

Overview of SG5 Activities

Gaborone, Botswana

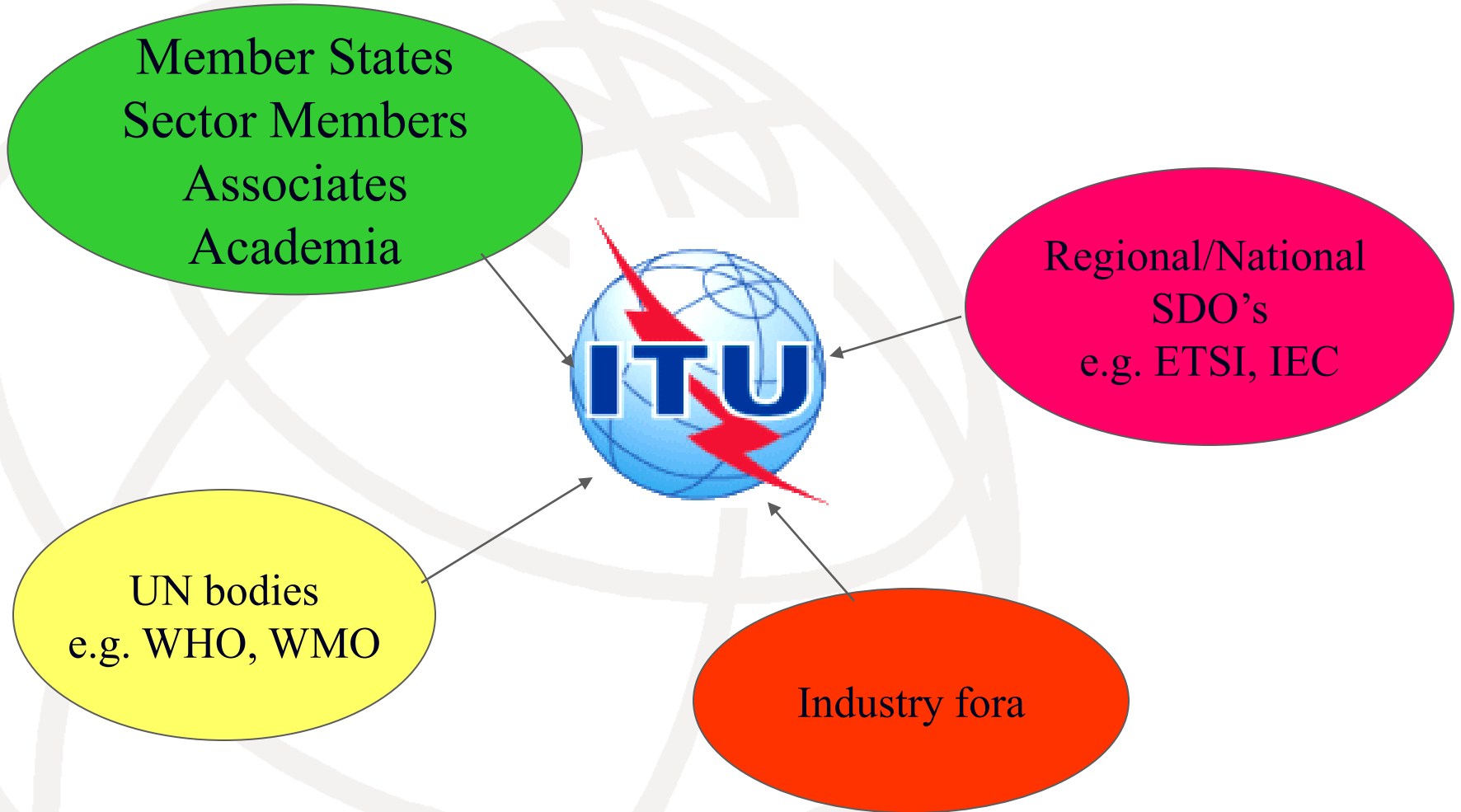
Mitsuru Yamada

Advisor of SG5 RG-AFR,
Telecommunication Standardization Bureau, ITU

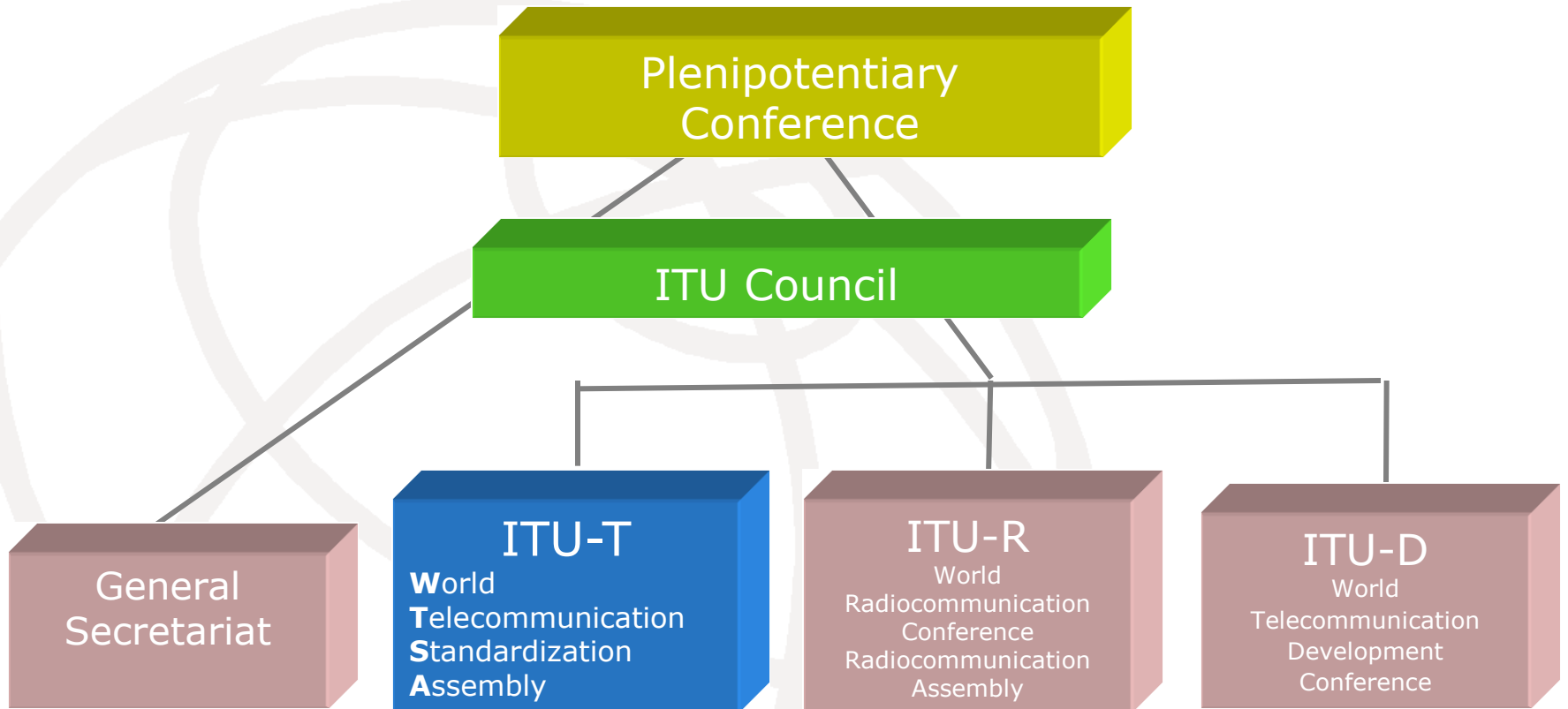
Introduction to ITU

- Founded in **1865**, oldest specialized agency of the UN
- Standards making, one of the ITU's first activities
- 191 Member States, over 700 private sector entities
- Headquarters in Geneva, 11 regional offices, 760 staff / 80 nationalities
- Five elected officials:
 - Secretary-General
 - Deputy Secretary-General
 - Director of the Radio Bureau (BR)
 - Director of the Telecommunication Standardization Bureau (TSB)
 - Director of the Telecommunication Development Bureau (BDT)

