Telecommunication Development Sector

Implementation report
January – December 2017

Implementation of the:
Strategic plan
Operational plan
Financial plan

ITU-D Mission

To foster international cooperation and solidarity in the delivery of technical assistance and in the creation, development and improvement of telecommunication/information and communication technology (ICT) equipment and networks in developing countries. ITU-D is required to discharge the Union's dual responsibility as a United Nations specialized agency and executing agency for implementing projects under the United Nations development system or other funding arrangements, so as to facilitate and enhance telecommunication/ ICT development by offering, organizing and coordinating technical cooperation and assistance activities.

Goal

The strategic goal of the ITU Telecommunication Development Sector (ITU-D) is threefold, and includes:

- To promote the availability of infrastructure and foster an enabling environment for telecommunication/ICT infrastructure development and its use in a safe and secure manner
- To provide assistance to developing countries in bridging the digital divide by achieving broader telecommunication/ICT-enabled socio-economic development
- To expand the benefits of the information society to the membership in cooperation with public and private stakeholders, and to promote the integration of the use of telecommunications/ICTs into the broader economy and society as drivers of development, innovation, well-being, growth and productivity globally.

Objectives

Objectives 1:
Foster international cooperation on telecommunication/ICT development issues

Objective 2:
Foster an enabling environment for ICT development and foster the development of telecommunication/ICT networks as well as relevant applications and services, including bridging the standardization gap

Objective 3:
Enhance confidence and security in the use of telecommunications/ICTs, and roll-out of relevant applications and services

Objective 4:
Build human and institutional capacity, provide data and statistics, promote digital inclusion and provide concentrated assistance to countries in special need

Objective 5:
Enhance environmental protection, climate change mitigation and adaptation, and disaster management efforts through telecommunication/ICTs

Outputs

1.1 WTDC

1.2 Regional Preparatory Meetings (RPMs)

1.3 Telecommunication Development Advisory Group (TDAG)

1.4 Study Groups

2.1 Policy and regulatory frameworks

2.2 Telecommunications/ICT networks, including conformance and interoperability and BSG

2.3 Innovation and Partnership

3.1 Building confidence and security in the use of ICTs

3.2 ICT applications and services

4.1 Capacity building

4.2 Telecommunication/ICT statistics

4.3 Digital inclusion of people with specific needs

4.4 Concentrated assistance to LDCs, SIDSs and LLDCs

5.1 ICTs and Climate change adaptation and Mitigation

5.2 Emergency telecommunications

Activities

Creation of tools and guidelines

Handling of special needs

Project management and coordination

Financial, operational and strategic planning, control and reporting

Database and web site management

Documentation (preparation, writing and editing)

Assisting members and related tasks

Research and analysis

Sharing information and related tasks

Preparation and delivery of training

Overview of ITU-D Strategic and Operational Plan Implementation

The following is a summary of results achieved, for the period January to December 2017, on the overall implementation of the five objectives of the ITU-D Strategic and Operational Plan.

Five ITU-D Objectives

Objective 1

"Foster international cooperation on telecommunication/ICT development issues"

The results achieved during the period of January to December 2017 are as follows:

1.1 World Telecommunication Development Conference (WTDC)

The seventh WTDC (WTDC-17) of ITU was held from 9 to 20 October 2017 in Buenos Aires, Argentina, under the theme of "ICT for Sustainable Development Goals". It attracted 1368 participants from 134 Member States, 62 ITU-D Sector Members, 10 Academia, observers and the United Nations and its Specialized Agencies. The conference opened with a welcoming video message by Mr António Guterres, United Nations Secretary-General. During the first three days of WTDC-17, four plenary sessions were dedicated to the High-Level Segment during which 53 speakers addressed the conference, including the key note statement from Dr Tedros, Director General of WHO, provided by a WHO representative in Buenos Aires. Side events on 10 most relevant topics were held during the WTDC-17. In addition, 2 Ministerial Roundtables and a gala event were organized to celebrate the 25th Anniversary of ITU-D. All former Directors of the Telecommunication Development Bureau (BDT) were present in the celebrations. WTDC-17 prepared the way forward for ITU-D and BDT for the upcoming period.

The main outcomes of the conference were:

- Adopted the Buenos Aires Declaration, highlighting the main conclusions and priorities established by the conference, and reinforcing the political support towards ITU's development mission and strategic objectives;

- Agreed on the ITU-D contribution to the strategic plan of ITU for 2020-2023, to be considered at the next plenipotentiary conference to be held in in Dubai, UAE in 2018;

- Adopted the Buenos Aires Action Plan (BaAP) that aligns the work of the ITU-D with the strategic objectives of ITU so as to assist countries in harnessing the full benefits of ICTs.

Moreover, WTDC-17 adopted five regional initiatives per development region. It also adopted the composition of the TDAG Bureau and appointed the TDAG Chairman and vice-chairmen. The Conference approved 42 revised and 4 new Resolutions and abrogated 6 Resolutions, 5 of which were merged with other existing ones. WTDC-17 adopted 7 Questions each for Study Groups 1 and 2. Finally, the Conference

> *ITU's duties and responsibilities in the Telecommunication development sphere are consolidated in the Telecommunication Development Sector (ITU-D)*

noted the report of the Committee 2 on Budget control, which includes the financial implications of the implementation of the regional initiatives for the year 2018-2021.

WTDC	Resolutions 1, 2, 5, 30, 33, 37, 50, 53, 59, 81, 82
PP Resolutions	PP Decisions 5, 13 PP Resolutions 25, 71, 72, 77, 111, 131, 133, 135, 139, 140, 151, 154, 165, 167
Council	Resolution 1372
WSIS Action Line	WSIS Action Lines C1 and C11
Contributing to SDG Targets	SDGs: 1, 3, (target 3.d), 5, 10, 16 (targets 16.5, 16.6, 16.8), 17 (targets 17.9, 17.16, 17.17, 17.18, 17.19)

1.2   Regional preparatory meetings (RPMs)

In line with WTDC Resolution 31 (Rev. Dubai, 2014), BDT organized one regional preparatory meeting (RPM) per region for WTDC-17, each preceded by a one-day meeting of the regional development forum (RDF). In 2016, the RPMs were organized in the Kyrgyz Republic, for the Commonwealth of Independent States (CIS) and in Rwanda, for Africa. In 2017, the remaining RPMs were organized in Sudan, for the Arab States, in Paraguay, for the Americas, in Indonesia, for Asia and the Pacific, and in Lithuania, for Europe.

All six RPMs were held with the objective of identifying priorities at the regional level for the development of telecommunications and information and communication technologies (ICTs). They gave careful consideration to the results of the implementation of the Dubai Action Plan since 2014 and mainly focused their discussions on the priority issues, topics, Questions, and regional initiatives included in the Buenos Aires Action Plan (BaAP). All RPMs recognized that ITU-D regional initiatives constituted an effective mechanism for fostering implementation of the WSIS outcomes and 2030 Agenda for Sustainable Development, including the achievement of the Sustainable Development Goals.

In addition, all RPMs arrived at a set of proposals on priority issues for their respective regions that served as a basis for the formulation of contributions to WTDC-17.

The following key documents were submitted to and reviewed by all six RPMs:

- Preliminary Draft ITU-D Contribution to the ITU Strategic Plan for 2020-2023;
- Preliminary Draft ITU-D Action Plan;
- Preliminary Draft WTDC-17 Declaration;
- Rules of Procedure of ITU-D (WTDC Resolution 1);
- Report on streamlining WTDC Resolutions.

After TDAG-17, WTDC-17 preparatory meetings were organized by the following regional groups: African Telecommunications Union (ATU), Inter-American Telecommunication Commission (CITEL), League of Arab States (LAS), Asia-Pacific Telecommunity (APT), Regional Commonwealth in the Field of Communications (RCC), and European Conference of Postal and Telecommunications Administrations (CEPT).

WTDC	*Resolutions 1, 5, 17, 25, 30, 31, 33, 37, 48, 50, 59, 61, 81*
PP Resolutions	*PP Decisions 5, 13* *PP Resolutions 25, 71, 111, 135, 140, 165, 167*
WSIS Action Line	*WSIS Action Lines C1 and C11*
Contributing to SDG Targets	*SDGs: 1, 3, (target 3.d), 5, 10, 16 (targets 16.5, 16.6, 16.8), 17 (targets 17.9, 17.16, 17.17, 17.18, 17.19)*

1.3   Telecommunication Development Advisory Group (TDAG)

The 22nd meeting of TDAG took place from 9 to 12 May 2017 at ITU headquarters in Geneva. It was the last meeting before WTDC-17. The meeting of TDAG addressed the following broad range of subjects:

- Preparations for WTDC-17, including an update on the preparations for the Conference, (ii) the report of the Regional Preparatory Meetings Coordination Meeting, (iii) the structure of WTDC-17, (iv) the ITU-D Contribution to the Draft ITU Strategic Plan, (v) the Draft ITU-D Action Plan, and (vi) the Draft WTDC-17 Declaration;

- Outcomes of WTSA-16 related to the work of ITU-D;

- Implementation of the ITU-D Strategic Plan and Operational Plan 2016, including regional initiatives;

- ITU-D four-year rolling Operational Plan 2018-2021, including a progress report by the TDAG Correspondence Group on the Strategic Plan, Operational Plan and Declaration (CG-SPOPD);

- ITU-D contribution to the implementation of the WSIS Plan of Action, including the United Nations General Assembly Overall Review and the Sustainable Development Goals;

- Working methods and Rules of Procedure of ITU-D (WTDC Resolution 1), including a report by the TDAG Correspondence on Rules of Procedure of ITU-D (CG-Res1);

- Streamlining WTDC Resolutions;

- ITU-D 25th Anniversary celebrations;

- Collaboration with the other Sectors, including a progress report on the work of the Inter-Sector Coordination Team on Issues of Mutual Interest;

- ITU-D Study Group-related matters;

- Membership, partnership, and innovation-related matters.

The following additional meetings took place during the TDAG week:

- Correspondence Group on Rules of Procedure of the ITU Telecommunication Development Sector (ITU-D) (WTDC Resolution 1) (CG-Res1);

- Correspondence Group on the Strategic Plan, Operational Plan, and Declaration (CG-SPOPD);

- Correspondence Group on Streamlining WTDC Resolutions (CG-SR);

- Inter-Sector Coordination Team on Issues of Mutual Interest.

Some of the main outcomes of TDAG were as follows:

- In relation to the ITU-D Contribution to the Draft ITU Strategic Plan, TDAG drew attention to documents TDAG17-22/7, TDAG17-22/8, and TDAG17-22/9, which contained the compilation of outcomes by RPMs and contributions to TDAG-17, and invited members to use these documents in their preparation for WTDC-17.

- In relation to the Working methods and Rules of Procedure of ITU-D (WTDC Resolution 1), TDAG advised members to use the compilation document TDAG17-22/10 in the preparation for WTDC.

- In relation to streamlining WTDC Resolutions, TDAG supported the report of CG-SR and appreciated the proposal to reduce the number of study Questions and efforts to avoid duplications.

WTDC	Resolutions 1, 5, 17, 24, 30, 33, 37, 50, 59, 61, 81
PP Resolutions	PP Decisions 5, 13 PP Resolutions 25, 71, 135, 140, 151, 154, 165, 166, 167
Council	Resolution 1372
WSIS Action Line	WSIS Action Lines C1 and C11
Contributing to SDG Targets	SDGs: 1, 3, (target 3.d), 5, 10, 16 (targets 16.5, 16.6, 16.8), 17 (targets 17.9, 17.16, 17.17, 17.18, 17.19)

1.4   Study Groups

The ITU-D Study Groups held their third set of Rapporteur Group meetings for the 2014-2017 study period in January 2017. The SG1 Rapporteur Groups, including the Joint ITU-D/ITU-R Group for WTDC Resolution 9, met in Geneva from 9 to 18 January 2017, followed by the SG2 Rapporteur Group meetings from 18 to 27 January 2017. The Rapporteur Group meetings were an important milestone towards the completion of the expected deliverables for all study Questions for the study period. Significant progress was made on the expected deliverables, and the groups also brainstormed on possible future directions and related activities of their specific study Questions. These exchanges on the possible future of the study Questions were useful as members debated and formulated proposals on the same matters at RPMs and at WTDC-17.

- In conjunction with the Rapporteur Group meeting for Question 3/2 (cybersecurity), an open workshop was held on the topic of "Cybersecurity and risk assessments in practice" on 26 January 2017. Experts gathered to share their knowledge and experience on the practical assessment of cyber risks at the national level, in large organizations, and in critical infrastructure sectors. Supply chain risks and the role of standards for managing cyber risks in organizations were also debated.

- The final ITU-D Study Group 1 and 2 meetings for the study cycle took place in Geneva from 27 to 31 March 2017 and from 3 to 7 April 2017, respectively. The SG1 and SG2 meetings agreed on the Final Reports containing the deliverables called for by WTDC-14 for all SG1 and SG2 Questions. The groups also continued discussing the future of the existing study Questions, which in turn served to inform Member States as they prepared for WTDC-17.

- The SG1 and SG2 meeting dates for the next study period (2018-2021) were also considered.

- Sponsorship opportunities were made available for activities, such as exhibits, side and social events, around all ITU-D SG1 and SG2 meetings, including Rapporteur Group meetings in 2017.

- The call to Member States to nominate candidates for the positions of chairmen and vice-chairmen of ITU-D study groups for the next study period (2018-2021) was launched in May 2017.

- A total of 18 publications, available in the six languages, were finalized for WTDC-17 to display the outputs gathering the results of the studies and surveys conducted and reflecting the inputs received during the 2014-2017 study period.

- WTDC-17 reinforced the role of the ITU-D study groups to provide membership with a platform to share experiences, present ideas, exchange views, and achieve consensus on strategies to address telecommunication/ICT priorities. The Conference also appointed the new management team made up of two Chairmen and 23 Vice-Chairmen from the six regions. As to the scope of the ITU-D study groups for the new cycle 2018-2021, through its 14 new study Questions, ITU-D SG1 will continue to focus on the "Enabling environment for the development of telecommunications/ICTs" and SG2 will concentrate on "ICT services and applications for the promotion of sustainable development".

- The call to Member States, Sector Members, Associates and Academia to nominate candidates for the positions of rapporteurs and vice-rapporteurs for the 14 new study Questions was launched in November 2017.

