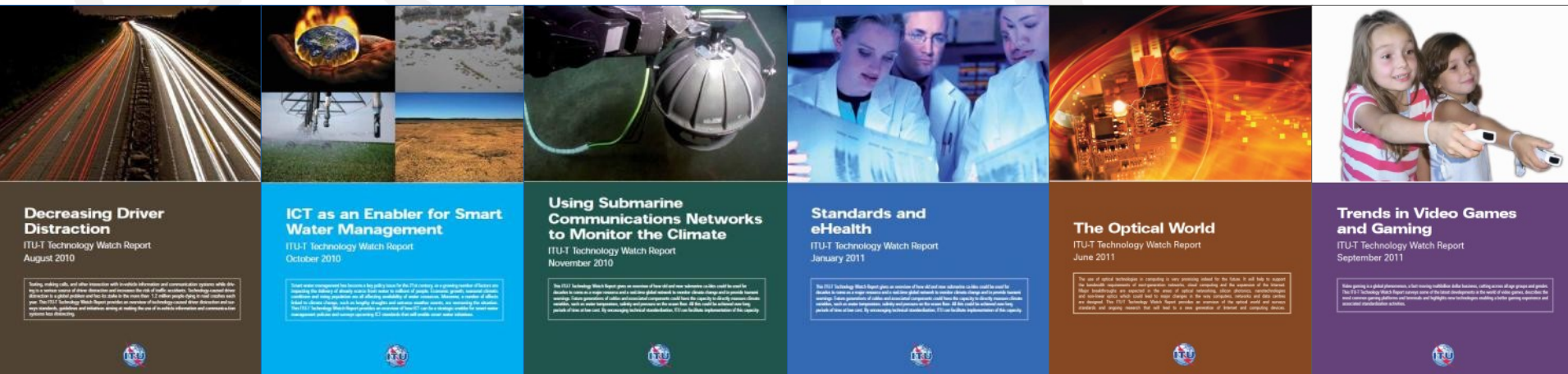Committed to connecting the world

Hot Topics

Technology Watch: Identifying the Hot Topics

- Output contributed to creation of new Focus Groups, Study Group Questions, workshops, discussions, etc.

- Widely recognized inside and outside ITU

- Open to contributions and topic proposals

Decreasing Driver Distraction
ITU-T Technology Watch Report
August 2010

ICT as an Enabler for Smart Water Management
ITU-T Technology Watch Report
October 2010

Using Submarine Communications Networks to Monitor the Climate
ITU-T Technology Watch Report
November 2010

Standards and eHealth
ITU-T Technology Watch Report
January 2011

The Optical World
ITU-T Technology Watch Report
June 2011

Trends in Video Games and Gaming
ITU-T Technology Watch Report
September 2011

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Conformance and Interoperability Testing

Business plan:

- KPMG to present at Council-12 (July)