International Telecommunication Union

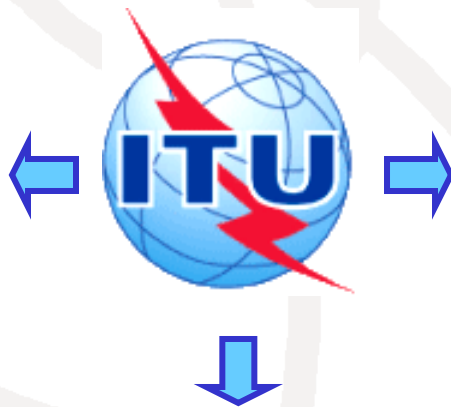


ITU Structure



ITU Sectors

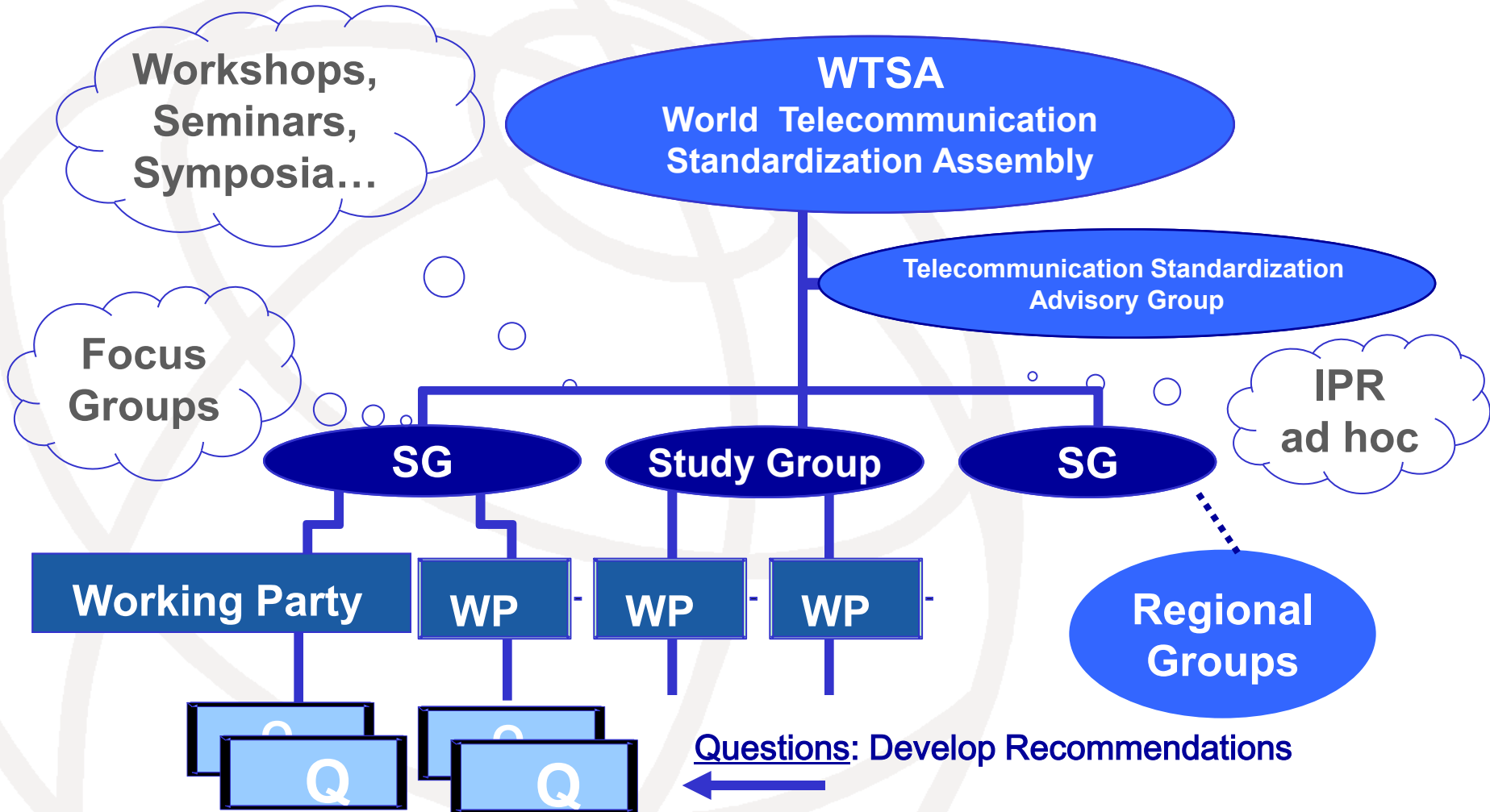
ITU-T
Telecommunication
standardization
on worldwide basis