WTDC	Resolutions 1, 2, 5, 9, 17, 21, 30, 33, 50, 59, 61, 80, 81
ITU-D	Recommendations 15, 16, 17, 19, 20, 21, 22
PP Resolutions	PP Decisions 5, 13 PP Resolutions 25, 71, 133, 135, 140, 154, 165, 166, 167
Council	Resolution 1372
WSIS Action Line	WSIS Action Lines C1 and C11
Contributing to SDG Targets	SDGs: 1 (target 1.b), 3 (target 3.d), 5, 10, 16 (targets 16.5, 16.6, 16.10), 17 (targets 17.9, 17.16, 17.17, 17.18)

Objective 2

"Foster an enabling environment for ICT development and foster the development of telecommunication/ICT networks as well as relevant applications and services, including bridging the standardization gap"

The results achieved during the period of January to December 2017 are as follows:

2.1   Policy and regulatory frameworks

- ITU-D continues to share data, research, and analysis and publications on cutting-edge policy, regulatory, and economic issues.
    - The 2017 Global Regulatory Outlook was launched in Q1 2017 (executive summary available at http://www.itu.int/en/ITU-D/Regulatory-Market/Pages/Outlook/2017.aspx) - a first report in a new annual series tracking market and regulatory trends in the ICT sector and their implications across the economy.
    - A new report on Maximizing availability of international connectivity in developing countries: Strategies to ensure global digital inclusion as well as a discussion paper on the social and economic impact of digital transformation on the economy were released in 2017.
    - Reports and White Papers analyzing new business models in a digital economy have been published.
    - Reports have also been prepared on collaborative regulation for digital financial inclusion in Mongolia and Sudan, and a new project launched under the Financial Inclusion Global Initiative in three countries for the implementation at national level to leverage telecommunications/ICTs for Digital Financial Inclusion.
    - An ITU Manual for QoS Regulation was prepared with input from ITU-T.

- – Strategic Guidelines on International Mobile Roaming were prepared in collaboration with and with significant input from regional regulatory and other international and regional associations.
  - – A new series of reports on Artificial Intelligence for Development is being prepared.
  - – Inputs were provided to study group questions, in particular relating to ITU-D Study Group 1/1, 3/1, 4/1 and 6/1.

- Enhanced Knowledge-exchange tools and platforms to facilitate access to data (ICT-Eye, ICT Regulation Toolkit, the ICT regulatory knowledge centre). Access to the ICT Regulatory Tracker has been facilitated through its release on a new online micro-site, available here: (https://www.itu.int/net4/itu-d/irt/#/tracker-by-country/regulatory-tracker/2015);

- Gathering and publishing key regulatory and tariff data to facilitate evidence-based decision making: ITU-D has developed the ICT Regulatory Tracker, a unique data-based tool that covers over 186 countries for a period of nine years, showcasing national, regional, and global regulatory progress. The 2015 edition of the Tracker was updated, with the 2016 data being integrated and to be published in November. The 2017 edition of the annual ITU-D questionnaire on regulatory and policy issues was sent out to Membership to help track the evolution of ICT policies and regulation.

- Fostering key strategic dialogues, including the Global Symposium for Regulators, and delivering best practice guidelines on key regulatory and policy issues and approaches: Key strategic dialogues on International Mobile Roaming were pursued, draft strategic guidelines were shared, and the 17th edition of the Global Symposium for Regulators (GSR) and its pre-events (the Global Dialogue on Digital Financial Inclusion and the Regulatory Associations meeting and Private sector Chief Regulatory Officers meeting) were held from 11 to 14 July in Nassau, the Bahamas. More than 400 participants from some 60 countries, including government ministers and high level international policy makers from the world's information and communication technology (ICT) regulatory authorities and private sector executives attended the 17th edition of the ITU Global Symposium for Regulators (GSR-17).

- As the sole facilitator of WSIS Action Line C6, BDT is leading activities related to the enabling environment for investment and growth in the ICT sector and beyond. A facilitation meeting on the Regulatory Wheel of Fire: Collaborative Regulation to Leverage ICTs for SDGs was held during the WSIS Forum 2017. Preparations are underway for the WSIS Forum 2018.

- Assistance to Antigua & Barbuda in developing policy and regulatory frameworks and recommending an organizational, functional, and governance structure for the Establishment of An Independent Regulatory Authority for Antigua and Barbuda in accordance with newly enacted legislation.

- The study and report of the Broadband strategy for Burundi have been completed and validated in Yaoundé at the end of January 2017 in the ITU Area Office premises in the presence of 6 delegates from the administration of Burundi.

- BDT Forum on Economics and Finance in ICTs/ Telecommunication for Africa and the TSB-SG3 Regional meeting for Africa were held back-to-back on 30 January to 2 February 2017 at Victoria Falls, Zimbabwe. These meetings were attended by 91 participants from 25 countries and 5 institutions, namely ATU, SADC, ESMT and UPU. The Forum provided a platform at which economical and financial issues affecting the sector in different countries were discussed, and possible solutions were considered.

- International Mobile Roaming (IMR) Cost Model training for the SADC region was held on 29 March 2017 in Durban, South Africa, and it was attended by 10 SADC Member States and over 60 delegates.

- ITU Regional Forum on Consumer Information, Protection, and Rights for Africa 2017 was held in Cotonou, Benin on 14-16 March 2017 with 131 participants from 21 countries, including the ATU, GSMA and ESMT.

- Validation Meeting for the Broadband Universal Access Study and Household Survey for the Kingdom of Lesotho was held on 23 March, 2017 in Maseru, Lesotho. The final report provides policy and strategic guidance for broadband development in the Kingdom.

- The review of the National Broadband Policy and Associated Strategic Implementation Plan for Achieving a Digital Economy for the Republic of Namibia was prepared with the technical support from the ITU to align it with the new "Guidelines for the structure of a public policy document" released by the Government of Namibia at the end of 2016. The review was finalized and fully accepted by the Government of Namibia.

- The ITU Regional Economic and Financial Forum of Telecommunications/ICTs, organized by the ITU Telecommunication Development Bureau (BDT) in close collaboration with the Federal Telecommunications Institute (IFT) of Mexico, was to be held in Mexico City, Mexico on 20-21 September 2017. Due to an event of force majeure in Mexico (earthquake on 19th September), this activity had to be suspended and the determination of the new date is currently coordinated.

- Knowledge and best practices on the contribution of ICTs to the UN SDGs 2030 were shared during the ITU/BDT Regional Economic and Financial Forum of Telecommunications/ICTs for Arab States held in Nouakchott, Mauritania on 17-18 May 2017. The Forum was attended by 85 participants from 6 countries.

- Expert Group Meeting on Smart Grids, held on 28 February 2017 within the framework of the ITU Regional Initiative for Europe on Broadband, gathered more than 30 telecom and energy stakeholders and provided foundations for a study on smart grids to be released in Q2/2017.

- ITU Regional Forum for CIS and Europe on Innovation Capabilities and Growth of ICT Startups raised awareness of ITU activities in the regions, including the implementation of Regional Initiatives. This forum was attended by 54 participants from 12 countries (Europe and CIS).

- Completed a scoping mission on 17-28 September 2017 for the country implementation for Egypt and from 13 to 17 November in Mexico within the framework of the Financial Inclusion Global Initiative in collaboration with the World Bank and the Bill and Melinda Gates Foundation.

- ITU-GSMA Asia-Pacific Digital Societies Policy Forum 2017, held in Bangkok, Thailand on 8-10 May 2017, welcomed about 160 participants from over 20 countries in the ASP region. The forum addressed emerging digital services towards the age of 5G.

- The International Satellite Symposium 2017 was held in Bangkok, Thailand during 31 August to 1 September 2017 and was preceded by a one-day workshop. The Symposium was hosted and co-organized with the NBTC Thailand with support from the Australian Government and partners. About 90 people from over 20 countries attended the Workshop, and over 170 people from more than 30 countries participated in the Symposium.

- Technical assistance was provided to Sri-Lanka to develop technical RFP for an island-wide centralized automated RF monitoring system.

- Enhanced capability of the Ministry of Information and Communication of Bhutan on Consumer Protection Framework for ICT Sector on 18–21 July 2017.

- ITU - TRAI Asia-Pacific Regulators' Roundtable and ITU-TRAI International Training Program were held on 21-25 August 2017 in New Delhi, India, resulting in improved policy and regulatory capacity and skills of participants as follows:
  - 50 participants from 24 countries for the Regulators Roundtable
  - 94 participants from 20 countries for the International Training Program
  - Enhanced regulatory cooperation and consensus on key regulatory issues through Outcome Report.

- Enhanced awareness and regulatory collaboration amongst ICT and Financial stakeholders in Mongolia through a workshop and study that focused on cross-sectoral policy and regulatory collaboration in the area of digital financial services and digital financial inclusion

- The ITU Asia Pacific Centre of Excellence Training on "Collaborative Cross-sectoral Regulatory Mechanisms and Competition Analysis in Digital Economy" (7-11 August 2017, Bangkok), organized by the ITU, the National Broadcasting and Telecommunications Commission (NBTC) of Thailand, and the Ministry of Digital Economy and Society (MDES), built the capacity of 36 participants representing 13 countries across Asia-Pacific (excluding 5 presenters).

- The ITU partnered with the Infocomm Media Development Authority of Singapore to build capacity of 16 participants from 16 countries in the area of regulation while sharing the Singapore Experience.

- Helped CIS Member-States to understand and discuss best practices of policy making and regulation to enable digital economy at an ITU Regional Workshop, which was held in Moscow, Russia and attracted 49 participants from 12 countries.

- The ITU Asia-Pacific CoE workshop on "Implementing E-application strategies for telecom sector growth in the Pacific" organized in partnership with PITA, DoC (FIJI), DoCA (Australia) and MDES (Thailand) built capacity of 65 participants from 13 countries in the area of telecom strategy, e-applications and platform development with specific reference to the Pacific.

- Publishing of two Case Studies on the Digital Ecosystem and the ICT massification in Bolivia and Panamá, which provide strategic recommendations to support these countries to identify the main paths for the development of the sector, especially in the definition of public policies and initiatives that promote the deployment of broadband infrastructure, investments in the sector and innovation.

- Preparation of the Case Study on the Digital Ecosystem and the ICT massification in Nicaragua, which will be published in 2018.

- Publishing of the study on Measuring the Independency of the Regulatory Agencies using the Gilardi Index for the REGULATEL countries members.

WTDC	Resolutions 1, 9, 17, 21, 23, 30, 32, 43, 48, 62
PP Resolutions	PP Decisions 5, 13 PP Resolutions 25, 71, 102, 135, 138, 154, 165
WCIT	Resolution 3
WSIS Action Line	WSIS Action Lines C6 of the Geneva Plan of Action and §§ 112-119 of the Tunis Agenda for the Information Society

Contributing to SDG Targets	*SDGs: 1 (targets 1.1, 1.2, 1.3, 1.4, 1.5, 1.a, 1.b), 2 (targets 2.3, 2.4, 2.c), 3 (targets 3.8, 3.d), 4 (targets 4.3, 4.4, 4.5, 4.7, 4.c), 5 (targets 5.1, 5.b), 7 (targets 7.a, 7.b), 8 (targets 8.2, 8.3, 8.9, 8.10), 9 (targets 9.1, 9.3, 9.5, 9.a, 9.c), 10 (targets 10.3, 10.c), 11 (target 11.1), 12 (targets 12.8, 12.b), 13 (target 13.3), 16 (targets 16.6, 16.7, 16.8, 16.10, 16.b), 17 (targets 17.6, 17.8, 17.9, 17.14, 17.16, 17.17)*

2.2 Telecommunication/ICT networks, including conformance and interoperability and bridging the standardization gap

- Enhancements to the ITU ICT Infrastructure Maps (http://itu.int/go/Maps). The ITU Maps presents critical ICT infrastructure on info highways broadband backbone (e.g. optical fiber, microwave links, satellite earth stations, and submarine cables). The Map interface is going to be renewed to allow new data visualizations and analytics; a Request for Proposal has been realized and procurement process was concluded in September, the following have been provided: graphical improvements proposals, wireframes for smartphone and tablet applications, dashboard and statistics, video and demonstrations for events are still under development. At the time of this reporting, the Map presents information from 406 operator networks and 19,170 nodes worldwide. The research on the transmission links has reached 13,010,406 km of routes, of which 3,101,414 km of info-routes have been imported to the Map. A New webpage, additional layers (IXPs in collaboration with Telegeography) and 3 interactive dashboards (distance, population reach, and hub analysis) have been added, submarine cables and satellite earth station information have been updated. The addition of three additional infrastructure layers on mobile coverage (2G, 3G, and 4G) will be concluded by the end of the year.

- As the sole facilitator of WSIS Action Line C2, BDT is leading activities on Information and Communication Infrastructure focusing on the achievements of the SDG 9 (infrastructure, industry and innovation). During the WSIS Forum 2017 two major events, the Workshop on mapping infrastructure Gaps and the Action Line C2 Facilitation Meeting, took place with around 40 participants and 6 presentations in each event.

- A revision of the report on the Implementation of Evolving Telecommunication/ICT Infrastructure for Developing Countries: Technical, Economic and Policy Aspects were developed and shared with all participants of the ITU-D Study Groups. This revision added to essential telecommunication/ICT infrastructure and their technologies information on IoT standardization process and concepts, spectrum, and broadcasting. The report makes reference to more than 200 ITU publications (e.g. ITU-D Study Group Reports, ITU Guidelines, and ITU Recommendations from all Sectors). A Report on ICT Infrastructure mapping to the achievement of SDG 9 is ongoing.

- Until the beginning of 2017 Spectrum Management Master Plans were provided within the framework of an ITU-Ministry of Science, ICT & Future Planning (MSIP) (Republic of Korea) project for countries in ASP (Brunei, Bangladesh, Pakistan, Thailand, Fiji, and Samoa) and in the Caribbean (Grenada, Jamaica and Saint Vincent and the Grenadines).

- Basic Spectrum Management System Project was launched for developing countries' spectrum management framework setup. Assistance to Comoros and Bolivia is ongoing.

- New version for SMS4DC, 5.1, was launched and further development of SMS4DC project has started to upgrade administrative and radio communication engineering function.

- Regional Seminar for Europe and CIS on "Spectrum Management and Broadcasting was held with around 70 participants" in Rome on 29-31 May 2017. In 9 sessions, 45 presentations were delivered on, among others, the Future of digital terrestrial television broadcasting, Digital dividend utilization, IMT 2020 (5G), Spectrum needs of IoT, etc.

- Expert workshop on EMF issues for 5G implementation was organized in Rome on 2-3 November 2017 with around 40 participants.

- Assistance on conformity and interoperability has been provided to developing countries. A C&I Assessment Study has been developed for South America region, and 9 out of the 10 South American countries took part on it. Regional training events have been organized together with testing laboratory partners for AMS, ASP and AFR.

- Collaboration between an ITU Academia member in the Americas Region, CPqD with ITU and Caribbean Stakeholders in regard to homologation and testing procedures. A high-level Caribbean mission visited the laboratories of the CPqD in Campinas, Brazil, on 13-17 November, 2017 to follow and validate testing of devices; ITU and Caribbean Stakeholders are presently assessing and testing the best procedures and processes for shipping equipment to Testing Centres, like CPqD, in order to be tested.