Conformity database

- About to receive first entries

Interoperability events

- Identify new customers/technologies

Capacity building

- In cooperation with BDT, additional forums in 2012

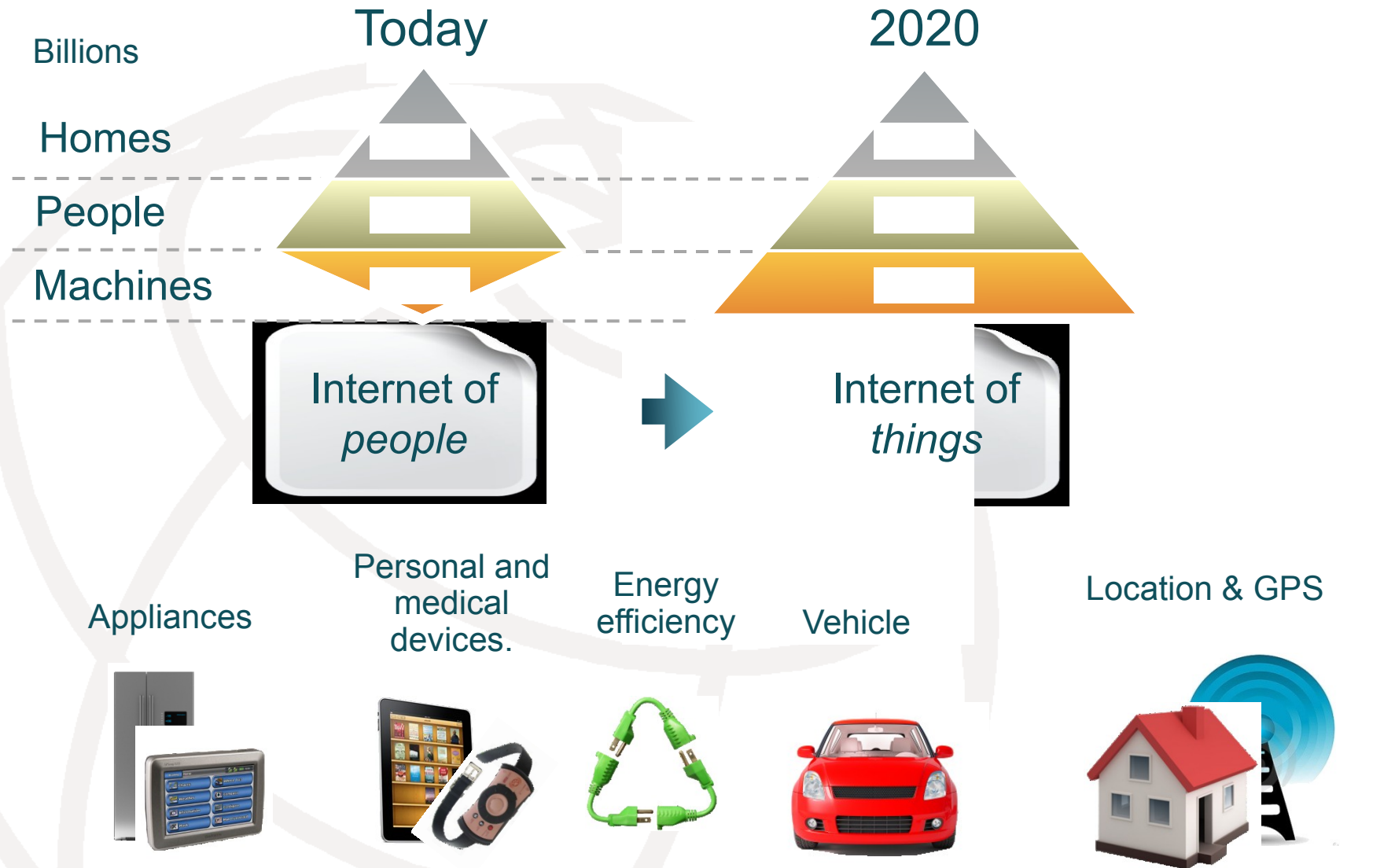**Assistance in the establishment of test facilities**

6 Focus Groups

➢ **Bridging the Gap: from Innovation to Standards**

➢ **Focus Group on M2M Service Layer**

➢ **Disaster Relief Systems, Network Resilience and Recovery**

➢ **Focus Group on Audiovisual Media Accessibility**

➢ **Focus Group on Driver Distraction**

➢ **Focus Group on Car Communication**

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9 Joint Coordination Activity

- **Smart Grid and Home Networking**

- **Cloud Computing**

- **Internet of Things**

- **ICT and climate change**

- **Accessibility and Human factors**

- **Identity Management**

- **Conformance and Interoperability Testing**

- **IPTV**

- **NGN**

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In a Society Where Everything is Connected...

Today

2020

Billions

Homes

People

Machines

Internet of *people*

Internet of *things*

Appliances

Personal and medical devices.

Energy efficiency

Vehicle

Location & GPS

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ITU's Focus Group on M2M

Government: access and enable interaction with government service providers

Health care: increase efficiency in health service delivery, personalized health solutions

Retail, finance, marketing: contactless payment, customized branding and advertising

Security: tracking and anti-theft solutions

Industrial: Efficient factory, supply chain and logistics

Automotive / Transport: connected cars, smart road-side infrastructure, emergency notification, driver assistance systems, car sharing, navigation, driverless car

Utilities: smart grid and water supply

Consumer: Smart buildings, home automation

Smart Scenarios

Smart governance

Smart mobility

Smart living

Smart environment

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Internet of Things (IoT)/ Machine-to-Machine communications

- ITU's Global Standards Initiative on IoT started May in 2011

- ITU-T Focus Group M2M Service Layers created Jan 2012

  - Focus initially on e-health

  - 1st meeting April 2012

  - WHO/ITU Workshop on e-health standards and interoperability

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e-Health

- Chief Technology Officer (CTO) request to accelerate work
- Protocol to relay biometric info, connecting doctors with patients in remote locations
- Requirements and network capabilities for e-health monitoring applications
- Workshop with World Health Organization (WHO) April 2012

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Intelligent Transport Systems

