



# The importance of standards and future for ITU-T

**Greg Jones**

***Counsellor, ITU-T Study Group 15***

*International Telecommunication Union (ITU)  
Telecommunication Standardization Bureau*

**ITSF – 5 November 2014**  
(greg.jones@itu.int)



# ITU Membership

- Member States: **193 governments**
- Sector Members **649 (259 ITU-T)**
  - All study groups in one sector
- ITU-T Associates **139**
  - one study group only
- ITU-T Academia **60**
  - All study groups
- <http://itu.int/members>

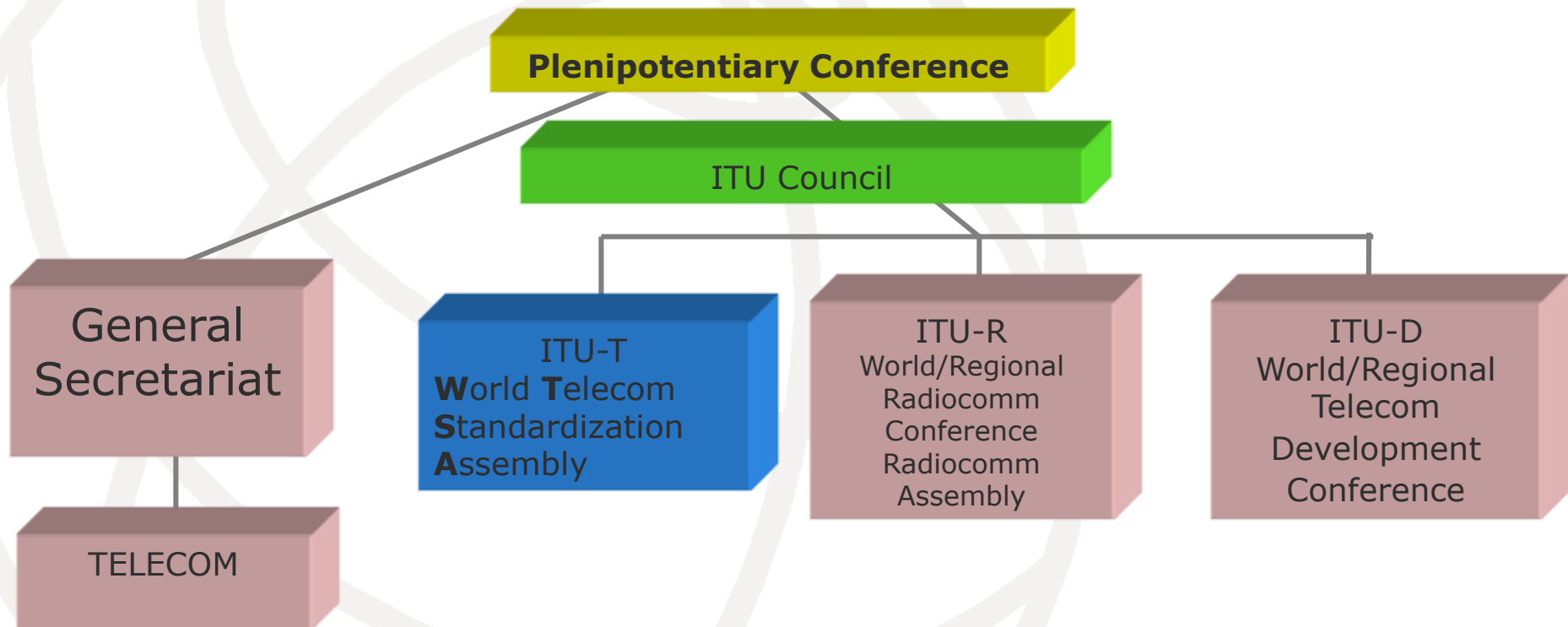
# Importance of standards

- facilitate the interoperability of network technologies
- help to promote more competition and hold down prices
- Help achieve volumes leading to economies of scale



# ITU Structure

**Oldest UN specialized agency (founded in 1865)**



# ITU elected officials 2015-18



Houlin Zhao of China  
Secretary-General of ITU



Malcolm Johnson of United Kingdom  
Deputy Secretary-General

## Directors of the three Bureaux



François Rancy – France  
Radiocommunication (ITU-R)



Chaesub Lee – Korea  
Standardization (ITU-T)