- The Government Wide Area Networks (G-WAN) Study for Dominica to facilitate the planning, designing and implementation of a comprehensive, secure IP-based Government wide area network has been completed. This completes the three studies which were done for Dominica, Grenada and St. Kitts and Nevis. The study was done in collaboration with CTU.

- Enhanced knowledge in Conformance & Interoperability for Africa with a training held in Tunis in May 2017. 8 participants from 6 countries participated in the training in Regulatory framework and practical EMC tests.

- Assistance to Member states on Future Internet Exchange & IPv6-based broadband: Final Improvements for Future Internet Exchanges Publication and Publication on Future Internet Exchange.

- Assistance to Member States on IPv6-based broadband (Business Model, SWOT Analysis, Policy and Strategy).

- Implementation of Broadband Wireless Networks to connect Schools and Hospitals in rural and remote areas in Burundi, Burkina Faso, Djibouti (operations). The installations are ongoing in Rwanda, Swaziland and Mali.

- Assistance to Member States on the Development of Broadband Access is ongoing for CIS countries: Web-based software for selecting the most feasible solution for broadband deployment in CIS and Georgia based on information about specific location in CIS and Georgia (city, settlement, etc.).

- A digital switch-over database was updated based on information from around 15 countries (see http://www.itu.int/en/ITU-D/Spectrum-Broadcasting/Pages/DSO/Default.aspx).

- Broadband Wireless Network in Africa – DJIBOUTI: Field Installations (final phase) and last shipment completed.

- South-Sudan final document on broadband.

- New Broadband Wireless Connectivity Model taking into consideration the Migration strategy to NGN in Swaziland (4G LTE in collaboration with Huawei) and discussions with Lesotho and Burkina Faso took place in order to cooperate by acquiring their equipment at a reasonable price in the benefice of Burkina Faso.

- Broadband Wireless Network in Africa – MALI: Administrative process and Needs Assessment.

- Broadband Wireless Network in Africa - BURKINA FASO: Tender Process for E-Learning.

- The pre-feasibility study to enhance ICT infrastructure for East African Community (EAC) to support the EAC-ITU- China Project was completed for the 3 components: Enhanced Broadband and connectivity infrastructure in East African Community, Regional E- transactions platform for e- government and e-commerce, and Centre of Excellence in ICT research and Innovation. A preliminary report was presented to stakeholders, including the Ministers of Rwanda and Uganda and the ITU SG during the Transform Africa Summit, held in Kigali, Rwanda on 10 May 2017.

- Within the framework of the ITU-Latin-American Development Bank (CAF), a summary report on the digital broadcasting roadmaps, which includes all beneficiary countries, has been prepared.

- Diagnosis and updating of National Technical Plans of Radio Broadcasting in the Republic of Colombia are currently under development.

- Diagnosis and audit to the process of assignment of spectrum by objective selection in the Republic of Colombia are currently under development.

- AMS RI 3 on Development of broadband access and adoption of broadband achieved to date the following results: provision of assistance for the development of guidelines for sustainable broadband infrastructure in rural areas; delivery of studies on broadband; capacity building activities; support for the establishment of Community ICT Centers; support to South American countries in terrestrial optical cable systems; and the formulation and development of national broadband policies to implement a broadband technology framework.

- Members' capacity was built on the latest developments in digital terrestrial television, IPv6, and SMS4DC through workshops, trainings, and direct assistance.

- Assisted Djibouti in the feasibility study for the establishment of a Regional Internet Exchange Point (IXP).

- During the first semester of 2017, ITU-AMS assisted Guatemala in the establishment of the interim executive committee and definition of the model of the national IXP. In addition the coordination of the physical implementation of the first national IXP started in this period.

- Enhanced Capacity of over 260 delegates from Arab countries in the fields of spectrum management and frequency planning and coordination through the organization of the 3rd Annual MENA Spectrum Management Conference, held on 24-25 January 2017 in Dubai, in partnership with Forum Global and TRA United Arab Emirates. This event was followed by the ITU workshop on Cross-Border Frequency Management in Arab States on 26 January 2017 in Dubai, UAE.

- BDT and BR have been collaborating towards the support on Cross Border Frequency coordination for AMS countries in 2017. Within this exercise of frequency coordination, ITU organized 2 coordination meetings in 2017: Managua, Nicaragua, 8-10 March 2017 - Guatemala City and Guatemala, 28 August - 1 September 2017. And other 2 other meetings are foreseen for 2018. For the time being 21 iterations in UHF and 8 iterations in VHF have been made by the BR taking into account the respective submissions of digital requirements from the participating countries. 21 out of 30 participating Administrations submitted their digital requirements in the UHF band at least once. For the VHF band the BR received submissions from 5 administrations: Bahamas, Guatemala, Honduras, Mexico, El Salvador and France. Regarding this exercise, more information can be found at: http://www.itu.int/en/ITU-R/terrestrial/broadcast/Americas/Pages/default.aspx.

- Within the framework of the activities and actions made related to radio topics in the Americas, ITU volunteered to participate in the ad-hoc group on 2030 ICT ALLIANCE FOR THE AMERICA strengthening the cooperation between ITU and CITEL, with emphasis on emergency telecommunications.

- Enhanced the skills of 80 delegates from seven Arab countries in the area of Technical, Regulatory and Policy Aspects related to "Broadband Networks in the Era of App Economy". This was during the ITU Arab Forum on Future Networks, held in partnership with CIFODECOM on 21-22 February 2017 in Tunis, Tunisia. 80 delegates from seven Arab countries attended the Forum, where challenges and opportunities of the new App Economy were presented and discussed.

- Enhanced the skills of 42 participants from the Americas (most from the Caribbean) and other regions (Egypt, Iraq, Indonesia, Switzerland, Saudi Arabia) on Spectrum Management: using the latest generation tools, carried our through the ITU Academy platform, in close cooperation with the Inter-American Telecommunication Commission (CITEL/OAS).

- The ITU Americas Centre of Excellence (CoE) for Spectrum Management, CINTEL, delivered 2 online training courses. The first training course was requested by the regulator agency from Ecuador (ARCOTEL) to enhance the skills of 10 professionals on Regulatory aspects of Telecommunications and Spectrum Management Services; and the second one was focused on the Fundamentals of Spectrum Management.

- Enhanced the skills of 26 participants from the Americas Region on the basic knowledge and concepts related to telecommunications networks, 4G, Advanced IMT, mobile communications, broadcasting, IP, NGN, as well as fundamentals and trends of the technological evolution. This online training course was delivered in close cooperation with the Inter-American Telecommunication Commission (CITEL/OAS) that supported the course by providing fellowships.

- The ITU Americas Centre of Excellence (CoE) for Broadband Access, INICTEL-UNI, delivered 7 online training courses in benefit of the Latin American countries, and counted on the attendance of 94 participants in the courses related to following topics: Optical Networks Technologies and NGN, LTE and LTE Advanced, 5G, Mobile Communication Systems and IPv6.

- The ITU Americas Centre of Excellence (CoE) for Digital Broadcasting, INATEL, delivered 2 online training courses in benefit of the Latin American countries for 16 participants.

- Country Assistances on development of framework for cross border RF interference management was provided to LAO P.D.R and Cambodia.

- Technical assistance was provided to Mongolia to develop Master-plan for spectrum Management.

- Assistance was provided to Timor-Leste on developing Spectrum Monitoring plan: Detailed report on developing Radio Frequency Monitoring capability delivered. National workshop on technical skill development of ANC (regulator) staff conducted. Skills of 12 technical engineers developed on RF monitoring.

- The "ITU Asia Pacific Centre of Excellence (CoE) online Training on Spectrum Management" was successfully held on 13–26 May 2017. 292 participants from diverse backgrounds, including Administrations, Regulators, Operators and academia (excluding presenters), registered (217 participated) for the course. The participants came from 49 countries, of which 20 were from Asia-Pacific region and 29 were from outside ASP region. Participation during the workshop was very effective, especially in the forums where over 770 posts were made on more than 50 topics in 2 weeks.

- 3 countries for three regions have been selected for assistance within the framework of the ITU-Republic of Korea project on Basic National Spectrum Management system.

- Coordinated the data collection and validation in the process of enhancing the Interactive Terrestrial Transmission Map in Europe, covering infrastructure of more than 90% of European countries.

- Assistance was provided to Nepal on updating National Radio Frequency Management Framework and draft Radio Law.

- 3rd Annual Asia-Pacific Spectrum Management Conference (2 - 3 May 2017) was conducted in partnership with Forum Global (over 200 participants), followed by ITU workshop on Managing spectrum in the age of wireless communication (3-4 May 2017) in Bangkok. The workshop was attended by 83 participants representing administrations, regulators, industry and operators.

- ITU-D SG1 Resolution 9 co-chair participation in ITU-R WP1B work, modified final report on efficient spectrum management and new broadcasting technologies.

- Relevant ITU activities on EMF (for all the three sectors) have been presented during the WHO International Advisory Committee Meeting on the Non-Ionizing Radiation Programme 29-(30 June 2017).

- The "ITU Asia Pacific Centre of Excellence Training on Internet and IPv6 Infrastructure Security Program" (8-12 May 2017 at TOT Academy, Nonthaburi, Thailand) built capacity of 35 participants from across the Asia-Pacific in the area of IPv6 and Internet Infrastructure Security. The training workshop was organized by the ITU, the Ministry of Digital Economy and Society, Thailand and the APNIC with support from the IEEE Comsoc and the TOT Academy.

- A workshop on IPv6 Deployment and IPv6 Security Workshop was held on 19-21 June at Thimphu, Bhutan, in partnership with Department of Information Technology and Telecommunication (DITT) and APNIC. The workshop was supported by ITU-DoCA (Australia) project. The workshop was attended by around 50 participants from government, regulators, industry and academia. Following the workshop, consultations on IPv6 roadmap development were also held with key stakeholders in Bhutan.

- More than 30 participants raised their awareness on Conformity and Interoperability (C&I) for 4G LTE through the ITU Asia-Pacific CoE online distance learning programme organized in partnership with CAICT.

- Enhanced regulatory capacity to develop cost modeling tool for promoting affordable access of voice and data services by building the regulatory capabilities of Bangladesh Telecommunication Regulatory Commission (BTRC), 5-8 June 2017 and November 2017 and delivered the cost models to the BTRC.

- Built capacity and awareness of 41 participants under ITU ASP COE Training on Conformity and Interoperability for 4G LTE from 30 October-3 November, 2017 Shanghai, China.

- The V Latin-American Telecommunications Congress was jointly organized with GSMA LA, ASIET and CAF from June 19 to 22 in Cartagena, Colombia. More than 500 people attended the Congress. In a poll distributed to 150 attendees, the panel organized by the ITU ranked second (out of seven) under the category "Which was the most relevant panel?".

- Improved regional collaboration on regulatory, economic and technical aspects of post-NGN, 4G and 5G and facilitated dialogue between policy-makers, regulators and the private sector during an ITU Regional Conference, which was held in Kiev, Ukraine, on 7-9 June 2017 and which was attended by 125 participants from 7 countries.

- ITU C&I Assessment Study for South America was finalized and the study/results were presented to countries during a workshop, 3-4 July 2017. ITU Conformity and Interoperability (C&I) Week for the Americas Regions was organized in two parts: Workshop on the ITU C&I Assessment Study for South America, from 3rd to 4th July, and Training for AMS Region on C&I Infrastructures and Virtual Laboratory Services, from 5th to 7th July 2017, both events were held in Campinas, Brazil.

- ITU has continued supported COMTELCA for the establishment of a Mutual Recognition Agreement in the sub region countries (Costa Rica, Dominican Republic, El Salvador, Guatemala, Honduras, Nicaragua and Panama), to work in progress concepts of virtual labs and supranational certification body. COMTELCA decided to move forward with the MRA in 2018.

- The ATU RPM for WTDC-17 was organized in Victoria Falls Zimbabwe. 33 countries were represented. African common proposals on BDT contribution to the Strategic plan, Rules of Procedure, Declaration and regional initiatives were approved as well as candidacies for positions to TDAG and SG1 and SG2 were registered.

- The ATU RPM for WRC-19 was held in Dakar 10 to 16 September. 150 delegates from 40 countries attended the event and African groups were established in relation with WRC-19 agenda items.

- A national workshop for DRC on Spectrum policies was organized 19 to 22 September in Kinshasa by GSMA with the participation of ROA. New Frequency Allocation Table was developed.

- Coordination between Gabon and Equatorial Guinea for AGEOS earth Stations to be notified to BR was made with ROA assistance, 25 and 26 September at the request of ANINF, Gabon.

- Specific Assistance on Spectrum Management delivered in Spanish to Equatorial Guinea during one week training in Malabo 24 to 30 September.

- Assistance on Standards and C&I was given to SADC Members in a CRASA(Communications Regulators Association of Southern Africa) Electronic Communication Committee meeting held in Zambia 7-9th August 2017.

- C&I Week for Americas: Workshop to present the Assessment Study for South America (3-4 July) 9 from 10 countries participated in the study; and the C&I training (5-7 July) 15 participants from 9 countries.

- ANE Congress, Global Forum and ITU workshop participation and presentation, Bogotá, 5-8 September. 200 participants from 20 countries on the Global forum and 55 (from 13 countries) on the Workshop.

- Assistance provided to Seychelles on Spectrum Monitoring tenders. The report has been prepared and submitted to Seychelles.

- ITU-Academia Partnership Meeting: Developing Skills for the Digital Era, 19-21 September, Budapest. There was a special session on possible cooperation on spectrum management, especially in SMTP. 90 participants from 32 countries, including 37 universities.

- Contribution was provided to the accreditation of the SMTP during the meeting with ZeVA on the 5th of December 2017

- The Pacific Media Partnership Conference (PMPC) was held during 15-17 August 2017 in Solomon Islands. PMPC was jointly organized by ABU and ITU and hosted by the Solomon Islands Broadcasting. It was attended by about 51 people from 20 countries of which 10 countries are from the Pacific region.

- The "ITU Asia Pacific Centre of Excellence (CoE) Training on Spectrum Engineering and Cross border RF coordination", was successfully held from 11 – 15 September 2017. 44 participants (excluding 9 speakers and around 15 SRMC staff involved in organization of the event) from Administrations, regulators and industry thereby representing 15 ITU member states.

- The ITU Asia Pacific Centre of Excellence Training on "Broadband Mobile and Internet of Things Network Planning", was successfully held from 19-22 September 2017 in Bangkok, Thailand. The training workshop, which was organized by the ITU, the National Broadcasting and Telecommunications Commission (NBTC) of Thailand and the Ministry of Digital Economy and Society (MDES), built capacity and skills of 75 participants representing 10 countries across Asia-Pacific (excluding 4 presenters) in the area of 5G and IOT network planning.

