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| **Regional Preparatory Meeting for WTDC-17 for Asia and the Pacific (RPM-ASP)**  | P:\SUP\Logos\Post-150th Anniv\ITU-logo-UNblue.jpg |
| **Bali, Indonesia, 21-23 March 2017** |
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|  | **Document** **RPM-ASP17/****27-E** |
| **7 March 2017** |
| **Original:** **English** |
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| **India (Republic of)** |
| SUGGESTED MODIFICATIONS/INPUTS TO THE PRELIMINARY DRAFT ITU-D ACTION PLAN 2018-2021 OBJECTIVE 2 OUTPUT 2.1 |

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| **Priority area:**Strategic Plan, Action Plan, Declaration**Summary:**In Section output 2.1 (refer page 15-19) under objective 2 titled – "Modern and secure telecommunication/ICT Infrastructure: Foster the development of infrastructure and services, including building confidence and security in the use of telecommunications/ICTs" it is mentioned that BDT will work to strength national regulatory bodies in frequency planning and assignment, management and monitoring. This includes spectrum-management assessments, master plans and recommended action plans for the further development of spectrum-management structures, procedures and tools, including new spectrum-sharing approaches. Since spectrum trading is also an efficient way of utilization of available spectrum with the telecom service providers, therefore, it is suggested that spectrum trading techniques should also be promoted by BDT along with other techniques/approaches. Accordingly, draft has been modified. **Expected results:**Regional Preparatory meeting (RPM) may take incorporate the suggested modification in the draft ITU-D Action Plan 2018-2021.**References:**Preliminary draft ITU-D Action Plan 2018-2021. |

**Proposal**

In Section output 2.1 (refer page 15-19) under objective 2 following changes are suggested:

*Original draft under the head implementation framework and sub head spectrum management reads as:*

Spectrum management

Wireless technology has great potential to improve our quality of life. BDT works to strengthen national regulatory bodies in frequency planning and assignment, management and monitoring.

This will involve, in particular:

* continuing to maintain, update and expand the Spectrum Management System for Developing Countries (SMS4DC) software, providing technical assistance and conducting training activities for its deployment and use;
* providing spectrum-management assessments, master plans and recommended action plans for the further development of spectrum-management structures, procedures and tools, including new spectrum-sharing approaches;
* providing assistance on spectrum fee regimes, including direct assistance in the establishment of such regimes; in the harmonization of regional spectrum allocations, including coordination procedures in border areas; and in the optimization and cost-effective use of spectrum-monitoring systems and networks.

*Modified draft will be as follows:*

**"Spectrum management**

Wireless technology has great potential to improve our quality of life. BDT works to strengthen national regulatory bodies in frequency planning and assignment, management and monitoring.

This will involve, in particular:

* continuing to maintain, update and expand the Spectrum Management System for Developing Countries (SMS4DC) software, providing technical assistance and conducting training activities for its deployment and use;
* providing spectrum-management assessments, master plans and recommended action plans for the further development of spectrum-management structures, procedures and tools, including new spectrum-sharing approaches and spectrum trading techniques so that the telecom services providers, having spectrum available with them, can trade it in secondary markets and are able to utilise the available spectrum optimally and efficiently;
* providing assistance on spectrum fee regimes, including direct assistance in the establishment of such regimes; in the harmonization of regional spectrum allocations, including coordination procedures in border areas; and in the optimization and cost-effective use of spectrum-monitoring systems and networks."

*The modified Preliminary draft ITU-D Action Plan 2018-2021 is attached in track change mode in the word format.*

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| Suggested corrections/inputs in Preliminary Draft ITU-D Action Plan 2018-2021 |

Objective 2 – Modern and secure telecommunication/ICT Infrastructure: Foster the development of infrastructure and services, including building confidence and security in the use of telecommunications/ICTs

In Section output 2.1 (refer page 15-19) under objective 2 following changes are suggested.

Output 2.1

Products and services on telecommunication/ICT infrastructure and services, including broadband and broadcasting, bridging the digital standardization gap, conformance and interoperability and spectrum management

1. Background

Infrastructure is central for enabling universal, sustainable, ubiquitous and affordable access to ICTs and services for all.