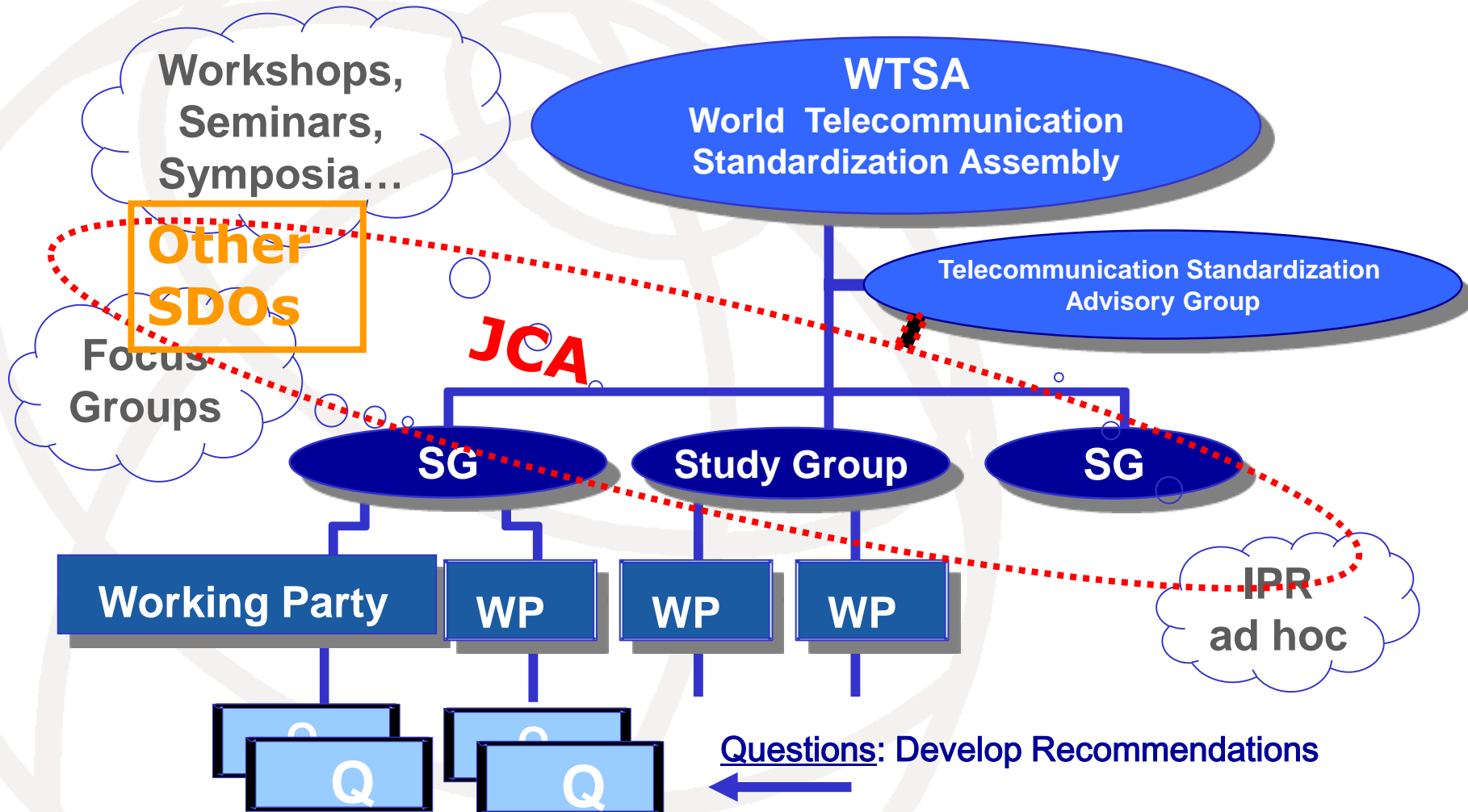
Brahima Sanou - Burkina Faso  
Development (ITU-D)



# ITU-T in a Nutshell

- ITU-T Product: Recommendations (= “standards”)
  - Freely available to the public once published
- Work (mostly) done in Study Groups (10 of them)
- Unique partnership of private sector & government
- Truly global
- Consensus decisions
- Very flexible
- Fast procedures, transparent procedures
- Collaboration and cooperation within the ecosystem
- Electronic submission tools
- Brand name
- Interoperability events / ITU-T Conformity database
- Common Patent Policy ITU-T/ITU-R/ISO/IEC