- The ITU Asia Pacific Centre of Excellence Training on "Internet of Things: Technology, Standards and Planning", was successfully held from 8-11 July 2017 in Tehran, I.R. Iran. The training workshop, which was organized by the ITU, the Faculty of ICT (Ministry of ICT, I.R. Iran) and the China Academy of ICT (CAICT), built capacity of 72 participants representing 5 countries (excluding presenters) in the technical aspects of IOT.

- Facilitated experience exchange and capacity building on broadband technologies at an ITU Regional Workshop, which was held in Odessa, Ukraine, on 27-29 September 2017 and gathered 51 participants from 10 countries.

- Within CIS RI4 developed a tool that helps to select the most feasible solution for broadband deployment in all cities and settlements in CIS and Georgia https://broadbandcalculator. online

- The ITU ASP CoE training on "Deployment of Broadband through Next Generation Networks", held from 6-10 November 2017, Ghaziabad, India built capacity of 12 participants in the area of broadband networks and NGN.

- The ITU-NBTC Training on "Building IoT solutions for e-applications", held from 27-30 November 2017 (Bangkok, Thailand) built capacity of more than 50 participants in the area of IOT research and applications.

- Helped to coordinate spectrum management practices at the Regional Spectrum Management Conference and Regional Workshop on Practical Use of Radio Regulations, held in Yerevan, Armenia on 12-15 December 2017. The events attracted 150 delegates from 20 countries.

WTDC	*Resolutions 1, 9, 10, 11, 13, 17, 18, 20, 21, 22, 23, 25, 30, 32, 35, 37, 39, 43, 47, 48, 50, 51, 52, 57, 62, 63, 77,* *Recommendations 17, 19, 22*
PP Resolutions	*PP Decisions 5, 13* *PP Resolutions: 25, 71, 101, 123, 176, 177, 178, 203*
WRC	*Resolutions 12, 55, 212, 223, 224, 238, 908* *Recommendations 207*
WTSA	*Resolutions 17, 20, 29, 44, 64, 72*
WCIT	*Resolution 5*
WSIS Action Line	*WSIS Action Lines C2, C3, C7 and C9 of the Geneva Plan of Action and the section "Financial mechanism for meeting the challenges of ICT for development" of the Tunis Agenda for the Information Society*
Contributing to SDG Targets	*SDGs: 1 (targets 1.a, 1.4), 4 (targets 4.4, 4.6, 4.a, 4.c), 6 (targets 6.5, 6.a, 6.b), 7 (targets 7.1, 7.b), 8 (targets 8.2, 8.5), 9 (targets 9.1, 9.4, 9.5, 9.a, 9.b, 9.c), 11 (targets 11.1, 11.5, 11.a, 11.b), 17 (targets 17.3, 17.5)*

2.3 Innovation and partnership

- Partnership in the ICT ecosystem: Partnership and resource mobilization enhanced through direct contacts, networking and meetings. In 2017, 58 new partnership agreements were signed with various stakeholders: multi-thematic (20), on ICT Applications (12), on human capacity building (6), on infrastructure (5), on emergency telecommunication (4), on digital inclusion (3), on cybersecurity (3), on e-waste (2), on regulatory and market environment (2), and on innovation (1). The beneficiary regions of these newly-signed agreements were: Global (33), the Americas (7), Asia-Pacific (8), Africa (4), Arab States (3), Europe (2), and CIS (1). The BDT internal database on partnership agreements have been enhanced to support BDT resource mobilization efforts and to facilitate identification of potential partners. BDT pays particular attention at nurturing relationship with existing partners and engaging with them in lasting relationship. In addition, BDT also recognizes the importance of widening and diversifying its partners' base through outreaching activities towards nontraditional partners. Therefore, in a convergent ICT ecosystem, entities from other sectors are becoming new BDT partners, such as Pierre Fabre Foundation for projects in m-health or International Solid Waste Association for projects related to e-waste.

- ITU has been working in alliance with PAHO during 2017 on updating a study on successful experiences on e-health in the Americas region and in replicating successful e-health initiatives.

- Sponsorship Opportunities: In 2017, a new interactive sponsorship platform, available in the six ITU official languages, has been launched for social and side-events activities taking place at the occasion of BDT organized events. Opportunities were opened for Study Group meetings, GSR-17 Side-events, WTDC-17 Side-events as well as ITU-D 25th Anniversary. This website/portal proposes opportunities to entities to enhance their visibility, promote brands, and showcase ICT products and solutions. Discounts are offered to ITU-D Membership for open events/meetings as well as for multiple sponsored activities. All resources mobilized are used to organized activities sponsored and to implement activities, projects and initiatives, including the regional initiatives, in the framework of the WTDC-14 and WTDC-17 Action Plans. Out of the 58 newly signed agreements during the period, 14 were sponsorship agreements related to GSR-17, ITUD 25th Anniversary and WTDC-17 Side Events.

- Following the 7th Private Sector Chief Regulatory Officers' (CRO) and the establishment of the CRO Working Group on Digital Financial Inclusion (CRO WG-DFI) on 14-15 November 2016, Bangkok, Thailand, coordination with identified countries (i.e. Mongolia and Sudan) and relevant stakeholders from the financial and ICT/telecommunications public and private sector entities was kicked-off in 2017. Several CRO WG-DFI e-meetings took place and assessment missions to Mongolia and Sudan were carried out by end June 2017 for which the outcomes were presented at the 8th CRO and CRO WG-DFI meetings at GSR-17 demonstrating the need for enhanced collaboration between financial and ICT/telecommunication regulators to achieve UFA. A Public – Private Roundtable on Partnering for the SDGs was organized as a pre-event of WTDC-17 with over 100 participants from both sectors. Among other things, the roundtable highlighted CRO progress and outcomes, collected inputs and recommendations to further promote enhanced cooperation between Member States, Sector Members, Associates and Academia.

- Partnerships have been, and continue to be, fostered with Academia to promote the development of telecommunications/ICTs, in particular the introduction of new technologies and promotion of ICT innovation, including through the development of studies and platforms for increased engagement with Academia

- As a side event to WTDC-17, on ACADEMIA④SDGs was also held at WTDF-17 with over 100 participants to present and discuss academic work and research to innovative solutions accelerating sustainable development. The Impact Study on ICT④SDGs was finalized and the book "ICT-centric economic growth, innovation and job creation", was launched at WTDC-17. This was a collaborative project leading scholars and experts from around the world, addressing the challenges and opportunities offered by ICTs in the areas of innovation, governance, education, job creation and economic growth. It presents an in-depth roadmap for sustainable economic growth by exploiting the recent developments in Information and Communication Technology (ICT) and creating an environment that nourishes ICT-centric innovation and generates new employment opportunities.

- National Innovation workshop conducted during country reviews has brought together multi-stakeholders and multi-sectors to co-create contributions to foster national digital innovation policies in Rwanda on 23 and 24 February, 2017.

- National workshop and Innovation ecosystem stakeholders' consultations were held throughout the process of the country reviews for Kenya to help strengthen the ICT centric innovation ecosystems. BDT presented the preliminary outcome of the study on 24 March, 2017 in Nairobi, Kenya.

- National ICT innovation ecosystem stakeholder consultations held from 13 to17 March in Buenos Aires, Argentina. This technical assistance is being provided to Argentina with aim to strengthen the startup ecosystem and ICT SMEs and improve their competitiveness.

- First regional innovation forum was held on 28 and 29 March in Chisinau, Moldova, as a joint initiative between EUR and CIS regions. The expected outcome was to share challenges and opportunities, discuss good practices, and offer a platform for twinning, networking and learnings of ongoing and planned country level initiatives on Innovation.

- National stakeholders' workshop and additional interviews for the country review of the ICT centric innovation ecosystem for Moldova were held from 12 to 19 May, 2017 in Chisinau, Moldova.

- Innovation track was successfully delivered for the WSIS Forum 2017 where startups and government policy makers met in order to strengthen digital industries and innovation capacity and leverage investment to bridge the innovation divide.

- The Innovation toolkit <Bridging the Digital Innovation Divide> for strengthening ICT-centric ecosystems was launched during a session in the WSIS 2017 innovation track. This toolkit has been developed to help countries develop a Digital Innovation Framework, a set of policies and projects that foster national innovation.

- Using the toolkit, BDT has trained over 40 national or regional experts representing 20 countries and certified 30 of them.

- An Executive regional executive workshop, on bridging the digital innovation divide, was organized in cooperation with the Regional Cooperation Council (RCC) and International Center for Promotion of Enterprises (ICPE) within the framework of the ITU EUR5 RI, in Ljubljana, 12-13 September 2017, gathering of about a dozen stakeholders from European countries , and 6 countries in Europe were equipped with skills to champion / lead a national reviews on the ICT centric innovation ecosystems and develop coherent approaches to move their respective countries towards an innovation driven economy.

- A multi-stakeholder global workshop, on bridging the digital innovation divide, was organized on the sideline of ITU telecom in Busan, 26-28 September, with representatives from 8 countries who were equipped with skills to champion / lead a national reviews on the

ICT centric innovation ecosystems and develop coherent approaches to move their respective countries towards an innovation driven economy.

- A multi-stakeholder regional workshop on Bridging the Digital Innovation Divide: Accelerating Digital Transformation towards the 4th Industrial Revolution, was held 11-12 December 2017 in Gaborone, Botswana. Workshop was held in collaboration with SADC secretariat and attended by representatives from several SADC countries and over 20 participants.

- BDT also held a side event during WTDC-17 on the Digital Economy: Accelerating Digital Transformation, in October 2017 in Buenos Aires.

- Finalization of the three priority projects of the Arab Technology Incubators and Techno parks Network (ARTECNET) during the meeting of the Working Group held at the Smart Village, Egypt, on 18-20 April 2017, attended by 15 participants from 9 countries.

- ITU together with Busan Metropolitan City organized the 4th Young ICT Leaders' Forum in conjunction with the Telecom World 2017 in Busan, Republic of Korea, during 27-29 September 2017. Over 200 participants from more than 30 countries worldwide participated in the Forum. The Forum also hosted Busan Global Smart Cities Challenges which presented 5 awards to winners.

- Enhanced awareness of 35 participant about the methods and tools used by other countries resulting in more inspired and motivated trainers who would improve the training they provide for their employees and students on ICTs for promoting Innovation & Entrepreneurship in Sri Lanka from 12-15 September 2017 followed by another training for Department of Agriculture in December 2017 further enhancing the skills of 40 officers by developing web interfaces and mobile app for Department of Agriculture Sri Lanka with support from TRCSL Sri Lanka. ITU together with Asia Pacific Telecommunity (APT) and Pacific ICT Regulatory Resource Center (PIRRC) conducted workshop on of Spectrum Management and harmonized use of Spectrum Resource from 28-30th November in Nadi Fiji. The workshop was attended by 27 participants, representing 10 ITU member states (FSM, Fiji, Indonesia, Kiribati, PNG, Samoa, Solomon Islands, Timor-Leste, Tuvalu, and Vanuatu), 1 regional organization (APT) and two other non-member states from the Pacific.

WTDC	Resolutions 1, 5, 30, 33, 50, 59, 71, 157
PP Resolutions	PP Decisions 5, 13 PP Resolutions: 25, 71, 72
WSIS Action Line	WSIS Action Lines 3, 4, 5, 6, and 7 of the Geneva Plan of Action and the section "Financial mechanism for meeting the challenges of ICT for development" of the Tunis Agenda for the Information Society
Contributing to SDG Targets	SDGs: 1 (targets 1.a; 1.b), 2 (targets 2.a, 2.c), 3, 4 (targets 4.a, 4.b, 4.3, 4.7), 5 (targets 5.b, 5.6), 8 (target 8.2, 8.3, 8.6, 8.10, 8.b), 9 (targets 9.5, 9.b, 9.c), 10, 11 (targets 11.1, 11.4), 12, 13 (target 13.3), 16, 17 (targets 17.1, 17.3, 17.9, 17.14, 17.16, 17.17)

Objective 3

"Enhance confidence and security in the use of telecommunications/ICTs, and roll-out of relevant applications and services"

The results achieved during the period of January to December 2017 are as follows:

3.1 Building confidence and security in the use of ICTs

- Launched the Gaming Booklet of the Child Online Protection challenge in partnership with the Ministry of Communications and Information Technology which contains a detailed description of the games that are applied during the challenge on 4 March 2017;

- Conducted Child Online Protection Challenge in Port Said, Egypt on 4 March 2017, in partnership with the COP National Committee in Egypt and other stakeholders. More than 60 students learned via gamification about the Internet safety.

- Caribbean School Cyber Security Awareness Programme promoted by ITU in 2017: designed to assist the Ministries of Education in the Caribbean to promote awareness in the safe use of ICT, anti-cyber bullying and general cyber security awareness in secondary schools. Three countries benefitted from the programme in the Caribbean in June (Belize, St. Kitts & Nevis, Guyana).

- Delivery of Cyber bullying Workshop sessions in St. Kitts & Nevis (35 participants) and Guyana (120 participants); Unanimous Satisfaction of Participants; in Belize Presentation workshop; review & consolidation of the Anti-cyber bullying School Policy manual (70 participants); above 85% satisfaction among stakeholders.

- The Cybersecurity technical Training and Cyberdrill for Suriname and for the Caribbean was organized from 3 to 7 July. The event counted with 99 attendees representing 8 Countries: Dominican Republic, Grenada, Guyana, Saint Vincent and the Grenadines, Suriname, Trinidad and Tobago , Montserrat (UK), Turks and Caicos Islands (UK), and USA.

- Organized in cooperation with the Arab Regional Cybersecurity Centre (ARCC) the Regional ALERT (Applied Learning for Emergency Response Teams) Cyber Drill — 5th Edition, held in Doha, Qatar, on 5-9 March 2017. More than 11 countries attended the drill with around 100 participants.

- The Drill was followed by two days training on 8-9 March 2017 conducted by Cyber Wellness Center (CWC) of the EC-Council. Participants divided into two tracks: Technical Track covered Web Vulnerabilities modules (SQAP) and Management Track covered Chief Information Security Officer (CISO) modules. Trainings were preceded by pre-assessment tests and followed by post assessment tests.

- CIRT Readiness Assessments were performed for Republic of Mali, 20-23 March 2017 and for Namibia, 19-21 April 2017 with the involvement and awareness building of stakeholders in the country. The assessment will facilitate the planning and implementation of CIRT in Mali and in Namibia.

- Raised awareness and developed guidelines on Child Online Protection (COP);

- Selected countries were assisted in establishing their national CIRTs and regional cybersecurity drills were conducted to test readiness of CIRTs and strengthened optimal coordination between Arab CIRTs.

- In terms of technical and policy frameworks, a regional study was conducted on "Cloud Computing in Arab Countries: Legal and Legislative Aspects, Facts and Horizons" to help define the legal measures that ensure data privacy and secure use of the Internet and its various applications.

