Brief overview of ITU-T Study Group 5 activities

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Information and Training Session on ITU Methodologies for Assessing the Environmental Impact of ICT

Geneva, Switzerland, 12 April 2012



Structure of ITU-T SG5

ITU-T SG5
"Environment and climate change"

Q.14 Terminology

WP1/5

Damage prevention and safety

WP2/5

Electromagnetic fields: emission, immunity and human exposure

WP3/5

ICT and climate change

7 Questions

7 Questions

6 Questions



ITU-T Study Group 5 "Environment & Climate Change"



Working Party 3 "ICT and Climate Change"

- Continuing and expanding the work of ITU-T Focus Group on ICT and CC
- All ITU-T study groups to examine impact of standards on climate change

ITU-T SG5/WP3's six work areas:

- Q 17/5 Energy efficiency for ICT equipment and Climate Change standards harmonization
- Q 18/5 Methodology of environmental impact assessment of ICT
- Q 19/5 Power feeding systems
- Q 21/5 Environmental protection and recycling of ICT equipment/facilities
- Q 22/5 Setting up a low cost sustainable telecommunication infrastructure for rural communications in developing countries
- Q 23/5 Using ICTs to enable countries to adapt to climate change



Highlights on Deliverables of WP3/5

- Important green ICT standards that have been approved by SG5 WP3 in last few months. These are namely:
 - Recommendation ITU-T L.1000: Universal power adapter and charger solution for mobile terminals and other hand-held ICT devices
 - Recommendation ITU-T L.1100: A method to provide recycling information of rare metals in ICT products
 - Recommendation ITU-T L.1300: Best practices for green data centers
 - L.1410 "Methodology for environmental impacts of Information and Communication Technologies (ICT) goods, networks and services"
 - L.1420 "Methodology for environmental impacts of Information and Communication Technologies (ICT) in Organizations"
 - All these Recommendations have been now approved.









ICTs play a double role in climate change

ICTs are part of the problem...

The Bad News:

ICT Accounts for Approximately

3%

of Global CO2 Emissions

But ICTs are also part of the solution...

The Good news:

ICT has the potential to reduce emissions in other sectors by

vs 15%

Smart buildings, Smart metering, Smart Motor systems, Smart Logistics plus **Dematerialisation of Transport**



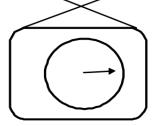
Environmental aspects of ICT

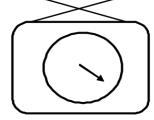
Minimization towards **Environmentally** Sustainable ICT Sector

Environmental load caused by ICT

Environmental load reduction achieved by ICT

Maximization towards Environmentally Sustainable Society





Negative Aspects on Environment

- * Consumption of energy
- **★** Consumption of natural resources
- **★** Generation of waste

Positive Aspects on Environment

- **★Dematerialization (digitization of** information)
- *Reduction of movement and transportation
- **★**Making industry and lifestyles more efficient etc.



Should quantify both environmental aspects.



Q18/5 deliverables:

ITU-T Methodologies

- Common set of methodologies for the assessment of ICT carbon footprint
 - Without, it will be impossible to provide meaningful comparisons
 - > Helps to establish the business case to go green
- Scope includes: goods, networks, services, organizations, projects, cities and countries
 - <u>L.1400</u> Overview and general principles of methodologies for assessing the environmental impact of information and communication technologies (Approved)
 - <u>L.1410</u> Methodology for environmental impact assessment of information and communication technologies goods, networks and services (Approved)
 - L.1420 Methodology for energy consumption and greenhouse gas emissions impact assessment of Information and Communication Technologies in organizations (Approved)
- Developed in cooperation with UNFCCC Secretariat, EC, and over 40 organizations etc..
- Contributions are needed to develop Methodologies on ICT in projects, cities and countries



Objectives of the training session

- 1. Build awareness of the two recently agreed ITU methodologies on ICT with workshop participants
- 2. Show how this work fits into overall ITU work on ICT methodologies
- 3. Give participants an overview of both methodologies covering
 - the principles and processes involved in carrying out a life cycle
 - assessment (LCA) of ICT goods networks and services and ICT in organizations
- 4. Discuss the benefits and Limitations of LCA approaches



Agenda

 1. Opening remarks: Reinhard Scholl, Deputy Director, Telecommunication Standardization Bureau, ITU 	14.00 to 14.10
2. Brief overview of SG5: • Ahmed Zeddam, Chairman ITU-T Study Group 5	14.10 to 14.30
 3. Recommendation L.1400: Recommendation L.1410: Jean Manuel Canet, Rapporteur Q18/5 Q/A 	14.30 to 16.00
Coffee break	16.00 to 16.15
4. Recommendation L.1420: • Gilbert Buty, Editor, Q18/5 Q/A	16.00 to 16.15 16.15 to 17.00
4. Recommendation L.1420:Gilbert Buty, Editor, Q18/5	

Thank you!