- In-Vehicle Multimedia applications and services

- Climate Change

- Electric Vehicles

- Road Safety

- Driver Distraction

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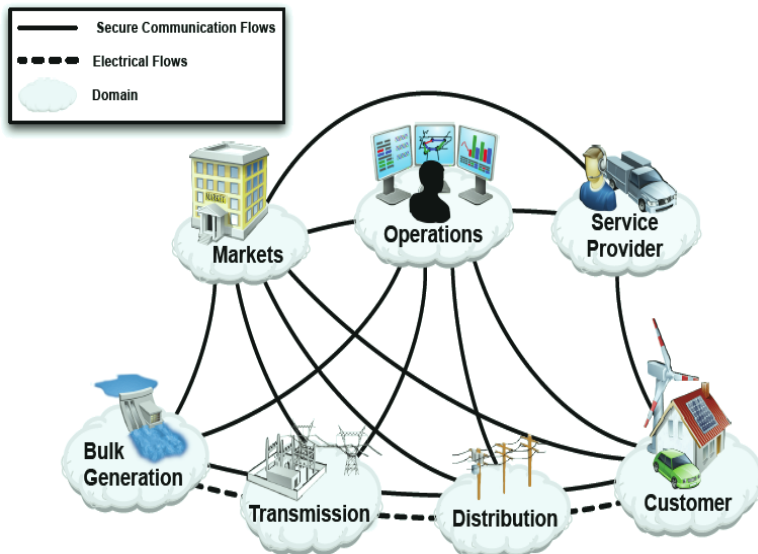
ICTs and Climate Change

- ITU-T Universal charger: future versions to cover ICT devices other than mobile phone
- ITU-T Methodologies to assess ICT carbon footprint to be completed
- Recommendation on conflict materials
- To come: standard on guidelines for recycling rare-metals in ICT products
- Joint task force with WMO and UNESCO on the use of submarine cables to monitor climate and provide tsunami warning
- 2nd ITU Green ICT Apps Challenge launched

Smart Grid

NIST Smart Grid Framework 1.0 January 2010

- Electric Grid Transport & Distribution Communication Standards

- Optimization of facility usage

- Integration of renewable energy sources, which are distributed and less stable
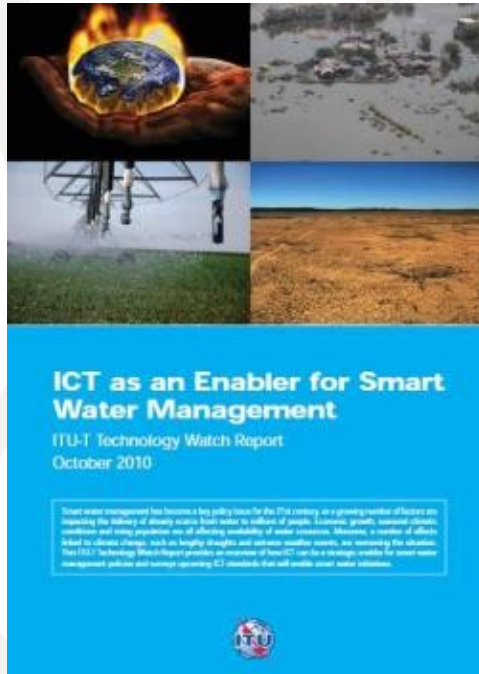
- Integration of electric vehicles

ITU Technology Watch Report
ICT as an Enabler for
Smart Water Management

ICT as an Enabler for Smart Water Management

ITU-T Technology Watch Report
October 2010

ITU-T Study Group 5, Question 23 on ICTs and Adaptation to Climate Change:

➢ How can ICT standards better enable water management under accelerating climate change conditions to improve the overall efficiency of water use, leading to a more sustainable use of water resources?

Network Resilience to Natural Disasters

- New Focus Group on standards for Network Resilience and Recovery from disasters

- Focus:

  - (1) disaster relief for individuals (to notify the damage situation from victims to their relatives, friends, or employers)

  - (2) disaster relief guidance (to show victims the routes to evacuation shelters, home, etc.).

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Accessibility

- PP-10 Res 175 … accessibility for persons with disabilities…

- ITU provides accessibility to ICTs, and to ITU facilities for participants with visual, hearing or physical disabilities

- Voluntary fund to assist disabled participants

- Focus Group Audio Visual Media Accessibility

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Cloud Computing

- Growth opportunity for Telcos

- Opportunity for developing countries

- Security, Audit, and Privacy

- Cloud Computing picks up a lot of activity in ITU

The Economist, Oct 2009

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Internet Access through ITU standards

- Access:

  - ADSL: ITU-T G.992

  - Powerline Transmission:
    ITU-T G.9960 (G.hn)

  - FTTX (Fibre to the <x>):