- Assisted Sudan in the development of its national child online protection strategy framework in 2017;

- Awareness was raised among 100 school students regarding the Internet safety through the organization of the Child Online Protection Challenge in Port Said, Egypt on 4th March 2017, in partnership with the COP National Committee in Egypt and other stakeholders.

- The ITU developed National Cybersecurity strategy (NCS) for Mauritania for the period 2017-2022, preceded by a workshop to assess the current cybersecurity status through consultation with the national stakeholders, with planned work on CIRT implementation with potential funding by both ITU and host.

- Built capacity among the cybersecurity professionals in Djibouti through the Arab Regional Cybersecurity Centre (ARCC) by conducting two weeks' training that covered the "Web Security Attacks and Solutions" on 14-18 May 2017 and the "Vulnerability Assessment Penetration Testing Training" on 21- 25 May 2017;

- Organized a workshop on "Cybersecurity and risk assessments in practice" during the ITU-D Study Group 2 Meeting in January.

- Launched the 2nd edition of the Global Cybersecurity Index. The index aims at measuring the level of commitment of Member States to cybersecurity.

- Cybersecurity Symposium and Technical Training for Uruguay and the Americas Region (26-29 September 2017), with 84 participants from 14 countries: Argentina, Bolivia, Brazil, Chile, Colombia, Costa Rica, Ecuador, El Salvador, Jamaica, Mexico, Panama, Paraguay, Peru, and Uruguay.

- Organized in partnership with CTO a national workshop in Swaziland to draft the cybersecurity maturity review and national cybersecurity strategy for Swaziland.

- Supported the 5th Central European Cybersecurity Public-Private Dialogue Platform held from 14 to 15 September 2017 in Sibiu, Romania.

- During the Americas Cybersecurity Regional Symposium, BDT organized the Fifth Cyberdrill Applied Learning for Emergency Response Teams (ALERT), 26-29 September, Montevideo Uruguay.

- Cybersecurity in the Pacific Island project was signed in September together with the Government of Australia to assist 4 countries in the Pacific Islands on establishing National CIRTs.

- A project was signed with Zimbabwe to establish a National CIRT.

- Enhanced Capacity of National Telecommunication Authority (NTA), Nepal, as well as the law enforcement agencies in cooperation with the UNODC and Interpol was conducted on 7-11 August 2017. The draft Cybercrime Legislation for Nepal was prepared.

- ITU Regional Workshop on Cybersecurity for CIS provided a platform for experience exchange and learning recent notable cyber-attacks in the region and ways to combat them. The Workshop was attended by 56 participants from 8 countries.

- The Child Online Protection in ASEAN Conference was organized by MCMC Malaysia in cooperation with ITU on 5-6 December 2017 in Malaysia.

- The FIRST-ITU Regional Symposium & Cyber Drill for Africa and Arab Regions, was held in Dar Es Salaam, Tanzania, 13 –17 November 2017. 20 countries attended the conference and drill with around 180participants.

- The cyberdrill, followed by a High Level Simulation on cybersecurity related risks for the Government of Tanzania, took place on 20-21 November. 20 CEOs and 4 Permanent Secretaries actively participated.

- The ITU ALERT cyber drill for Europe and CIS Regions, was held the 21-23 November 2017, in Chisinau, Moldova. 26 countries attended the drill with around 180 participants.

- A CIRT assessment for the institutions of Bosnia and Herzegovina was carried out in Sarajevo, the 26-28 November 2017.

- A regional training on Threat intelligence was held in Cotonou, Benin from 11-15 December 2017.

- A regional workshop "Key Aspects of Cybersecurity in the Context of Internet of Things (IoT)" was held in Tashkent, Uzbekistan on 18-19 September 2017 and gathered 56 participants from 8 countries.

WTDC	Resolutions 1, 5, 9, 15, 30, 33, 37, 45, 50, 59, 64, 67, 69, 78, 79
PP Resolutions	PP Decisions 5, 13 PP Resolutions 25, 71, 72, 130, 179, 181
WTSA	Resolutions 50, 52, 58
WSIS Action Line	WSIS Action Lines C5
Contributing to SDG Targets	SDGs: 1, 3 (target 3.5), 4 (target 4.a), 5 (targets 5.2, 5.3, 5.b), 7, 8, 9, 10 (target 10.2), 11, 16, 17

3.2   ICT applications and services

- A new joint effort was launched with WHO African Region during the First WHO Africa Health Forum that took place in Kigali, Rwanda on 27-28 June 2017 to scale up Digital Health services in Africa. The partnership will focus on building a capable workforce to effectively use ICT as well as addressing the need of multi-stakeholders partnership models that can bring about sustainable adoption of Digital Health.

- A Cooperation Agreement with FAO was signed to reinforce the working relationship on e-Agriculture issues and expand the scope and depth of activities. A Hackathon is planned to take place with FAO during the WSIS Forum 2018 under the theme "Hack against Hunger".

- A Regional e-Agriculture Strategy Workshop is under planning with FAO for the Caribbean region to take place early 2018.

- A model partnership agreement between different sectors (Health, Agriculture, Education, etc.) with ICT sector is under development to facilitate the creation of national and institutional agreements that can foster the scaling up of ICT for Development services leveraging public-private partnership.

- A side event was organized during WTDC-17 on eHealth.

- A joint UNESCO-ITU Mobile Learning Policy Review will be conducted in selected countries to review national ICT in education initiatives and produce a detailed report containing both an evaluation against international benchmarks and a set of policy recommendations based on good practices supported by evidence. Palestine was selected as a first country to start with.

- A Joint UNESCO-ITU "Policy Forum on Mobile Learning" was held on 24 March 2017 attracting over 300 participants and stressed on the importance of cross-sectoral collaborations in developing the necessary E-skills.

- A major agreement was signed with the European Commission and WHO to set up a mHealth Innovation and Knowledge Hub in Europe. The Hub will be collecting and disseminating research and experience related to the large-scale implementation of mHealth programs and support Member States in setting up large-scale mHealth programs.

- A meeting was held in Zambia to scale up implementation of mHealth involving all stakeholders, Ministry of Health, Ministry of ICT, ZICTA, Mobile Network Operators, WHO and ITU. Roles of each stakeholder were established.

- A bid for telemedicine was done in Zimbabwe. Technical evaluation took place but all bidders found to be short of requirement. A relaunch of tender was advised.

- An Expression of Interest (EoI) to solicit European institutes interest to host the EU mHealth Innovation and Knowledge Hub. 11 EoI were received from different 17 countries (both as individual and part of a consortium). A detailed Request for Proposals will be published to seek detailed proposals to select the European institute or consortium that will host the Hub.

- Assistance was provided to Zimbabwe through an infrastructure and equipment audit to extend telemedicine services in remote areas of the country, as well as in-country training.

- Assistance was provided to Senegal to develop their national eHealth Action Plan.

- A "Toolkit and Implementation Guidelines for a Digital Health Platform" was developed to guide decision makers and health planners in designing and implementing a national "digital health platform".

- A first draft of a Common ICT for SDG Platform was developed to provide an overall architecture of a common digital infrastructure that can deliver a set of integrated and cross-cutting services based on common standards and Enterprise Principles.

- A Letter of Intent was signed with WHO and UN-HABITAT to develop a joint programme on Smart Healthy Cities to identify champion cities around the world to create models for the use of ICT as a key enabler to transform health conditions in cities.

- Preparatory work and meetings on mDiabetes for Senegal with Ministry of Health, Ministry of ICT of Senegal, WHO and mobile telecoms operators for the preparation of phase 2 of the project completed during the 1st quarter of 2017. At the end of phase 1, the project registered the participation of 110,000+ users in its database.

- Work with Burkina Faso resulted in the decision to implement m-Cervical Cancer programme, and preparatory work was undertaken in March 2017 for the launching of the initiative scheduled for April 2017 in Ouagadougou.

- Built capacities of policy-makers regionally in formulating national strategies for smart learning through the implementation of the signed cooperation agreement with the Telecommunication Regulatory Authority of the United Arab Emirates and the Mohamed Bin Rashid Smart Learning Programme. The first capacity building workshop took place in Dubai on 26-28 February 2017 with the participation of 18 participants from 10 countries. The second Smart Learning Workshop was virtual and was held on the 6th of September 2017 with the participation of around 10 participants. The third workshop was held on 27 and 28 November 2017 with the participation of 7 participants from four countries.

- Enhanced awareness among policy makers in the Arab region on the means necessary to formulate national strategies relevant to smart learning by developing guidelines for this purpose in collaboration with Alecso, Intel and Millennium@EDU.

- In partnership with FAO, a number of activities were implemented in the area of e-agriculture including; a) the national e-agriculture strategy for Papua New Guinea was further refined and some of the priority solutions identified, b) the engagement with stakeholders towards its implementation was further strengthened. National consultation were carried out as part of the development of National E-agriculture Strategy for the Philippines, Department of Agriculture (Philippines) and Department of ICT (Philippines). c) In Fiji, a validation workshop

was done for the draft E-agriculture strategy and consultation held on agromet solutions). The process for developing E-agriculture Strategy for Afghanistan was started.

- Enhanced regulatory capability to deal with suitable framework on Over-the-Top (OTT) Services for Vientiane, Lao PDR, on 19-23 June 2017.

- Increased regional collaboration on smart cities and improved understanding of the underlying technologies and related challenges at ITU Regional Workshop held in Samarkand, Uzbekistan, on 1-2 June 2017.

- Facilitated the exchange of experiences and discussed innovative solutions based on the Internet of Things and Future Networks technologies at an ITU Regional Workshop, which was held in in Saint Petersburg, Russia, from 19 to 20 June 2017 and which attracted 69 participants from 11 countries.

- Improved cooperation and facilitated dialogue on digital financial services between financial and ICT regulators, telecom providers and other private companies at an ITU Regional Forum on Digital Financial Services Development which was held in Astana, Kazakhstan, from 4 to 5 July 2017.

- Enhanced the skills of 93 participants from the Americas Region on "The role of ICT in the Smart and Sustainable Digital Cities". This online training course was delivered through the ITU Academy platform in close partnership with the Inter-American Telecommunication Commission (CITEL/OAS).

- The third edition of a joint ITU-SAMSUNG Regional Competition for Latin America and the Caribbean on "Mobile Applications for Accessibility" was carried out in 2017, awarding certificates to the winners of the two categories: (1) Ideas, solutions or projects that still need to be developed or that are under development, won by an academic entity from Argentina; and (2) Solutions to benefit people with disability that are already developed or available in the market, won by an academic entity from Brazil. This contest is primarily focused on developing innovative and creative solutions to benefit persons with disability (PwD), bringing more social inclusion and interaction, comfort and quality of life to their daily routine through mobile technologies.

- An ITU-Telecom Regulatory Authority of India (TRAI) training on "Leveraging ICTs for Smart Sustainable Cities" in addition to a national symposium on "ICT Regulatory challenges in Indian Smart Cities" held on 24-26 March 2015 raised awareness among more than 190 participants on the latest trends in smart city developments.

- The Study on "ICTs and Public Health in Latin America: m and e-health approach" documents a wealth of information sources on eHEALTH that can facilitate the design, implementation or replication of successful eHEALTH initiatives by different countries and to advance eHEALTH capacities. The study proposes a framework to conduct an assessment of countries' eHEALTH development, enabling their comparison and can be a milestone towards an eHEALTH readiness index. The study also delves into the work of 2014 "best practices of leadership, innovation and governance in e-health: the cases of Brazil, Mexico and Peru" prepared for the ITU. In 2017, the eHealth initiatives have become more visible and common in the region, the scope of the present study is broader and more focused on understanding the policies and national plans of e-health and m-health, processes and contexts in Brazil, Mexico, Peru, Argentina and Panama. As a result of their joint collaboration during 2017, ITU AMS and PAHO have agreed to work in a MOU to facilitate their joint collaboration in the future. The MOU is planned to be signed in 2018.

WTDC	Resolutions: 1, 5, 30, 54
PP Resolutions	PP Decisions 5, 13 PP Resolutions 25, 71, 72, 139, 140, 183, 202
WSIS Action Line	WSIS Action Lines C7 of the Geneva Plan of Action
Contributing to SDG Targets	SDGs: 2, 3, 4 (targets 4.1, 4.2, 4.3, 4.4, 4.5, 4.6, 4.7), 6, 7, 8 (targets 8.1, 8.3, 8.8), 9 (targets 9.1, 9.b), 11

Objective 4

"Build human and institutional capacity, provide data and statistics, promote digital inclusion and provide concentrated assistance to countries in special need"

The results achieved during the period of January to December 2017 are as follows:

4.1 Capacity building

- The 3rd Center of Excellence Steering Committee meeting for the Europe region was held in Copenhagen on 17 January 2017, which approved the work plan and training programme for 2017. In follow up, the training catalogue with Training Opportunities by European CoEs was released in March. Preparations have been finalized for the convening of Steering Committee meetings in all regions during the last quarter of 2017.

- The 5th meeting of the Group on Capacity Building Initiatives (GCBI) was held successfully from 8 to 9 February 2017. Members reviewed ITU's work on CB during the past year and provided guidance on the way forward.

- The online publication "Capacity Building in a Changing ICT Environment" was released. The first issue focuses on mobile technologies for skills development and lifelong learning. It features the work of an international team of experts, tackling the issues in an analytical, critical, and conceptual fashion.

- A Cooperation Agreement was signed with ARCTEL on the joint implementation of an Accelerated Management Course for Telecommunication Executives. The course aims to deliver high-quality and certified training for managers of the Communication Sector.

- The Report on Capacity Development in Internet Governance (IG) was finalized. It provides a detailed overview and assessment of existing IG capacity development activities globally and regionally and will be the basis for further work of ITU in this field.

- Under the framework of the ITU Academy's Centers of Excellence network, a total of 64 training courses were delivered between January-December 2017, with a total of 1551 participants from all over the world.

- Supported the development of the Quality of Service and Experience (QoS/E) Framework and draft QoS/E guidelines for the WATRA region.

- Development of training materials for the ICT and Climate Change Training Program was completed. The material will now undergo editing and should be available for delivery by the end of the year.

- The Spectrum Management Training Program (SMTP) underwent a complete review and update to ensure that the materials incorporates the latest developments in the field.

- The report on the development of the Internet of Things (IoT) training Program was completed. The program will contain total of 15 modules, 8 at the Foundational level and 7 at the advanced level. Experts were recruited to develop the individual modules. The modules should be ready by the end of April 2018.

- The Quality of Service Training for SADC was held in Gaborone, Botswana, on 8-10 May 2017. This training was attended by 106 participants from 8 SADC countries. Country case studies from this training are used as reference materials for the Quality of Service Training programme and as input into the QoS/QoE manual.