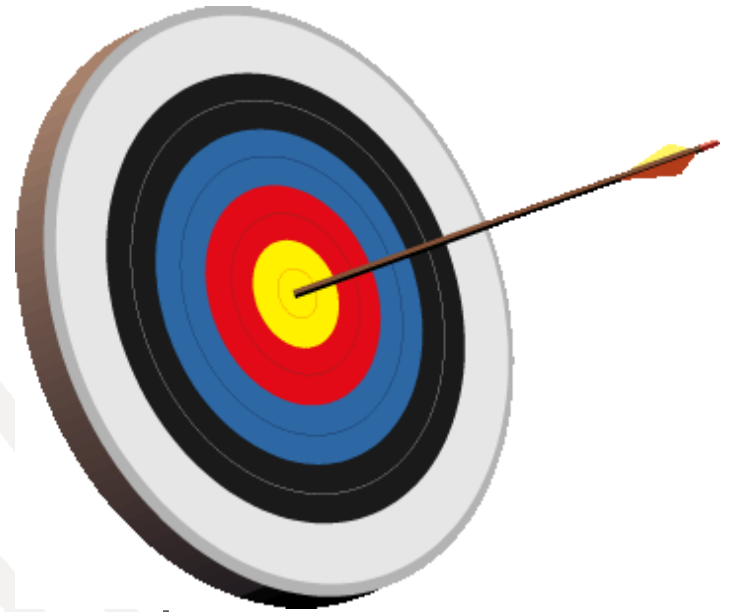
ITU-D
Assisting
implementation and
operation of
telecommunications in
developing countries

ITU-R
International Spectrum
Management and
Radiocommunication
Standardization

ITU-T Structure



ITU-T Objectives



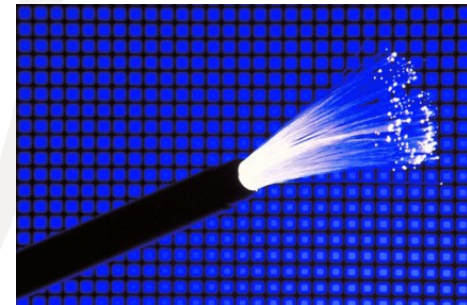
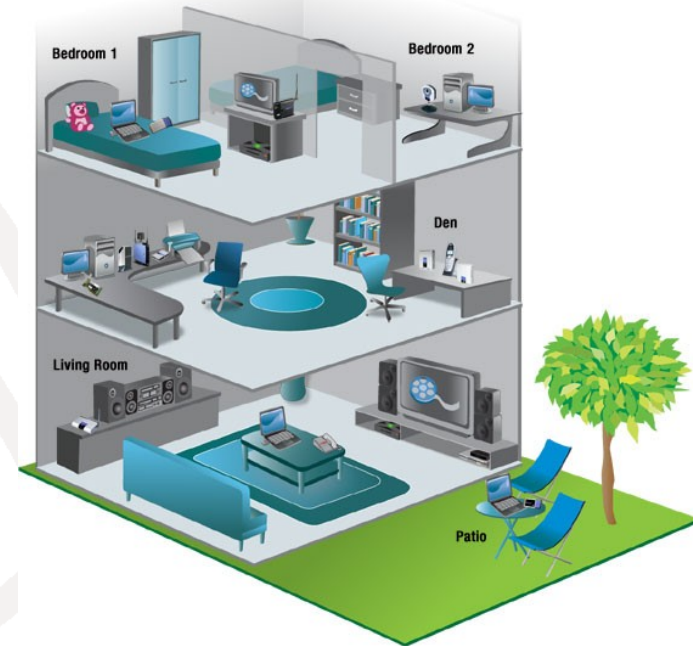
- Develop and publish standards for global ICT interoperability
- Identify areas for future standardization by involving academia
- Provide an attractive and effective forum for the development of international standards
- Promote the value of ITU standards
- Disseminate information and know-how
- Cooperate and collaborate
- Provide support and assistance

ITU-T hot topics

- Next generation network (NGN), IPTV
- Home networking
- Cybersecurity & identity management (IdM)
- Next generation multimedia conferencing, videocoding
- Broadband access and transport network, optical fibres
- Quality of Service
- Conformity & Interoperability
- ICT & Climate Change, Cloud Computing, Smart Grid, ITS, IoT . . .
- **AV Media Accessibility (17:30-17:45 25th July, Special presentation, Gaborone, Botswana)**

