SPECTRUM MANAGEMENT ACTIVITIES OF ITU / BDT / TND

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TECHNOLOGIES AND NETWORKS DEVELOPMENT (TND)

- **Mandate of the Unit**
- **WSIS:** Action Line C2
- **Doha 2006:** Programme 2
- **Hyderabad 2010**: Programme 1

- **Assist Member States and ITU-D Sector Members to maximize the utilization of appropriate new technologies**

- **Assists developing countries to plan, build, operate, upgrade, manage and maintain technologies applicable in their networks and services**

- **Applied research and the transfer of technological know-how**

PROGRAMME 2 (Doha 2006): Information and communication infrastructure and technologies development

Priorities are given to the following technology-related domains:

- 1.1 Spectrum management and radio monitoring
- 1.2 Broadcasting
- 1.3 Network planning
- 1.4 Mobile terrestrial communications
- 1.5 Innovative services/applications networks

PROGRAMME 1 (Hyderabad 2010): Information and communication infrastructure and technologies development

Priorities areas:

- 1 Spectrum management and radio monitoring
- 2 Broadcasting
- 3 Next Generation Networks
- 4 Mobile communications (2G, 3G, 4G, etc.)
- 5 Broadband networks
- 6 Rural communications
- 7 Outside plants

TASKS WITHIN PROGRAMME 2

- Creation of tools
- Creation of training material
- Assistance to members
- Information sharing

The Programme is carried out by various means, including symposia, workshops, conferences, seminars and expert advice.

TND Activities

- **Training**

  Technology-oriented training material developed and presented in all regions

- **Assistance to members**

  Network engineering and dimensioning (Wireline, Wireless, Mobile),

  Spectrum management

  Transition to digital broadcasting

- **Partnerships**

  United Nation agencies and other stakeholders, international and regional organisations

SPECTRUM MANAGEMENT AND BROADCASTING ACTIVITIES OF TND / 1

- Developing principles and techniques for effective spectrum management
- Advising on practical questions from developing countries on spectrum management and broadcasting
- Providing an opportunity for expert and high-level consultation for senior personnel from developing countries

SPECTRUM MANAGEMENT AND BROADCASTING ACTIVITIES OF TND / 2

- Providing information on various aspects of sound and television broadcasting systems/networks and of spectrum management systems (planning, engineering, operations, management and economics).
- Evaluating existing systems and participate in the evaluation of tenders for equipment
- Participating in seminars and courses organized at ITU Headquarters or elsewhere on specialized aspects of broadcasting and spectrum management subjects

SPECTRUM MANAGEMENT
AND RADIO MONITORING

The frequency spectrum is recognized as a "scarce resource"

- efforts to strengthen administrations' national regulatory bodies in the fields of frequency planning and assignment, spectrum management and radio monitoring.

- assisting developing countries to better plan and manage the use of their radio spectrum and establishing their national frequency management system

SPECTRUM MANAGEMENT ACTIVITY EXAMPLES / 1

- **SMS4DC (Spectrum Management Software for Developing Countries)**
  - Developed by BDT close cooperation with the ITU-R sector
  - Recent developments: monitoring link, Google Earth
  - Providing training
- **2008**
  - **SMS4DC Trainings**
    - Gambia, Bangladesh, Yemen, Lebanon
  - **Presentations**
    - Buenos Aires (BR Seminar), Johannesburg
    - Regular information to administrations, delegates
- **2009**
  - Final Approval Test of version 3 (monitoring, Google Earth)
- **ITU-D SG2, Resolution 9**

SPECTRUM MANAGEMENT ACTIVITY EXAMPLES / 2

- **Assistance to developing countries**
  - spectrum management assessments, revising legislation, spectrum pricing, coordination procedures
  - assisting in spectrum management projects
- **2008-2010**
  - spectrum management assessments
    - Benin, Gambia, Samoa, Vanuatu, East-Timor, Tonga, Gabon, Sierra-Leone, Zimbabwe, Barbados, Cambodia, Laos
  - assisting in spectrum management projects
    - Angola, Colombia
  - Satellite communication:
    - Mongolia, Sri Lanka, Bangladesh
  - Spectrum pricing
    - Kenya

BROADCASTING

Digitization is completely transforming the sound and television broadcasting sector.

- impart information to broadcasters and service providers to all aspects of digital conversion

- provide advise in the area of implementation of digital technology and development of relevant human resources

BROADCASTING ACTIVITY EXAMPLES

- **Transition from analogue to digital**
  - Roadmap project for Africa
  - ITU-D SG2 Question 11-2/2 (after WTDC-10: 11-3/2)
- **Cooperation with regional broadcasting unions**
  - **e.g. WBU, EBU, ABU, CBU**
- **Delivering seminars for capacity building**
- **Assistance to developing countries**
- **Conversion of audiovisual archives from analogue to digital**

Thank you !

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