The ICT sector is characterized by rapid technological change, and by convergence of technological platforms for telecommunications1, information delivery, broadcasting and computing. The deployment of common broadband, including mobile, technology and network infrastructures for multiple telecommunication services and applications and the evolution to all IP-based wireless and wired next-generation networks (NGNs) and their evolutions open up opportunities but also imply significant challenges for developing countries

Communications no longer just connect people: the Internet of Things (IoT) as well as Smart Grids concepts are fast becoming a reality.

Also notable is the worldwide transition from analogue to digital broadcasting, enabling more efficient use of spectrum and higher quality audio and video delivery.

1. Implementation framework

**Programme: Telecommunication/ICT network infrastructure and services**

The objective of this programme is to assist ITU Member States and ITU D Sector Members and Associates in maximizing the use of appropriate new technologies for the development of their information and communication infrastructures and services and building global Telecommunication/ICT infrastructure though partnership, bridging the digital standardization gap (BSG), Conformity and Interoperability and Spectrum Management programme.

Main areas of work include:

**Next-generation networks including ICT Networks for Smart Grids**

The architecture of information and communication infrastructures is continuously changing to accommodate new requirements for a growing number of ICT-enabled services and applications, along with evolution to next-generation networks (NGN) and further evolutions, including NGN evolution and future networks.

Activities will be focused on:

* providing assistance to Member States on deployment and migration of their existing networks to NGN and further evolutions;
* assisting countries in planning the introduction and continuous adoption of new network elements and applications by making use of specialized planning tools;
* assisting countries in the digitization of analogue networks and in applying affordable wired and wireless technologies, including interoperability of ICT infrastructure;
* assisting countries in maximizing the use of appropriate new technologies for the development of the appropriate telecommunication / ICT networks including Smart Grids infrastructure and services;
* providing assistance to Member States on deployment of Next-generation ICT networks (NGN) and further evolutions into Smart Grids.

**Broadband networks: Wired and wireless technologies, including IMT**

The introduction of different broadband technologies, are providing high bandwidth and connectivity, It is therefore important to provide developing countries with an understanding of the different technologies available for broadband using both wired and wireless technologies for terrestrial and satellite telecommunications, including International Mobile Telecommunications (IMT).

Activities will be focused on:

* providing assistance to developing countries in their medium- to long-term planning for the implementation and development of national ICT broadband network plans;
* collecting and disseminating information and analyses on the current status of broadband backbone and submarine cables, in order to assist members in network planning, avoiding duplication of efforts and resources and disseminating information on different countries' experiences with the use of different technologies and services. This is including the creation of an online Interactive Transmission Map related to national backbone worldwide connectivity (Optical Fibres, Microwaves, Submarine Cables, Satellite Earth Stations) as well as of other key metrics of the ICT sector;
* promoting Internet exchange points (IXPs) as a long-term solution to advance connectivity, and supporting ITU members with deployment of/transition to IPv6-based networks and applications, in collaboration with relevant expert organizations.

**Rural communications**

Rural populations will need to be provided with telephony and broadband access, by connecting remote areas to the broadband core networks. Choosing efficient, cost-effective and fast deployment technologies – whether wired or wireless networks – will improve accessibility.

The focus in this area can be summarized as follows:

* providing information on suitable technologies for access, backhaul and source of power supply to bring telecommunications to rural, unserved and underserved areas;
* implementing projects on public/community broadband access points focusing on the provision of ICT services and applications through suitable technologies, including satellite, and business models which achieve financial and operational sustainability;
* disseminating information and analyses of the latest technologies and best practices through methods such as publications, symposia, seminars and workshops, taking into account the outputs of related ITU D study group activities.

**Bridging the Standardization Gap**

Increasing the knowledge and capacity of developing countries for the effective application/implementation of standards (Recommendations) developed in ITU T and ITU R is fundamental for bridging the standardization gap.

Good and liable standards help to improve the establishment of regional and national set of technical requirements and ultimately contributes to access safe, interoperable and affordable ICT equipment/systems contributing reducing the digital divide.