Standards Success Stories

H.264
MPEG-4/AVC



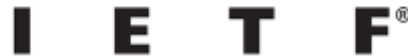
ITU-T Key Features

- Truly global public/private partnership
- 95% of work is done by private sector
- Continuously adapting to market needs
- Pre-eminent global ICT standards body



ITU-T collaboration

44 formal partnerships



- World Standards Cooperation
ISO – IEC - ITU
 - Patent policy & Joint events
- ITU-T and IEEE
 - MoU & Joint events
- Global Standards Collaboration
 - Supports ITU as preeminent global ICT standards organization.
- Management meetings with:
 - ETSI
 - IETF
 - ICANN
 - ISO/IEC JTC 1
- MoU on E-Business:
IEC, ISO, ITU and UN/ECE

Study Groups & Chairs

SG	Title
2	Operational aspects of service provision and telecommunications management – <i>Marie-Thérèse Alajouanine (France)</i>
3	Tariff and accounting principles including related telecommunication economic and policy issues – <i>Mr Ki-Shik Park (Republic of Korea)</i>
5	Environment and climate change – <i>Mr Ahmed Zeddami (France)</i>
9	Television and sound transmission and integrated broadband cable networks – <i>Mr Arthur Webster (USA)</i>
11	Signalling requirements, protocols and test specifications – <i>Mr Wei Feng (China)</i>
12	Performance, QoS and QoE – <i>Mr Charles A. Dvorak (USA)</i>
13	Future networks including mobile and NGN – <i>Mr Chae-Sub Lee (Rep. of Korea)</i>
15	Optical transport networks and access network infrastructures – <i>Mr Yoichi Maeda (Japan)</i>
16	Multimedia coding, systems and applications – <i>Mr Yushi Naito (Japan)</i>
17	Security – <i>Mr Arkadiy Kremer (Russia)</i>

SG5-Specific Information

Gaborone, 25-26 July 2011

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SG 5 Mandate

- Mandate (exact wording in WTSA-08 Resolution 2): SG5 is responsible for studying ICT environmental aspects of electromagnetic phenomena and climate change
 - studying Electromagnetic Phenomena which can cause **damages or disturbances** to telecommunication installation or **injury** to people (telecommunication personnel and service users) or **health effect** to population
 - studying **methodologies** for evaluating the **ICT effects** on climate change and to reduce environmental effects related to ICT facilities, equipments, etc.

Lead Study Group role

- SG 5 is Lead study group on electromagnetic compatibility and electromagnetic effects; and also
- Lead Study Group on ICTs and climate change.

Structure of Study Group 5

Chairman, SG5: ^(1/2)

Mr Ahmed Zeddami (France)

Vice-chairmen, SG5:

- Mr Tariq H. Al-Amri (Saudi Arabia)
- Mr Héctor Carril (Argentina)
- Mr Philip Day (Australia)
- Mr Sung-Chul Kang (Republic of Korea)
- Mr Guy-Michel Kouakou (Côte d'Ivoire)
- Mr Alexander Tsymb (Russian Federation)
- Mr Li Xiao (China)

Structure of Study Group 5

(2/2)

Working party 1/5 – Damage prevention and safety

- Chairman, WP 1/5: Mr Philip Day (Australia)
- Vice-chairman, WP 1/5: Mr György Varju (Hungary)

Working Party 2/5 – Electromagnetic fields: emission, immunity and human exposure

- Chairman, WP 2/5: Mr Mitsuo Hattori (Japan)

Working Party 3/5 – ICTs and climate change

- Chairman, WP 3/5: Mr. Keith Dickerson (BT, UK)
- Vice-chairmen, WP 3/5:
Ms Eunsook Kim (Korea) and Mr. Takeshi Origuchi (NTT, Japan)

Terminology

Question 14/5: Guides and terminology on environment and climate change

- This question is responsible for the following publications: “K-series Terminology”, “Guide to the use of ITU-T Publications produced by Study Group 5 aimed at achieving Electromagnetic Compatibility and Safety” and Handbook on “Mitigation measures for telecommunications installations”.
- As ITU-T Study Group 5 is also the lead Study Group on Environment and Climate Change, Question 14/5 will establish a similar document set to cover Information and Communications Technology (ICT) and Climate Change (CC).

