Director, Telecommunication Development Bureau

Information on activities of the Telecommunication Development Bureau (BDT) related to issues relevant to ITU-R

1   Introduction

This information document is provided by the BDT Director to the Radiocommunication Advisory Group (RAG) to highlight topics included in the RA-07 Resolutions in which cooperation between the Radiocommunication and the Development Sectors is expected. Since many of these issues have also been included in the mandate of BDT by WTDC-06, this document is presented to the RAG for its information in order to avoid duplication while RAG is considering the ongoing and future tasks of the ITU-R.

It should be noted that there is an excellent working relation between two Sectors on common interested areas, however it would be most appropriate if administrations specify their expectations from both Sectors.

The list of ITU-R Resolutions relevant to the activities of the BDT is as follows:

- Resolution ITU-R 7-1 Telecommunication development including liaison and collaboration with the ITU Telecommunication Development Sector.

- Resolution ITU-R 11-4 Further development of the Spectrum Management System for Developing Countries.

- Resolution ITU-R 12-1 Handbooks and special publications for development of radiocommunication services.

- Resolution ITU-R 17-3 Integration of International Mobile Telecommunications (IMT 2000 and IMT-Advanced) with existing networks.

- Resolution ITU-R 22-2 Improvement of national radio spectrum management practices and techniques.

- Resolution ITU-R 23-1 Extension of the international monitoring system to a worldwide scale.

- Resolution ITU-R 40-2 Worldwide databases of terrain height and surface features.

- Resolution ITU-R 48-1 Strengthening the regional presence in the Radiocommunication Study Group work.

- Resolution ITU-R 53   The use of radiocommunications in disaster response and relief.

- Resolution ITU-R 55   ITU studies of disaster prediction, detection, mitigation and relief.

BDT activities related to radiocommunication and broadcasting development

Based on the mandate received from the Doha Action Plan (WTDC-06) Programme 2 (Information and communication infrastructure and technology development) the BDT should assist developing countries in maximizing the utilization of appropriate new technologies in the development of their ICT infrastructure.

2   Regional Development Forums (RDFs)

Programme 2 is holding RDFs on new technologies, organized in close collaboration with the other two Bureaus.

- In 2009, BDT organized Regional Development Forums for the Arab Region on the theme "Access to spectrum, including broadcasting services – trends and technologies" As well as for the Americas, Asia-Pacific, Europe & CIS and Africa Regions on the theme "NGN and Broadband, Opportunities and Challenges".

- In 2010, a series of ITU Regional Development Forums focused on new technologies are planned covering NGN and broadband, spectrum management and broadcasting issues.

More information on these events can be found at: http://www.itu.int/ITU-D/tech/indexevents.html.

3   Digital broadcasting

BDT is running several projects for the implementation of digital terrestrial television broadcasting in Africa, Asia-Pacific and CIS regions.

- In 2009, BDT finalized the Guidelines for transitions from analogue to digital terrestrial television broadcasting. BR experts provided assistance and comments on the Guidelines and also the latest ITU-R Study Group 6 Report on the subject was taken into account. Based on this guidelines, administrations can prepare their own roadmap for the transition process. For several selected countries, BDT is providing assistance in the preparation of the roadmap.

- For ITU-D Study Group 2 Question 11-2/2 (Examination of terrestrial digital sound and television broadcasting technologies and systems, including cost/benefit analyses, interoperability of digital terrestrial systems with existing analogue networks, and methods of migration from analogue terrestrial techniques to digital techniques) the report has been prepared also taking into account the above mentioned ITU-R Report. BR experts participated in the meetings and provided their assistance and comments.

BDT continues coordination and cooperation with regional broadcasting organizations like EBU, ABU and AIBD. BDT is regularly organizing workshops on digital broadcasting issues in the ASP Region with collaboration of the ABU and AIBD.

More information can be found at: http://www.itu.int/ITU-D/tech/digital-broadcasting/index.html

4   Spectrum Management System for Developing Countries (SMS4DC)

In 2002, the World Telecommunication Development Conference mandated the BDT to produce an enhanced software spectrum management package for developing countries that would meet the challenges and requirements of the 21st Century. The BDT answered this challenge by gathering together ITU technical experts to prepare the system specification and by commissioning a small team of software specialists to produce a low-cost software package to satisfy the specification.