The focus in this area will be:

* to promote and coordinate activities in the regions to support the implementation of the relevant standards tailored to developing country needs;
* organize, coordinate and provide necessary assistance to the activities of standardization Committees in the regions also through the organization of capacity building events and;
* provide the necessary assistance to the regional groups of ITU study groups;
* provide assistance to the regional telecommunication organizations for the setting-up and management of regional standardization bodies.

**Conformity and interoperability (C&I)**

Availability of high-performing and interoperable products accelerates widespread deployment of infrastructure, technologies and associated services, granting people access to the information society regardless of location or choice of device.

Conformity with international standards and interoperability, i.e. the ability of equipment from different vendors to successfully communicate between them, can help avoid costly market battles over different technologies.

The focus of BDT on this area will be as follows:

* cooperation with international organizations, industry and Conformity Assessment Bodies (CABs) as well as Accreditation Bodies, considered as key element for the success of the ITU C&I programme;
* educating technicians, policy-makers and businesses on the importance of C&I procedures and testing, mobilizing the resources required to implement regional and national C&I programmes, in cooperation with other relevant regional and international organizations;
* providing assistance to developing countries in the establishment of national, regional or subregional C&I programmes, and conducting assessment studies for facilitating the establishment of common conformance and interoperability regimes at national, regional and subregional level through the implementation of Mutual recognition agreements/arrangements (MRAs);
* preparing guidelines on this process which outline the technical and human resources required and the international standards to be applied.

**Broadcasting**

The objective of BDT work in broadcasting is to enable developing countries to achieve smooth migration from analogue to digital broadcasting and to follow the post-transition activities, such as the introduction of new broadcasting services and allocation of the digital dividend.

In particular, activities will be focused on:

* providing assistance on policy and regulatory frameworks for digital terrestrial broadcasting, including frequency planning and optimization of spectrum use; digital broadcasting guidelines and master plans for the transition from analogue to digital broadcasting and new broadcasting services and technologies;
* organizing regional meetings between ITU members on the use of spectrum for broadcasting services and other services.

**Spectrum management**

Wireless technology has great potential to improve our quality of life. BDT works to strengthen national regulatory bodies in frequency planning and assignment, management and monitoring.

This will involve, in particular:

* continuing to maintain, update and expand the Spectrum Management System for Developing Countries (SMS4DC) software, providing technical assistance and conducting training activities for its deployment and use;
* providing spectrum-management assessments, master plans and recommended action plans for the further development of spectrum-management structures, procedures and tools, including new spectrum-sharing approaches and spectrum trading techniques so that the telecom services providers, having spectrum available with them, can trade it in secondary markets and are able to utilise the available spectrum optimally and efficiently;
* providing assistance on spectrum fee regimes, including direct assistance in the establishment of such regimes; in the harmonization of regional spectrum allocations, including coordination procedures in border areas; and in the optimization and cost-effective use of spectrum-monitoring systems and networks.

**Relevant regional initiatives**

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| Region |
| **AFR Region** |
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| **AMS region** |
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| **ARB Region** |
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| **ASP Region** |
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| **CIS Region** |
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**Study group Questions**

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| Study Group X Questions |
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1. References to WTDC Resolutions, WSIS Action Lines and Sustainable Development Goals

**PP and WTDC resolutions and recommendations**

The implementation of PP Resolutions 32, 33, 34, 64, 101, 123, 125, 126, 127, 130, 131, 127, 135, 137, 139, 140, 159, 160, 161, 176, 177, 180, 188, 193, 197, 199, 200, 203 and WTDC Resolutions 9, 10 11, 15, 17, 18, 20, 21, 30, 32, 33, 35, 37, 47, 50, 52, 57, and 62 will support Output 2.1 and will contribute to the achievement of Outcome 2.1

**WSIS action lines**

The implementation of the WSIS Action Lines C1, C2, C3, C9 and C11 will support the Output 2.1 and will contribute to the achievement of Outcome 2.1

**Sustainable Development Goals and Targets**

Output 2.1 will contribute to the achievement of the following UN SDGs: 1 (targets 1.4, 1.5), 3 (targets 3.8, 3.d), 5 (target 5.b), 8 (target 8.2), 9 (targets 9.1, 9.a, 9.c), 10 (target 10.c), 11 (targets 11.5, 11.b), 16 (target 16.10), 17 (targets 17.6 and 17.7)

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