    - GPON (Gigabit Passive Optical Networks) ITU-T G.984

    - Bendable fibers: ITU-T G.657

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Optical Transport

- 95% of all international traffic runs over fibre = ITU-standards

- MPLS-TP

- Carrier Ethernet: ITU-T Y.1731

- Synchronization: Mobile Backhaul

- Optical Transport Networks from TDM to Packet

- Optical fibres, cables and systems

- SDH: ITU-T G.707

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Cybersecurity & Identity

The Economist, July 2010

- Strengthen the confidence and security in the use of ICTs

- Strengthen cybersecurity and combat cyber threats

- Identity Management

- Child Online Protection

- Cybersecurity Information Exchange Framework (CYBEX)

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Multimedia: Prime Time Emmy Award for ITU standards

- Advanced video coding:

  ITU-T H.264

  - Used to compress billions of clips on YouTube, high-definition content on Blu-ray Discs

- New work:

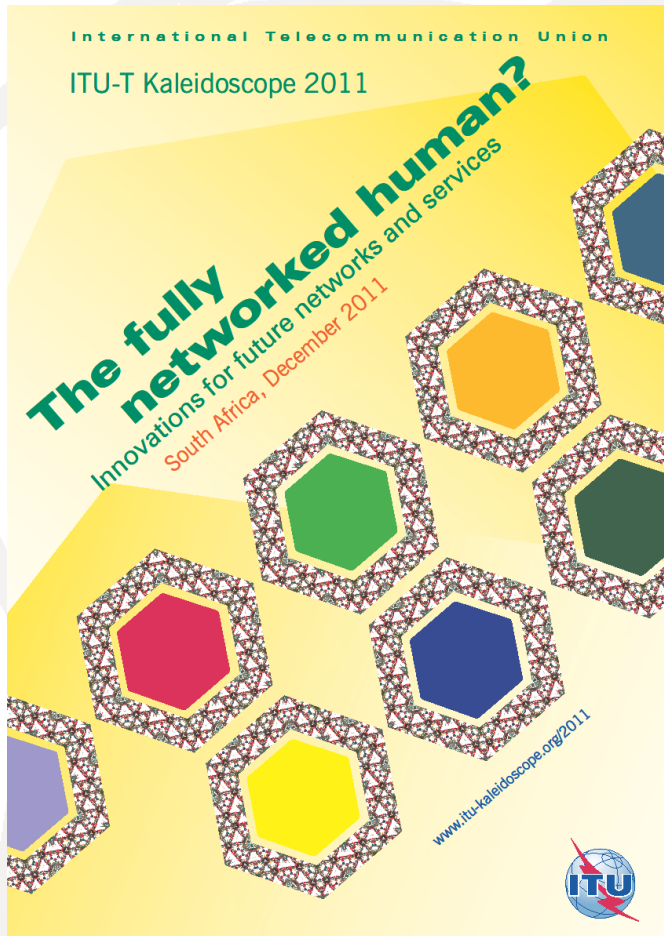 - Joint Collaborative Team (ITU-T, ISO/IEC) to reduce data rate by 50%

IPTV

- ITU-T suite of IPTV standards
- ITU organized interoperability testing events and showcasing events in Geneva, Singapore, India, Brazil, United Arab Emirates
- Demo at WTSA-12
- 2nd IPTV Application Challenge to be launched – prizes at WTSA

Involving future engineers

- Academia and universities can participate in the work of ITU at a reduced fee
- Kaleidoscope events
  - International events bringing academia and industry together
  - Rigorous, double-blind, peer-review process

Major issues related to working methods of ITU-T

- Current discussions

- International collaboration platform mechanisms

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Current discussions

SG 9

- Home Network: Proposal to revamp Q9; and Move Home Networking from SG15 to SG9 to boost SG9's mandate and participation.

- Proposal of a new Focus Group on Smart cable television

SG 11

- Suggested that SG11 will be recognized as a lead group in testing activity in WTSA-12

- Proposal to move the JCA-CIT and Q14/17 from SG17 to SG11

- Proposal to carry the output of the M2M FG on API and Protocols in SG11

SG15

- MPLS-TP:
    - Draft Recommendation ITU-T G.8113.1 *Operations, Administration and Maintenance mechanism for MPLS-TP in Packet Transport Network (PTN)* was not approved. Opposed by USA, Israel, UK, Finland, and Germany.
    - SG15 Chairman declared that this Draft Recommendation as contained in **COM15-R22** be sent without modification to WTSA-12 for approval.

- Recommendation ITU-T G.9980 *Remote management of CPE over broadband networks – CPE WAN Management Protocol (CWMP)* was not approved.
    - G.9980 has also been sent to WTSA-12 for approval.