The result is the *Spectrum Management System for Developing Countries* (SMS4DC), which is a computer program that provides assistance in the technical and regulatory procedures for managing the spectrum allocated to the Land Mobile, Fixed and Broadcasting services, in full compliance with the relevant ITU-R Recommendations.

The Version 3 of the software (which contains a link to R&S monitoring software and uses the Google Earth) was tested and released in 2009. BR experts participated actively during the test and BDT expert delivered a presentation and demonstration on the monitoring link to the participants of the WP 1C in 2009 September.

For detailed information see: http://www.itu.int/ITU-D/tech/spectrum-management/SMS4DC.html

5   Handbooks and special publications

BDT is preparing Handbooks, Guidelines and Reports on study questions.

Some publications from 2009 related to the work of the Radiocommunication Sector:

- Guidelines for transition from analogue to digital terrestrial television broadcasting.

- Report on the ITU-D Question 11-2/2 about the terrestrial digital sound and television broadcasting technologies and systems.

- Report on ITU-D Resolution 9 (Participation of countries, particularly developing countries, in spectrum management) and Guidelines for the establishment of a system of radio-frequency usage fees.

- Supplement to Guidelines on the Smooth Transition of existing mobile networks to IMT-2000 (GST) for developing countries.

6   International Mobile Telecommunications (IMT 2000 and IMT-Advanced)

Activities for the finalization of a new version of the Guidelines on Migration from Present Mobile Communication to IMT for Developing countries have been conducted, assisting ITU-D Study Groups. ITU-D Question 18-1/2 is dealing with the implementation aspects of IMT-2000 and information-sharing on systems beyond IMT-2000 for developing countries. Maintenance of the BDT Database on IMT-2000 containing information on licensing, technologies, status of IMT-2000 deployment and implementation, Status of IMT-2000 Deployments, Estimated Future Global Mobile Growth, Economic Benefits of Rapid User Migration to IMT Mobile Broadband and other related information is going on. Coordination and sharing of information with BR has also been actively promulgated.

For more details see http://www.itu.int/ITU-D/imt-2000/index.html.

7   Improvement of national radio spectrum management practices and techniques

ITU-R continues the collaboration with ITU-D on the implementation of the ITU-D Resolution 9 "Participation of countries, particularly developing countries, in spectrum management". BDT and BR worked together on the finalization of the final report and on the modification of the Resolution 9 for the next study period.

BDT is providing assistance to developing countries in spectrum management assessments and in the implementation of the SMS4DC.

- In 2009, assistance has been provided in AFS, ASP and in the Caribbean region for spectrum assessment (see also: http://www.itu.int/ITU-D/tech/spectrum-management/assistanceSM.html)

- New SMS4DC trainers have trained for ARB and AFS region.

8   Extension of the international monitoring system to a worldwide scale

BDT is organizing workshops on monitoring and providing assistance in tendering monitoring systems. SMS4DC has also a new feature: the link to the R&S monitoring software and the link to Thales monitoring software is under testing. During the workshops BR experts also present the international monitoring system and with the new feature of the SMS4DC, administrations can contribute to it.

- In 2009, monitoring training was organized in cooperation with the MIIC China in Shanghai.

- Draft monitoring tender document has been provided to East-Timor.

9   Terrain height databases

SMS4DC contains the Globe map which has approximately 1 km resolution. Higher resolution maps can be added to the software when it is available for the users. Studies are ongoing for having a higher resolution map in the system for which ITU-R studies are very important.

10   Strengthening the regional presence in the Radiocommunication Study Group work

BDT experts are providing presentations about the activities of the Radiocommunication Sector during their missions related to spectrum management assistance. Also BR experts provided information about the BR activities during the Regional Development Forums. BDT experts are regularly providing presentations on BDT activities on spectrum management and broadcasting during BR trainings.

11   Disaster prediction, detection, mitigation and relief

BDT is providing regular assistance in case of disasters and providing information on the possible solutions for prediction detection to the administrations. BR is participating and preparing contributions associated with ITU-D Study Group activities covering disaster prediction and detection.

For more details see: http://www.itu.int/ITU-D/emergencytelecoms/index.html

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