EMF study in Question 3/5

- Provide high level framework for managing the human exposure to EMFs (regulatory practices) emitted by the telecommunication equipment
- Provide guidelines for the assessment of human exposure based on the existing standards and recommendations
- Activities specified in WTSA-08 [Resolution 72](#) in order to assist developing countries in human exposure assessment.

Resolution 72 - Measurement concerns related to human exposure to electromagnetic fields

The World Telecommunication Standardization Assembly
(Johannesburg, 2008)

- Recognizes that some publications about EMF effects on health create doubt among the population, in particular in developing countries
- Invites ITU-T, in particular Study Group 5, to expand and accelerate its work and support
- Invites all members to contribute actively to the work of Study Group 5, in providing relevant and timely information, in order to assist the developing countries by providing information and addressing measurement concerns related to RF exposure

New Recommendation ITU-T K.guide “Guidance on how to manage humane exposure to EMF’s”

- This Recommendation will give guidance on how to handle the problem of the human exposure assessment in order to help the user to apply existing standards.
- This Recommendation will present in clear and possibly simple way the procedures how to evaluate an exposure and how to show the compliance with exposure limits.
- Existing standards are product or phenomena oriented. This Recommendation will be oriented on the examination of the area accessible to people in the real environment of currently operating base stations with many different sources of radiation.

Study questions on “climate change”

- Coordination and Planning of ICT&CC related standardization (Q17/5)
- Methodology of environmental impact assessment of ICT (Q18/5)
- Power feeding systems (Q19/5)
- Data collection for Energy Efficiency for ICTs over the lifecycle (Q20/5)
- Environmental protection and recycling of ICT equipments/facilities (Q21/5)
- Setting up a low cost sustainable telecommunication infrastructure for rural communications in developing countries (Q22/5)
- Using ICTs to enable countries to adapt to climate change (Q23/5)

Goals

- Developing a methodology to measure impact of ICTs on climate change (see later slides)
- Identifying priority sectors where ICTs can reduce emissions (e.g. smart buildings, intelligent transport systems)
- The promotion of NGNs (reducing power consumption by up to 40%)
- Lifecycle analysis including disposal/recycling of ICTs
- All new standards are now checked for energy efficiency

Methodologies

- Overview and general principles, L.1400
 - Covers definition of different types of environmental impacts, and general principles for the evaluation of ICT environmental impacts
 - Focuses on energy and GHG emissions. Other environmental impacts, e.g. raw material depletion or water impact will be tackled later
- Environmental impact of ICT goods, networks and services
 - Covers direct and indirect impacts of ICT
 - Consent expected in September 2011
- Environmental impact of ICT in organisations
 - Includes 3 scopes of ISO 14064-1
 - Consent expected in September 2011
- Environmental impact of ICT projects
 - Consent expected in 2012
- Environmental impact of ICT in countries
 - Consent expected in 2012
- Environmental impact of ICT in cities
 - Consent expected in 2012

Standard for a universal charger for mobile phones

- “Universal power adapter and charger solution for mobile terminals and other ICT devices” (ITU-T Recommendation L.1000)
 - specifies general requirements
 - covers charger for mobile phones
- Future version will cover other ICT devices

Recommendations under Study

Group 5 responsibility

- K-series: Protection against interference
- Part of L-series (Construction, installation and protection of cables and other elements of outside plant)
- L.1000-series: ICTs and climate change

JCA “ICT & climate change”

Convenor : A. Zeddam

Co-Convenor : Dave Faulkner

- The purpose of the JCA-ICT&CC is to provide a **visible contact point** for **ICT and Climate Change activities** in ITU-T, to seek **co-operation** from external bodies working in the field of ICT & CC
- The purpose of the JCA-ICT&CC is to **coordinate** the ITU-T ICTs and climate change work amongst the **ITU-T Study Groups**, and **to liaise** with the **ITU-R** and **ITU-D Sectors**. *The membership shall comprise all ITU-T SG Chairmen, all ITU-T SG Counsellors/Engineers, the TSAG Chairman and Counsellor, a number of SG Chairmen’s appointees, ICT & CC contact persons in ITU-T Study Groups and **invited representatives** from relevant SDOs such as **IEC, ISO** or relevant **academia, consortia or fora**.*

Next meeting of SG5

The next meeting of
Study Group 5 will be held

20 - 28 September 2011

in Korea

Contact: Ms. Judit Katona Kiss,
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Thank you
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Gaborone, 25-26 July 2011

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