PP-10 Resolution 178

invites the 2012 WTSA

1. to analyse the report by the Director of the Telecommunication Standardization Bureau and the Telecommunication Standardization Advisory Group and contributions from Member States and Sector Members, and decide on the adjustments to the structure of ITU-T, in order to reach the objective of improving the technical work, within ITU-T, on the development of the technical aspects of telecommunication networks for supporting the Internet;

2. to take the necessary action, as appropriate, regarding the establishment of a study group or other appropriate group in order to achieve the objectives mentioned in resolves above.

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Work methods inventory-1

- **WTSA-08 Resolution 1** – in particular
  - §7: Procedure for new/revised Questions
  - §8: Selection of approval process (AAP vs TAP)
  - §9: Traditional approval process
- **A-series Recommendations**
  - A.1: Work methods for ITU-T study groups
  - A.7: Focus groups: Working methods and procedures
  - A.8: Alternative approval process

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Work methods inventory-2

- **A-series Recommendations** (cont'd)
  - **A.4**: Communication process between ITU-T and Forums and Consortia
  - **A.5**: Referencing documents of other organizations in ITU-T Recommendations
  - **A.6**: Cooperation and exchange of information with national and regional standards development organizations
  - **A.23**: Collaboration with ISO/IEC JTC1

ITU-T A.4, A.5, and A.6

- Scopes:
  - A.4 - Communication between ITU-T and Forums and Consortia
  - A.6 - Cooperation and exchange of information between ITU-T and national and regional standards development organizations
  - A.5 - References to documents of other organizations in ITU-T Recommendations
- Issues
  - Nested referencing not addressed in A.5
  - Discussions on updating A-Series Supplement 3 may lead to clarifications in A.4

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ITU-T A.7

- Focus groups: Working methods and procedures
- Scope
  - Defines the rules for ITU-T FGs
- Current issues
  - Refinement of rules based on recent experience
  - Funding of FG activities

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Collaboration mechanisms

Current ITU-T collaboration toolbox

- Inter-SG collaboration
  - ➤ JCAs (high-level coordination on a theme – e.g. IPTV, IoT, NGN)
  - ➤ GSI (technical work in co-located "thematic" Rapporteur Group meetings)

- Reaching across to other ITU Sectors and external organizations
  - ➤ ITU-T A.23: Only with JTC1
  - ➤ Focus Groups

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JCAs (Joint Coordination Activities), GSI (Global Standards Initiative) and TSR (Technical and Strategic Review) (defined in ITU-T A.1, clause 2.2)

What they are, how they interwork, and some current issues

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JCAs – Joint Coordination Activities

- First use: JCA-NGN, circa 2004 (WTSA-04)
- Currently, nine JCAs running; two JCAs concluded
- It is a coordination mechanism for a certain topic
  - ➤ ITU-T groups
  - ➤ Can be open to other (non-ITU-T, non-ITU) entities
- Open to participation of representatives of groups
  - ➤ Not intended for the membership-at-large
- Connected to a Study Group or TSAG

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Issues with JCAs

- Sometimes, the line between coordination and development is crossed by JCAs
  - ➢ E.g. the "JCA that wanted to be a Focus Group"
  - ➢ Development of technical work, beyond coordination tools (roadmaps, gap analyses, etc)

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GSIs

- GSIs are <u>not</u> a group, but a bundling of "*birds-of-a-feather*" Questions, or
- A way of calling collocated, coordinated Rapporteur Group meetings
- Thematic:
  - ➢ IPTV, NGN, IoT (still running)
  - ➢ IdM (concluded)
- A GSI is not a group, but an assemblage of groups
  - ➢ Hence: no plenary, no chairman
- Expert participation: expected to do technical work
- Coordination: via the associated JCA

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Issues with GSIs

- Can be complex to manage, depending on:
  - How they are implemented
  - Number of participating Questions
    - More Questions mean more complicated groups
    - GSIs have a lot of flexibility on how to organize their work

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Collaboration on ITS Communication

➤ To provide a globally recognized forum for the creation of an internationally accepted, globally harmonized set of ITS communication standards

➤ Agreed by TSAG as a trial

Opportunities for contributions

- Improve method for approval of new and revised Questions
  - ➤ An AAP for Questions?
- Revision on the procedures for Focus Groups
- Streamline and increase efficiency of JCAs, GSIs and TSRs
- Consider mechanisms for efficient and attractive engagement of non-ITU-T entities

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Get involved

- Regional preparatory meetings proven platform

- Regional groups should coordinate common proposals

- TSAG meeting

  - Virtual meeting 17-18 April (2 hours daily)

  - 2 – 4 (am) July 2012 in Geneva

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