# ITU-T Working Structure



# Work in Study Groups

- SG Face-to-face meeting cycle every 6 – 9 months
  - Paperless meetings (electronic working methods)
  - Encourage remote participation (web-conferencing, email)
  
- More frequent meetings are:
  - Rapporteur meetings to deal with specific Questions (electronic or face-to-face meetings as frequently as once a month)
  - Working Party meetings



# Current Study Groups

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

# ITU-T Study Group 15

Development of standards on optical transport network, access network, home network, and power utility network infrastructures, systems, equipment, optical fibres and cables, and their related installation, maintenance, management, test, instrumentation and measurement techniques, and control plane technologies to enable the evolution toward intelligent transport networks, including the support of Smart Grid applications. This encompasses the development of related standards for the customer premises, access, metropolitan and long-haul sections of communication networks as well as for power utility networks and infrastructures from transmission to load.

# SG15 Lead study group roles

- access network transport
- optical technology
- optical transport networks
- smart grid

# SG15 Working Parties

- **WP1/15**: Transport aspects of access networks and home networking
- **WP2/15**: Optical access/transport network technologies and physical infrastructures
- **WP3/15**: Transport network structures

## **Q13/15 - Network Synchronization and Time Distribution Performance**

Network synchronization performance specifications are essential for successful operation and integration of digital transmission networks and associated switching and signalling systems and mobile networks. Network timing performance studies are needed to determine the feasibility and most effective means of implementing a time reference distribution service.



# Work in Focus Groups

- Works on a **well-defined topic**
- Work in a scheduled **time-frame**
- Establishes **its own working methods**
- **Non-ITU Members** can participate
- **Output** → **"ITU-T Specification"**  
(not Recommendations!)
  - However, output of FG can be input to a study group to make it an ITU-T Recommendation

# Currently 5 Focus Groups

- Aviation Applications of Cloud Computing for Flight Data Monitoring (FG AC)
- Digital Financial Services (FG DFS)
- Smart Sustainable Cities (SSC)
- Bridging the Gap: from Innovation to Standards (Innovation)
- Smart Water Management (SWM)
- <http://itu.int/en/ITU-T/focusgroups>



# Joint Coordination Activities

- Currently **10** JCAs ([itu.int/ITU-T/jca](http://itu.int/ITU-T/jca))
- **Management tool** when subject spans more than one study group
- **For coordination** and planning
  - Technical work done by the study groups
- **External organizations** can join a JCA





# Current Joint Coordination Activities

- Software-Defined Networking (JCA-SDN)
- Technical aspects of telecommunication networks to support the Internet (JCA-Res178)
- Child Online Protection (JCA-COP)
- Cloud Computing (JCA-Cloud)
- Internet of Things (JCA-IoT)
- ICT and climate change (JCA-ICT&CC)
- Accessibility and Human factors (JCA-AHF)
- Identity Management (JCA-IdM)
- Joint Coordination Activity on IPTV (JCA-IPTV)
- Conformance and Interoperability Testing (JCA-CIT)



# World Standards Cooperation: ISO, IEC, ITU

- Established in 2001
- Joint initiatives: **common text, common patent policy, joint workshops, joint education & training**
- Regular formal and informal contact of ISO, IEC, ITU leadership
- Goal: strengthen and advance the voluntary consensus-based international standards systems of ITU, ISO, and IEC
- Avoid duplication and overlap of work
- ITU-T Leadership meeting with ISO/IEC JTC 1



# Collaboration with Major SDOs

- **Global Standards Collaboration**
- MoU between **ITU** and **ETSI; IEEE Com Soc, CERN ...**
- MoU on e-business **ISO, IEC, ITU, UN/ECE**
- Some SDOs also **Sector Members** (IEEE,ETSI,IETF ...)
- **Joint workshops** (including **Kaleidoscope**)
- Leadership meetings: **ISO/IEC JTC1 & IETF**
- ITU-T and **ICANN**
  - (Reinhard Scholl, TSB Deputy Director was on ICANN Board)
- ITU-T and **IETF**
  - Collaboration agreement in ITU-T A.sup3 and RFC 6756
- **Global Standards Symposium** (WTSA-12, Nov 2012)
- **CTO Group** high-level, private sector executives meetings