- The workshop on "Developing the ICT ecosystem to harness Internet-of-Things (IoT)" for the Africa region was held in Mauritius from 28-30 June 2017 and attended by 151 participants.

- Organized the Regional Forum on Internet of Things (IOT): Smarter Living in the Caribbean and Digital Financial Services (DFS) Workshop at HYATT Regency Hotel, Port of Spain, Trinidad & Tobago, on 24–26 April 2017 and 27–28 April 2017, respectively. 70 participants from 14 countries benefited from the Regional Forum on Internet of Things (IOT): Smarter Living in the Caribbean, and 90 participants from 14 countries benefited from the Digital Financial Services (DFS) Workshop.

- Organized Regional Training Workshop on "Satellite Communications for the Africa region, Arab region and the Caribbean. These workshops were organized under a partnership agreement with the international Satellite telecommunication organization (ITSO).

- Organized with BR and participated in the Radiocommunication seminar (RRS-17), held in Dakar from 27 to 31 March 2017. More than 120 radiocommunication experts were trained on BR tools for space and terrestrial services.

- Built capacity on KPI, Digital proofs and Security of Electronic Transactions for Arab countries participated in a regional training was organized in cooperation with CIFODECOM-Tunis. 14 participants attended the training.

- Enhanced skills on Fundamentals of Fiber and Optical Networks at a regional training organized in cooperation with CIFODECOM-Tunis on 30 January-2 February 2017. 16 trainees attended the training.

- Partnered with the Asia-Pacific Telecommunity (APT) in organizing the "Preparing for International Conferences, 2017" Training. The training was delivered in two phases (On-Line and Face to Face) from 30 January to 3 February and 27-30 March 2017, respectively.39 participants from 22 countries completed the online course, and 30 attended the face to face training.

- ITU in partnership with the Asia-Pacific Postal Union built capacity of 12 participants in developing postal e-strategies.

- Enhanced skills of Arab countries on Optical Networks Engineering, Installation and Deployment through a regional training organized in cooperation with CIFODECOM-Tunis on 13-15 April 2017. More than 11 participants attended the training.

- Built capacity 4G/5GPlanning and Deployment at a regional course organized in cooperation with CIFODECOM-Tunis on 16-18 May, 2017. 14 participants attended the training.

- Built capacity on identifying ICT project and business risks and provide structured process for the management of ICT Risk Management at regional training organized in cooperation with SUDACAD-Sudan, from 30 April-2 May 2017. Due to the high demand of this training, a second session was organized on 23-25 May 2017. More than 30 participants attended the training from Arab countries, of which 10 were women.

- On-line indigenous training course to ensure access to training and innovation through the design and implementation of pilot projects that allow the implementation of communication networks-managed and operated by indigenous peoples, through educational processes aimed at broadening the knowledge of participants on the use of ICTs for information and communication tools, digital content, virtual education development and e-commerce. The training benefitted over 150 indigenous from 16 countries of the Americas region (Argentina, Bolivia, Brazil, Chile, Colombia, Ecuador, El Salvador, Guatemala, Honduras, Mexico, Nicaragua, Paraguay, Peru, Uruguay, United States and Venezuela). (http://www.itu.int/en/ITU-D/Digital-Inclusion/Indigenous-Peoples).

- Annual regional workshop on human capacity development for African countries, held in June 2017 in Port-Louis, Mauritius with 121 participants from 27 countries in attendance. The workshop provided the platform for the ICT professional from the public service, industry and academia to enhance their understanding on the Internet of Things ecosystems issues in Africa.

- Enhanced skills on IPv6 Certified Network Engineering through a regional training on IPv6 deployment organized in cooperation with SUDACAD-Sudan on 07-09 May 2017. The training aimed to explore the current and future IP technologies and its infrastructure. More than 15 participants from Arab countries attended the training.

- Capacity built on different aspects of Business Analysis for ICT projects on a regional training for Arab states organized in cooperation with SUDACAD-Sudan from 23-25 May 2017. The training was attended by more than 20 participants, 7 of which were women. Due to the high demand of this course, an online training was organize during the 07-18 August 2017. 43 participants attended the training and 10 of which were female.

- Within the framework of the partnership initiative with Telecommunications Regulatory Authority (TRA-UAE), a regional project was signed on human capacity building on IPv6 for Arab LDCs and Palestine. The project started its implementation in 2016 and 2 high and professional training activities were implemented in December 2016 and April 2017. The project aims to build human and institutional capacity to improve the technical skills in the development and use of IPv6, as well as to assist them to better deploy the IPv6. 28 participants from Arab LDCs and Palestine were trained and became certified IPv6.

- Ten ITU Asia-Pacific Centres of Excellence trainings were held in Asia-Pacific region on Spectrum Management, Internet and IPv6 Infrastructure Security, Conformity and Interoperability (C&I) for 4G LTE, IOT Technology, Standards and Planning, Collaborative Cross-sectoral Regulatory Mechanisms and Competition Analysis in Digital Economy, Spectrum Engineering and Cross border RF coordination, Broadband Mobile and Internet of Things Network Planning, Conformity and Interoperability (focus on IOT), Deployment of Broadband through Next Generation Networks, Implementing E-application strategies for telecom sector growth in the Pacific (detailed in other sections), and an online training on OTN and PTN for broadband and high-speed services. Facilitated the exchange of experiences between capacity building professionals at an ITU Regional Workshop, which was held in in Odessa, Ukraine, from 12 to 14 April 2017 and which attracted 62 participants from 9 countries.

- The regional workshop on "Strengthening capacities in international Internet governance" was held in Brasilia, Brazil, on 14 August 2017. The workshop enhanced the capacity of 60 participants from countries in the Americas region on a wide range of topics and included a large number of different stakeholders from the global and regional Internet governance community.

- The ITU-Academia Partnership Meeting: Developing Skills for the Digital Era was held in Budapest, Hungary, on 19-21 September 2017. The meeting was attended by 88 participants from 32 countries, including 38 academic institutions representing all regions. The large majority of the

participants came from academia, others from government, industry, Centers of Excellence and international organisations. The meeting contributed to enhanced cooperation between ITU and academic institutions, and between academic institutions and Centers of Excellence.

- Steering Committee meetings for the Centers of Excellence network were held successfully in all regions between November and December 2017. The meetings reviewed the activities and performance of the Centers during 2017, discussed challenges and how to overcome them, and agreed on the draft training catalogue for 2018.

- During the Internet Governance Forum 2017, an Open Forum on capacity building on Internet governance was organized, jointly with other stakeholders. The session discussed capacity building needs for policy makers (in particular in developing and least developed countries) and presented ongoing and planned activities in this regard by different stakeholders.

- Regional workshop dedicated to raising awareness of ITU activities in the CIS was held in Tashenkt, Uzbekistan on 27-29 November and attracted 58 participants from 9 countries.

WTDC	*Resolutions 1, 5, 9, 15, 20, 21, 22, 30, 32, 33, 36, 40, 50, 59, 73, 77*
PP Resolutions	*PP Decisions 5, 13* *PP Resolutions 25, 71, 72, 137, 139, 140, 176, 188, 189, 197, 199, 202*
Council	*Resolution 1143*
WTSA	*Resolutions 54, 59, 72*
WSIS Action Line	*Action Line C4 of the Geneva Plan of Action and §§ 8, 22, 23a, 26g, 49, 51, 65, 72h, 86, 87, 90c, d, f, 95, 114b of the Tunis Agenda for the Information Society*
Contributing to SDG Targets	*SDGs: 1 (target 1.b), 2 (target 2.3), 3 (targets 3.7. 3.b. 3.d) , 4 (targets 4.4, 4.7), 5 (targets 5.5, 5.b), 6 (target 6.a), 8 (Target 8.2), 9 (targets 9.1, 9.b, 9.c), 12 (targets 12.7, 12.8, 12.a, 12.b), 13 (targets 13.2, 13.3, 13.b), 14 (target 14.a), 16 (target 16.a), 17 (target 17.9, 17.18)*

4.2 Telecommunication/ICT statistics

- The latest edition of the ITU World Telecommunication/ICT Indicators Database and the ITU/World Bank joint publication "The Little Data Book on Information and Communication Technology 2017" were released in January 2017 and June 2017. The data will enable users to take informed decisions in the field of ICT, based on internationally comparable statistics.

- The Extraordinary Meeting of the EGTI/EGH took place on 1-3 March 2017. On 28 February, a meeting of the sub-group and independent consultant also took place. Two input documents (prepared by EGH/EGTI sub-group and Pyramid/Global Data) were discussed during the meeting. The meeting adopted a total of 14 indicators to be included in the IDI compared to the current list of 11 indicators. The results of the new IDI will be published in 2018, to provide sufficient time to undertake statistical tests and to allow sufficient time for countries to gather and report data on the newly included indicators.

- The 2017 short questionnaire data collection was completed. Around 164 countries submitted their responses to the WTI Short Questionnaire 2017. 114 countries responded to the ICT Household Short Questionnaire 2017, which is a significant increase from 2016 (67 countries).

- The "ICT Trends and Developments" reports for the Americas region, Asia and the Pacific and Europe were completed as an input to the Regional Preparatory Meetings (RPMs).

The reports enabled the ITU membership to assess ICT trends in their regions, as a basis for discussions at the RPMs.

- The National Workshop on ICT Indicators was held in Huye, Rwanda on 25-29 April, 2017. The workshop, which was attended by 19 participants, strengthened the capacity of the country to produce administrative and survey-based statistics on telecommunications and ICT that are internationally comparable, timely, and accurate.

- The National Training Workshop on ICT statistics was conducted in Ulaanbaatar, Mongolia from 22 to 24 May 2017. The workshop was attended by more than 120 participants representing the ministry, regulator, NSO as well as operators and service providers. The workshop provided a forum to discuss in detail the list of ICT indicators collected by ITU and other issues related to improving the availability of quality and internationally comparable ICT statistics in the country.

- A capacity building workshop on ICT statistics was held for Mongolia (22 and 23 May 2017), which built capacity of more than 100 participants. Following the workshop, meetings were held with the policy maker (CITA) and main producers of official ICT indicators in Mongolia, namely CRC and the NSO.

- The ITU Asia-Pacific Regional Workshop on ICT Statistics was held from 22 to 25 August 2017 in Xi'an, China, which build capacity of more than 60 participants (representing ministries, regulators and national statistical offices) from 20 countries to collect, produce, analyze, and disseminate quality indicators and statistics on telecommunication/ICT. The workshop was hosted by the Ministry of Industry and Information Technology of China with supports from the Australian Government, China Academy of ICT, Xi'an University of Posts and Telecommunications, and Shannxi Communications Authority.

- The meetings of the ITU Expert Group on Telecommunication /ICT Indicators (EGTI) and Expert Group on ICT Household Indicators (EGH) took place in Geneva, Switzerland, on 12-13 September and 14-15 September respectively. Nearly 100 statistical experts from ICT ministries, national statistical offices telecommunication regulators, and international organizations from 48 countries attended the meetings and discussed how to better track access and use of ICTs by households and individuals, and how data from ICT service providers could be used to inform policy-makers and regulators and help monitor and drive ICT development.

- The 2017 long questionnaire data collection was completed. Around 150 countries submitted their responses to the WTI Long Questionnaire 2017. Around 60 countries responded to the ICT Household Short Questionnaire 2017, and 114 countries responded to the ICT Price Basket Questionnaire 2017.

- The World Telecommunication/ICT Indicators Symposium (WTIS) 2017 was held in Hammamet, Tunisia from 14-16 November 2017 and was attended by around 420 participants from 74 Member States representing public and private organizations including ministries, regulators, national statistical agencies, universities and research institutions, telecommunication operators, ICT firms, and regional and international organizations.

- The Measuring the Information Society Report (MISR) 2017 was launched on 15 November 2017 during WTIS 2017. MISR 2017 includes the results of the ICT Development Index (IDI) 2017 at the global and regional level and highlights countries' improvements since 2016. The report presents a quantitative analysis of the information society and highlight new and emerging trends and measurement issues. It also includes for the first time individual economy profiles providing a snapshot of the latest ICT landscape and efforts made to increase the ICT access, use and proficiency of their citizens. The analytical report is complemented by a series of statistical tables providing country-level data for the indicators included in the IDI.

It contributed to the enhanced knowledge of policy makers, investors and business people about current ICT market trends allowing them to take evidence-based decisions; it provides an accurate analysis of telecommunication/ICT development.

- The ITU project on 'Big Data for Measuring the Information Society' was concluded successfully. The project includes pilot studies in six countries (Colombia, Georgia, Kenya, Philippines, Sweden and the United Arab Emirates) that aims to explore how big data from the ICT industry, particularly from telecommunication operators, can produce new or complement existing indicators to measure the information society. The outputs of the project include six country reports and a methodology document describing the big data ICT indicators and methodologies and how the indicators can be produced by operators and service providers, and compiled at the country level. The document was developed and enhanced based on experiences by pilot countries. The use of the methodology document will ensure international comparability of the ICT indicators that are produced from big data sources.

- ITU and the Ministry of Communications and Information Technology of Indonesia organized a mini workshop on ICT indicators and IDI on 12-13 December 2017 in Indonesia.

WTDC	*Resolutions 1, 5, 8, 30, 33, 37, 43, 50, 51, 52, 57, 59, 60*
PP Resolutions	*PP Decisions 5, 13* *PP Resolutions 25, 71, 72, 137, 139, 140, 176, 188, 189, 197, 199, 202*
WSIS Action Line	*Telecommunication/ICT statistics are relevant to the monitoring of the implementation of all WSIS Action Lines of the Geneva Plan of Action and are referred to in paragraphs 112-119 of the Tunis Agenda for the Information Society, as well as paragraphs 70 of the Outcome Document of the High-Level Meeting of the General Assembly on the Overall Review of the Implementation of WSIS Outcomes*
Contributing to SDG Targets	*Telecommunication/ICT statistics are relevant to the monitoring of the implementation of all SDGs and are referred to in paragraphs 48, 57, 74-76, 83 of the 2030 Agenda for Sustainable Development*

4.3   Digital inclusion of people with specific needs

- Awareness was raised on the type of ICT accessibility policies that ITU members can adopt and implement to ensure telecommunication/ICT accessibility for persons was disabilities. In addition, the capacity of Member States to develop and implement digital inclusion policies, strategies, and guidelines to ensure telecommunication/ICT accessibility for persons with disabilities was strengthened through the following:

  – Over 1000 ITU Members and stakeholders were made aware or had their capacity built in ICT accessibility policies, strategies, guidelines and good practices. This includes awareness raising during ITU-D Study Group Question 7/1 meetings; on public procurement of accessible ICTs to over 150 participants during the "European Workshop on Accessibility" held on 2-3 February 2017 in Brussels; in Costa Rica on 14 March 2017 to over 100 decision makers who participated in a political buy-in seminar on the topic of ICT Accessibility related to web accessibility (see details related to development of training below); and on 26 May 2017 to over 200 participants on the "Opportunities to promote Accessible ICTs from a global development perspective" in the event "International week – I am accessible" held by the Government of Spain through Ceapat-Imserso"; , 235 participants in "Accessible Americas IV- ICT for ALL" held in Costa Rica from 21 to 23 November as well as to over 75 participants during the Stakeholder Workshop on Web Accessibility organized by European Commission

on 29 November in Brussels. ITU activities and key resources on ICTaccessibility were also promoted and shared with the UN diplomatic community during the 4 December celebration of International Day of Persons with Disabilities.

– The fourth edition of the Regional Workshop Accessible Americas: ICTs for ALL was carried out in San Jose, Costa Rica, from 21 to 23 November 2017. The event accounted the attendance of 245 participants from 18 countries. The event focused on promoting further the development of accessibility in countries and institutions, through the effort and cooperation of stakeholders and sharing successful outcomes of projects and initiatives already implemented, in order to interchange resources and solutions and make the Americas region a more inclusive society.

– Assistance was provided to Egypt to develop a national ICT accessibility policy. ITU Member State Egypt released its national ICT accessibility policy for persons with disabilities at its annual ICT accessibility conference in April 2017. The policy includes recommendations on additions to Egypt's draft Disability Act as well as its ICT and broadcasting laws and regulations covering web, TV, mobile and public access terminals accessibility along with public procurement of accessible ICTs.

– A national training programme on web accessibility "Internet for @ll" composed by a political buy-in at national level on ICT accessibility and two "face-to-face train-the-trainer" courses on "Accessible web content" and in "Design and development of accessible websites" in line with the WCAG 2.0 web accessibility standards was developed. The pilot of this National training programme was implemented in Costa Rica from 13 to17 March 2017. During the decision maker's buy-in seminar awareness was raised among the Regulator, Superintendencia de Telecomunicaciones (SUTEL), Ministry of Science, Technologies and Telecommunications (MINCIT), the Universidad de Costa Rica and its Consejo Nacional para las Personas con Discapacidad (CONAPDIS). Within the political buy-in, ITU-D also made a presentation of a self-sustainable model that, as a result of a national certification for these two trainings, can generate in-country funds to also build capacity of persons with disabilities in using accessible websites. ITU also delivered the two training courses on web accessibility and as a result ITU-D certified 44 national trainers on "Accessible web content" and 20 national trainers in "Design and development of accessible websites". These courses were delivered at the Universidad de Costa Rica that with the curriculum provided by ITU will take the lead at national level on this topic and will replicate the courses to ensure that Costa Rica governmental websites are made accessible and available for persons with visual disabilities (PwD). The curriculum of this National training programme on web accessibility has already been translated from Spanish into English, French and Arabic and adapted to each region. It will be made available in other ITU official languages in 2018, upon regions' requests.

– Girls in ICT Day events were organized globally on 27 April, including at ITU Headquarters and at all ITU regional offices, raising awareness and contributing to create a global environment that empowers and encourages girls and young women to consider studies and careers in the growing field of ICTs. Up to day, since 2011 when the first International Girls in ICT Day was celebrated, over 9,000 events in 166 countries have taken place, empowering more than 300,000 girls and young women from around the world. In 2017, some 70,000 girls from 134 countries participated in over 2,100 events: this includes events held in 30 countries in the AFR region, 33 in the AMS region, 12 in the ARB States, 20 in the ASP region, 6 in the CIS and 33 in EUR. The ITU Girls in ICT Portal received 1,117,695 page views between January and September 2017. This compares to a total of 383,552 page views in 2016, and 337,936 page views in

2015. The Girls in ICT Portal houses a toolkit and branding materials for organizers to use in their events. It also includes a map of events worldwide, linked to pages where organizers can post pictures, videos and descriptions of the results of their events.

– Awareness about Girls in ICT Day has been raised among tens of millions worldwide and covered by BBC World TV in 2017. #GirlsinICT hashtag reached over 63 million Twitter accounts for 255,057,360 timeline deliveries this year.

– In 2017, the flagship Girls in ICT Day event organized in Geneva was connected with the Girls in ICT Day event organized in Vilnius, Lithuania during RPM-EUR and an event organized by Alfa Telecom in Beirut, Lebanon. These events, and events from around the world, are posted on the Girls in ICT Portal, which also hosts the Girls in ICT Facebook page and #girlsinict Twitter feed. The Portal is available at www.itu.int/girlsinict.

– ITU-D also raised awareness on how ICTs can promote girls' inclusion and access to education (particularly STEM) and employment and contribute to gender equality and women's empowerment with over 40 stakeholders-participants during a WSIS workshop on 15 June 2017, as well as to over 150 participants during the UNI Global Union - World Executive Board Meeting on "The Future World of Work" held from 9-11 October in Nyon, Switzerland.

– Internet Access and Training Centre for persons with hearing disabilities was established in Vitebsk, Belarus in March 2017. The Centre provides five working places.

• Girls in ICT Day celebration was encouraged in the Asia-Pacific region in a number of countries. ITU staff at regional office participated at celebrations done by the Asia-Pacific Telecommunity (Fiji), Vanuatu (remotely) and Thailand. A targeted programme for 2017 to train girls in ICT was also launched in Thailand, together with the Ministry of Digital Economy and Society (Thailand) and partners. Following the Girls in ICT Day celebration in Thailand, ITU and Ministry of Digital Economy and Society (Thailand) in partnership with FAO, CCKDM (Thailand) and CISCO have enhanced the awareness and skills of more than 150 female students and 11 women from Thailand through three trainings in using ICTs to improve their careers and work productivity.

• Enhanced regulatory capability for Bangladesh Telecommunication Regulatory Authority to ICT for Bangladesh for empowerment of women using ICT and developed recommendations in December 2017 Dhaka Bangladesh.

• The capacity of members in using telecommunications/ICTs for the social and economic development of people with specific needs, including telecommunication/ICT programmes to promote youth employment and entrepreneurship, was improved through:

– Raising awareness on the importance of training young people with job-ready digital skills among nearly 200 stakeholders during the June 2017 World Summit for the Information Society (WSIS) Forum "High Level Dialogue on Digital Skills for Decent Jobs for Youth". The session launched the joint ITU-ILO "Digital Skills for Decent Jobs for Youth" campaign to incentivize a range of stakeholders to train 5 million youth worldwide with job-ready digital skills by 2030. The Campaign has been launched under the "Global Initiative on Decent Jobs for Youth", supported by 22 UN agencies. ITU is leading the digital skills thematic area of the Global Initiative on Decent Jobs for Youth which seeks to scale up country action. More information about the campaign is available at www.itu.int/digitalskills.

– Raising awareness on digital skills for youth employment, including the joint ITU-ILO "Digital Skills for Decent Jobs for Youth" campaign, among 150 stakeholders attending the World Youth Skills Day event at UN Headquarters in New York on 17 July 2017.

Digital skills and the Digital Skills Campaign were promoted at this event by the UN Secretary-General's Envoy on Youth, Ms. Jayathma Wickramanayake and the President of the UN General Assembly, Peter Thomson, including their social media accounts, as well as via #DecentJobsForYouth and #digitalskills. These messages were amplified on International Youth Day, by the ITU Secretary General, the BDT Director and through an ITU Digital Skills Campaign infographic at https://pbs.twimg.com/media/DHA6KseXoAAZWVV.jpg

– Creating and making available to all ITU members, young job seekers and entrepreneurs an online database of ICT-enabled resources. This database includes links to training opportunities, crowd funding for start-up capital, mentoring networks and job-matching services to enable members and youth to leverage digital opportunities to enhance their employment and entrepreneurship opportunities. See http://www.itu.int/net4/ITU-D/CDS/sis/Youth/Resources/index.asp.

- 120 digital inclusion programmes and practices were shared on the Digital Inclusion Newslog at http://digitalinclusionnewslog.itu.int/ from January to June 2017, with more than 4,500 views of the newslog posts during this time period.

- Awareness was raised and best practices shared among ITU members through weekly publication of innovative digital inclusion practices and strategies on the ITU-D Digital Inclusion newslog. 181 digital inclusion programmes and practices were shared on the Digital Inclusion Newslog at http://digitalinclusionnewslog.itu.int/ from January to September 2017, with more than 6,757 views of the newslog posts during this time period. ITU members and related interested stakeholders have access through this newslog to the latest digital inclusion practices and strategies, such as digital literacy, coding training, initiatives to encourage more girls and women to take up ICT studies and careers and ICT accessibility practices for persons with disabilities.

- Support was provided to over 150 indigenous leaders from 16 ITU Member States in Americas Region (Argentina, Bolivia, Brazil, Chile, Colombia, Ecuador, El Salvador, Guatemala, Honduras, Mexico, Nicaragua, Paraguay, Peru, Uruguay, United States and Venezuela) to develop their capacity in using telecommunications/ICTs for the social and economic development though three (3) on-line courses: on "Access, development and use of web tools and digital content of interest of indigenous communities" (17 April-24 June), on " Training education in entrepreneurship" (3 July-26 August), and on "Development of Indigenous local communication networks (how to develop, manage and operate a network of Indigenous news radio) . (Joint OP action with Americas Region) (11 September-3 November).

- Raised ICT inclusiveness in Belarus by establishing an Internet Access and Training Centre for persons with hearing disabilities in Vitebsk, Belarus, in March 2017. The Centre provides five working places.

- Raised capacity of teachers of 2 Internet Access and Training Centres for persons with hearing disabilities through joint ITU-IIET UNESCO training, which was held in Minsk, Belarus, from 15 to 16 May 2017;

- Discussed results of the Girls in ICT Day initiative in CIS and outlined future directions of its development at ITU Regional Videoconference Seminar, which was held in Moscow, Russia, on 27 April 2017 and which attracted 60 participants from 6 countries.

- Promoting the formulation of ICT Accessibility Policies in the Arab region by assisting Sudan in the regard. Furthermore, assisted the Ministry of Communications and Information Technology of Egypt to formulate the ICT Accessibility Policy for Egypt. The report was

launched during the 6th Annual ICT Accessibility Conference that was held in Cairo, Egypt on 8-9 May 2017.

- Promoted ICT Accessibility regionally through the organization of Regional ICT Accessibility Week in collaboration with UNESCO on 24 – 28 September 2017. Activities were organized by 9 partners in 7 countries in the Arab region. On this occasion, ITU and UNESCO organized a High Level Symposium, a training on web accessibility, and a workshop on organizing accessible meetings on 27-28 September 2017 in Cairo, Egypt.

- Completed translation of the ITU curriculum on Web Accessibility into Arabic.

WTDC	*Resolutions 1, 5, 9, 11, 15, 20, 21, 22, 23, 30, 32, 55, 58, 68, 76, 77*
PP Resolutions	*PP Decisions 5, 13* *PP Resolutions 25, 30, 32, 33, 34, 36, 37, 64, 70, 71, 131, 139, 140, 175, 184, 198, 202*
WTSA	*Resolutions 55, 69*
WSIS Action Line	*Action Lines C2, C4 and C7 and C8 of the Geneva Plan of Action and § 90 of Tunis Agenda for the Information Society*
Contributing to SDG Targets	*SDGs: 1 (targets 1.2, 1.4, 1.a, 1.b), 4 (targets 4.1, 4.2, 4.3, 4.4, 4.5, 4.a, 4.b), 5 (5.1, 5.5, 5.b, 5.c), 8 (targets 8.2, 8.3, 8.5, 8.6, 8.10, 8.b), 9 (target 9.c), 10 (targets 10.2, 10.3), 11 (targets 11.2, 11.7, 11.c), 16 (target 16.b), 17 (targets 17.6, 17.7, 17.8, 17.17)*

4.4 Concentrated assistance to LDCs, SIDS and LLDCs

- A Pre-WTDC-17 Ministerial Roundtable on ICT④SDGs in Least Developed Countries (LDCs), Landlocked Developing Countries (LLDCs), and Small Island Developing States (SIDS) took place on 8 October 2017 and was attended by about 90 participants. The Roundtable highlighted how ICTs are accelerating the attainment of the Sustainable Development Goals (SDGs), and discussed national initiatives on how to address and overcome barriers to ICT affordability, connectivity, access, and use. It identified ICT strategies and policies, innovative technologies, and investment opportunities to drive ICT developments. It also highlighted the role of the private sector.

- To enhance the capacity of LDCs, the report on ICTs, LDCs, and the SDGs is under preparation. The report, which is being produced in cooperation with the UN Office of the High Representative for Least Developed Countries, Landlocked Developing Countries and Small Island Developing States (UN-OHRLLs), focuses on ICT infrastructure and affordability developments (SDG 9, Target 9c). A draft was presented during the WTDC-17, and the report will be launched in Q1 of 2018.

- Zambia received concentrated assistance in the form of equipment for schools for the blind.

- A presentation to highlight the importance of ICT infrastructure for development in LDCs was made at the Regional Meeting of African LDCs. The meeting was organized from 28 February to 01 March, in Dakar, by the UN Office of the High Representative for the Least Developed Countries, Landlocked Developing Countries and Small Island Developing States (UN-OHRLLS).

- ITU made a presentation to highlight the potential of ICTs in the LLDCs as key bedrock of the digital economy at the Expert Group Meeting on Financing Infrastructure Development for enhanced integration of the LLDCs into global trade. The meeting was organized by the UN Office of the High Representative for the Least Developed Countries, Landlocked Developing

Countries and Small Island Developing States (UN-OHRLLS) and took place on 4 and 5 October 2017 at the United Nations Headquarters, New York.

- A presentation was made to acknowledge ITU's work in the LDCs and the importance of ICTs to fast-forward the implementation of the outcome of the Mid-term Review of the Istanbul Programme of Action (IPoA) and to build synergies and coherence with the 2030 Agenda. The 15th Inter-Agency Consultative Group Meeting of the UN system and international organizations on the implementation of the IPoA for the LDCs for the Decade 2011-2020 was held on 3 October 2017. It was organized by the UN Office of the High Representative for the Least Developed Countries, Landlocked Developing Countries and Small Island Developing States (UN-OHRLLS) at the United Nations Headquarters, New York.

- Completed the Strategic Corporate plan for the recently established ICT Commission (ICTC) in Tanzania. The work was started in 2016 with the diagnostic of the situation and the respective validation. In 2017, the draft strategic plan was drafted, and a stakeholders' consultative meeting was held in Dar Es Salaam. After inserting the received inputs, the final document is in the process of being submitted to the ICTC. The Strategic Corporate Plan will help Tanzania to implement a structure ICT development programme.

- Celebrations in Girls in ICT in April. Sponsorship was given to some African countries, and a joint collaboration with UN agencies, such as UN Women, UNDP Regional Office, UNDP Country office and UNECA and the AUC in Addis Ababa, Ethiopia, was held.