# Partnership and External Cooperation

## **Recommendation ITU-T A.4**

- Procedure to approve/establish communication process with Forums/Consortia

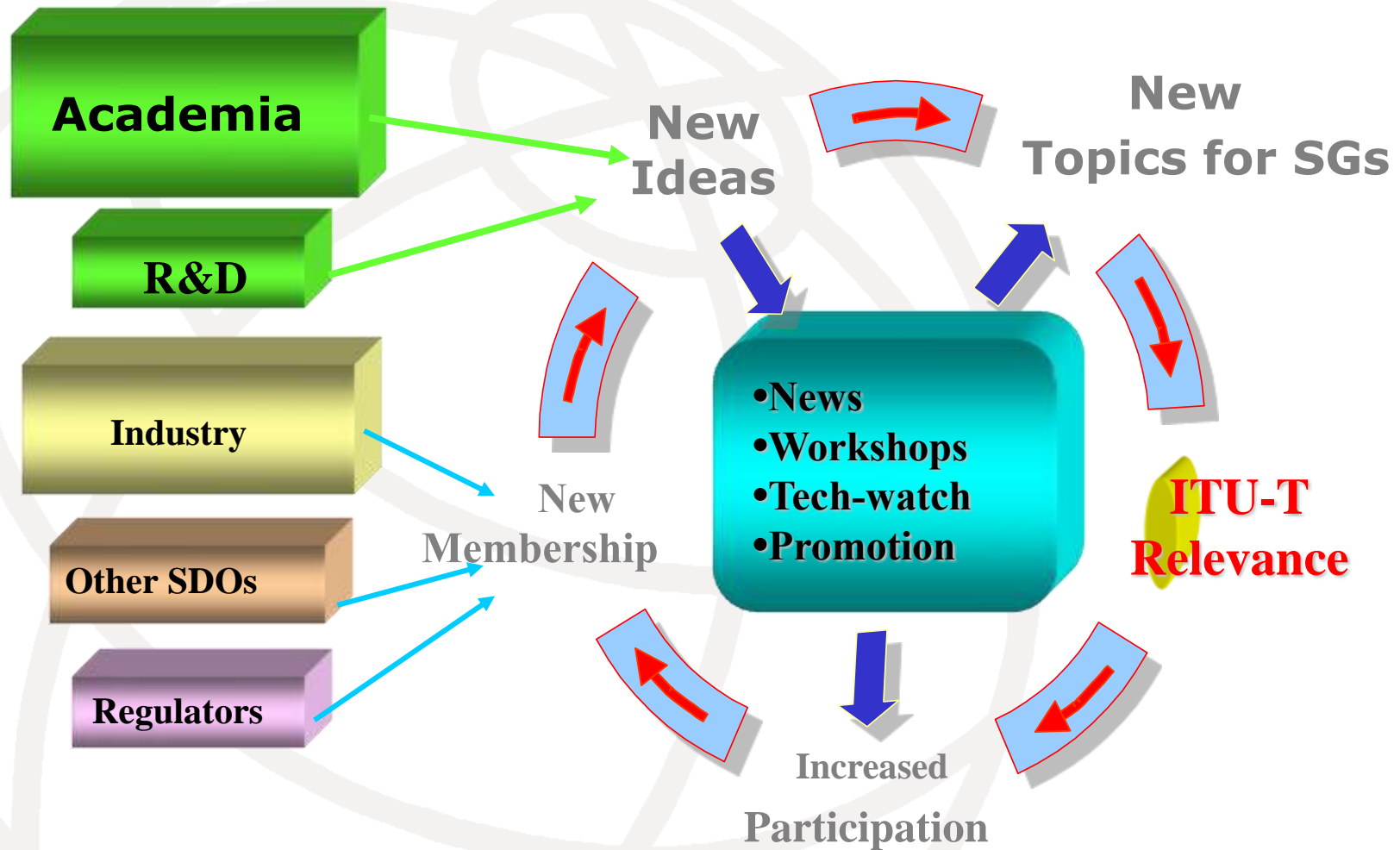
## **Recommendation ITU-T A.5**

- Procedure to qualify organizations for including references in ITU-T Recommendations

## **Recommendation ITU-T A.6**

- Procedure to approve cooperation and exchange of information with national and regional standards development organizations

# Academia & ICT standardization



[www.itu.int/ITU-T](http://www.itu.int/ITU-T)