- Enhanced skills of 14 participants from Arab LDCs on IPv6 security related security issues at the ITU Arab Regional Training Programme for Arab LDCs on IPv6 (CNE-2), organized in collaboration with NTC-Sudan in April, 2017. 14 trainees from 7 countries were trained.

- Aimed at enhancing the capacity of LLDCs, two reports on "America's landlocked developing countries (LLDCs): Connectivity opportunities and challenges in Bolivia and Paraguay" are currently under preparation.

- BDT contributed a chapter on the Internet Divide, with a focus on infrastructure and connectivity gaps in the LDCs, to the 2017 Aid For Trade at a Glance Report.

- Supported integration of ICT in education in Kyrgyz Republic in April 2017 by supplying remote education facilities as technical assistance to the Institute of Electronics and Telecommunications under Kyrgyz State Technical University named after Iskhak Razzakov.

- The workshop on "Enhancing access to submarine cables for Pacific Islands Countries" (31 July-3 August, 2017 in Fiji) was organized in partnership with Pacific Islands Telecommunications Association (PITA) and with the support of DoCA (Australia) and DoC (Fiji). The workshop built capacity and skills of around 90 participants from government, regulators, industry, and academia in the area of submarine cable access, pricing and costing.

- During 2017, a total of 624 fellowships were provided to participants from LDCs to participate in ITU meetings. Every LDC received at least one fellowship.

- The ITU Asia-Pacific CoE workshop on "Implementing E-application strategies for telecom sector growth in the Pacific" organized in partnership with PITA, DoC (FIJI), DoCA (Australia) and MDES (Thailand) built capacity of 65 participants from 13 countries in the area of telecom strategy, e-applications and platform development with specific reference to the Pacific.

WTDC	Resolutions 16, 17, 18, 21, 25, 26, 30, 33, 36, 37, 50, 51, 52, 53, 57, 60
PP Resolutions	PP Decisions 5, 13 PP Resolutions 25, 30, 32, 33, 34, 36, 70, 71, 123, 124, 125, 126, 127, 135, 159, 160, 161, 193, 202

WRC	Resolution 12
WCIT	Resolution 1
WSIS Action Line	Action lines C4 and C7 of the Geneva Plan of Action and §§ 9, 23, 26, 49, 59, 87 and 95 of the Tunis Agenda for the Information Society
Contributing to SDG Targets	SDGs: 1 (target 1.4), 3, 4 (targets 4.3, 4.5, 4.6, 4.a, 4.b), 5 (target 5.b), 6, 8 (target 8.5), 9 (targets (9.1, 9.2, 9.5, 9.a, 9.c), 10 (targets 10.2, 10.b), 11 (targets 11.1, 11.2, 11.7), 12 (target 12.b), 13 (target 13.b), 14, 15, 16, 17 (targets 17.7, 17.8, 17.9, 17.18)

Objective 5

"Enhance environmental protection, climate change adaptation and mitigation and disaster management efforts through telecommunication/ICTs"

The results achieved during the period of January to December 2017 are as follows:

5.1 ICTs and climate-change adaptation and mitigation

- The e-waste management policy and regulatory framework for Saint Lucia were finalized.

- The first phase (Phase 1) of a study for developing an E- Waste Management Policy and Regulatory Framework for Jamaica has been completed. The final phase (Phase 2) is 90% completed.

- ITU, together with the United Nations University (UNU), and the International Solid Waste Association (ISWA) is finalizing the Global E-waste Monitor 2017, which was launched on December 15th. This report presents 2016 global and regional figures on the amount of e-waste produced, and features a number of other figures, such as global and regional recycling rates, and the number of countries with e-waste legislation. This report is one of the key outcomes of the Global E-waste Statistics Partnership. The main objective of this Partnership is to build capacity to help countries produce reliable and comparable e-waste statistics, to collect data from countries and build a global e-waste database to track developments over time and by this informing policy makers and industry. ITU and its partners have secured funding to continue his work in 2018.

- BDT is finalizing the 'Handbook for the development of a policy framework on electrical and electronic waste from Information and Communication Technologies'.

- The final reports of the ITU-D Study Group Period 2014-2017 Questions 6/2 on ICTs and Climate Change and Question 8/2 on Strategies and Policies for the proper disposal or reuse of telecommunication/ICT waste material were published.

- BDT is finalizing a joint project with Universidad de La Plata, Argentina. The aim of this project is to establish an e-waste recycling pilot plant that will provide concrete responses the e-waste problems in cities in line with Sustainable Development Goals.

- BDT if finalizing a publication on Successful Electronic Waste Management Initiatives which will provide an overview of some examples and experiences in the African, Asian, European and Latin American regions on existing effective WEEE management initiatives that could serve as a basis to develop a best practice on the sound management of e-waste that could be replicated in other parts of the world.

- BDT is working on the development of training materials on ICTs and Climate Change, which is being done in four stages; stage 1 – scoping of the programme; stage 2-development of content; stage 3 – peer review and stage 4 –editing of the material. We have completed stage 1 and stage 2: all materials for the 21 modules have been developed and peer reviewed. We are now in stage 4 of editing of the materials

- A study has been commissioned to determine the capacity building needs of African countries in terms of developing guidelines on the development of legislative frameworks. This study would recommend a capacity building plan for having e-waste legislative framework in place.

- BDT is working on the development of a report to design an e-waste policy and regulatory framework for Malawi, including an assessment of current e-waste treatment and a forecast of e-waste volumes and values. Specifically, the policy framework will set out mechanisms to control the import, reuse and or production of ICT devices, the identification of activities and responsibilities of each of the stakeholders, both private and public, involved in the sound management of e-waste and a financing model for the e-waste management system.

- Regional Training Workshop on ICT for Climate Change Mitigation and Adaptation in Arab Region was organized in collaboration with the Tunis-International Center for Environmental Technologies (CITET). The workshop was held in Tunis, Tunisia, 12-13 July 2017. The workshop aimed at building skills on the required actions for Climate Change mitigation and adaptation and the role that ICT plays in tackling it. The workshop was attended by more than 60 participants, representing 7 member states and 3 UN agencies and 1 academia member.

- Regional workshop on Prospects of Smart Water Management (SWM) in Arab Region were held in Khartoum, Sudan on 12 December, 2017. The workshop aims to discuss the increasing role of ICT technologies to manage water resources, particularly for agricultural and urban uses in a smart city. Moreover, the workshop will shed light on the opportunities and challenges for expanding smart water management in the Arab region.

- Regional Forum on Internet of Things (IoT) for development of Smart Sustainable Cities (SSC) for Arab Region was held in Khartoum-Sudan, 13-14 December 2017. The forum will shed light on the increasing role of the Internet of Things (IoT) impacting various areas of development, ultimately contributing to building smart sustainable cities with integrated ecosystems.

- Showcasing utilization of ICTs to manage groundwater resources in a project on Smart Groundwater Management in collaboration with the Ministry of Communications and Information Technology of Egypt.

WTDC	*Resolutions 17, 21, 30, 32, 37, 50, 52, 53, 66*
PP Resolutions	*PP Decisions 5, 13* *PP Resolutions 25, 71, 182*
WTSA	*Resolution 73*
WSIS Action Line	*Action Line C7 (e-environment) of the Geneva Action Plan is closely linked to Output D.5.1*
Contributing to SDG Targets	*SDGs: 3 (target 3.9), 5 (target 5b), 9, 11 (targets 11b), 13 (targets 13.1, 13.2 and 13.3), 14, 15*

5.2 Emergency Telecommunications

- The II Workshop on Technologies for mitigating the effects of earthquakes and tsunamis was organized in Pisco, Peru on 21 and 22 June 2017.

- Pacific Training on VSAT Fundamentals and Installation took place in Vanuatu on 15-18 May 2017. It is part of the ITU project on the development of satellite communications capacity and emergency communications solutions for Small Islands Developing States of the Pacific.

- ITU supported the Government of Zimbabwe in addressing the challenges following the devastation caused by severe floods through the deployment of emergency telecommunication equipment. The equipment was used to coordinate recovery and rehabilitation activities, including providing communication to the most affected communities in the country.

- BDT finalized the implementation of two Early Warning Systems in Mbeta Island and Kasaya Village in Zambia. The systems will be used to provide early warnings to population on flooding and mudslides.

- ITU build capacity in Members States through the Second Multi-stakeholder Forum on the Role of Telecommunications/ICT in Disaster Management, which took place from 29 to 31 August 2017, in Bogotá, Colombia. The Forum, which was attended by about 400 participants, was organized by the ITU Telecommunication Development Bureau (BDT) and the Ministry of Information Technologies and Communications (MINTIC) of Colombia. The 2017 Forum served as a platform to exchange new experiences and best practices in the use of modern technologies for monitoring and for the establishment of multi-hazard early warning systems.

- A Letter of Intent to Establish an Agreement on "The use of ICTs for emergency and disaster situations in the Americas region" was signed by CITEL, COMTELCA, CTU, and ITU.

- An audit of the Caribbean Regional and Sub Regional Emergency Telecommunication Systems is being carried out in collaboration with CDEMA to specifically assess the regional and sub regional emergency telecommunication systems (for at least 10 of the 18 participating states) to identify current weaknesses and strengths and make recommendations for improvement, including to develop emergency telecommunication plans and systems.

- The ITU Regional Training Workshop on ICTs for Disasters Management for the Arab Region was organized in Khartoum, Sudan 28-29 August, 2017, and hosted by the National Telecommunications Corporation (NTC) in Khartoum, in collaboration with GSMA. The overall objective of training workshop was to raise awareness on the importance of the ICT role in disaster management and broaden knowledge on the humanitarian context of emergency response and the inter-agency response mechanisms. The training workshop was attended by more than 80 participants representing 10 Member States from the region, 2 from Africa including Palestine (based on resolution 99) and 5 private sector entities and other national organizations, 5 UN Specialized Agency, 1 other entities dealing with telecommunications, and 3 member Academia.

- As an implementation part of the BDT project "Development of ICT Applications against Ebola Disease" (Project No. 7RAF15087), BDT organized a Training Workshop on Server Configuration and Data Collection for Big Data Project (CDR Secure Storage and Analysis) as well as Use of ICT applications for humanitarian coordination, such as Tele-Health. The training took place from 16 to 20 October 2017, in Freetown, Sierra Leone. The training workshop was attended by 18 participants representing three (3) project beneficiary Member States – Sierra Leone, Liberia and Guinea. Project implementation was completed by 15 December 2017.

- Following the end of the ITU-D Study Group Period 2014-2017 (in April 2017), the final report of Study Group Questions 5/2 on Utilization of telecommunications/ICTs for disaster preparedness, mitigation and response was launched at WTDC-2017.

- ITU and the Australian Government (i.e. Department of Communications and the Arts) entered into a cooperation agreement to implement a project on emergency telecommunications in Asia and the Pacific, which will be carried out in 2018.

- BDT raised awareness on the importance of the ICT role in disaster management and broaden knowledge on the humanitarian context of emergency response and the inter-agency response mechanisms through a Regional Training Workshop on ICTs for Disasters Management for Arab Region organized in Khartoum, Sudan on 28-29 August, 2017 in collaboration with GSMA and hosted by NTC-Sudan. The training workshop was attended by more than 80 participants, representing 10 Member States from the region, 2 from Africa including Palestine (based on resolution 99) and 5 private sector entities and other national organizations, 5 UN Specialized Agency, 1 other entities dealing with telecommunications, and 3 members from Academia.

- A training workshop and focus group on Pacific Satellite Connectivity project were held in Bangkok, Thailand on 29 August 2017 and followed by the ITU International Satellite Symposium 2017. The workshop and focus group meeting were attended by focal points of the Pacific Islands Countries and industry partners of the ITU project.

- In September 2017, ITU deployed emergency telecommunication equipment to the Caribbean Islands as a response effort after the massive devastation caused by Category 5 Hurricanes Irma and Maria. Many Caribbean countries suffered extensive damages from some of the strongest storms to hit the region. Several Member States, including Haiti, Dominica and Antigua and Barbuda, received emergency telecommunications equipment, including 8 satellite phones and 3 BGANs that were deployed by ITU specifically for the purpose of giving information on the aerial shots allowed for photographic and audio feedback to news agencies, as well as to assist in the coordination among CDEMA and other responding units, for a combined total deployment in the Caribbean Region of 70 satellite phones, peripherals & accessories; 13 BGANs, peripherals & accessories; 33 Solar Chargers & accessories and two (2) VSAT, peripherals & accessories to support humanitarian relief and initial recovery efforts and for further coordination for recovery and reconstruction activities. The systems were installed in East-South East and South East communities of La Plaine and Delices of Dominica with 6 months of free connectivity. The two (2) VSATs will remain in Dominica as part of their infrastructure with connectivity cost undertaken by the country.

- ITU, CITEL, COMTELCA and CTU signed a letter of intention during WTDC-2017 in Argentina, committing to develop a cooperation mechanism for the implementation of projects on the use of ICT for emergency and disaster situations in the Americas region.

- As a result of that signed letter of intention with CITEL, COMTELCA and CTU, A Pilot project on establishment of an Alternate Regional Emergency Telecommunications Network in the Americas Region was prepared to assist the beneficiary countries in enhancing their emergency telecommunications capabilities and to improve emergency and disaster response. The beneficiary countries are Costa Rica, Dominican Republic, El Salvador, Guatemala, Honduras, Nicaragua, and Panama, and all of them have signed the Project document and are ready to comply with their commitments in the project. The solution consists of implementing the Alternate Regional Emergency Telecommunications Network in beneficiary countries, providing the Emergency Operations Centers (EOC) of ITU Member States with the necessary equipment (RMS server and client function) to connect to the

network Winlink 2000, under the characteristics of redundancy and autonomy. The Project will be finished by June 2018, before the start of the hurricane season. The main objective of the project will be the strengthening of the cooperation among Telecommunication and Disaster Response authorities, and radio amateur associations. ITU has already started promoting the adoption of this solution all over the Americas region.

WTDC	Resolutions 1, 5, 17, 21, 30, 32, 34, 37, 50, 52, 53, 69
PP Resolutions	PP Decisions 5, 13 PP Resolutions 25, 37, 71, 98, 136, 140, 182, 202
WRC	Resolutions 646, 647
WCIT	Resolution 2
WSIS Action Line	Action lines C7
Contributing to SDG Targets	SDGs: 3 (target 3.9), 5 (target 5b), 9, 11 (targets 11b), 13 (targets 13.1, 13.2 and 13.3), 14, 15

Implementation level by Objective (Result Based Management perspective*)

Chart 1 below provides a distribution of the actual use of the resources among the five objectives of the sector for the period of January to December 2017.

Chart 1

Implementation level by objective
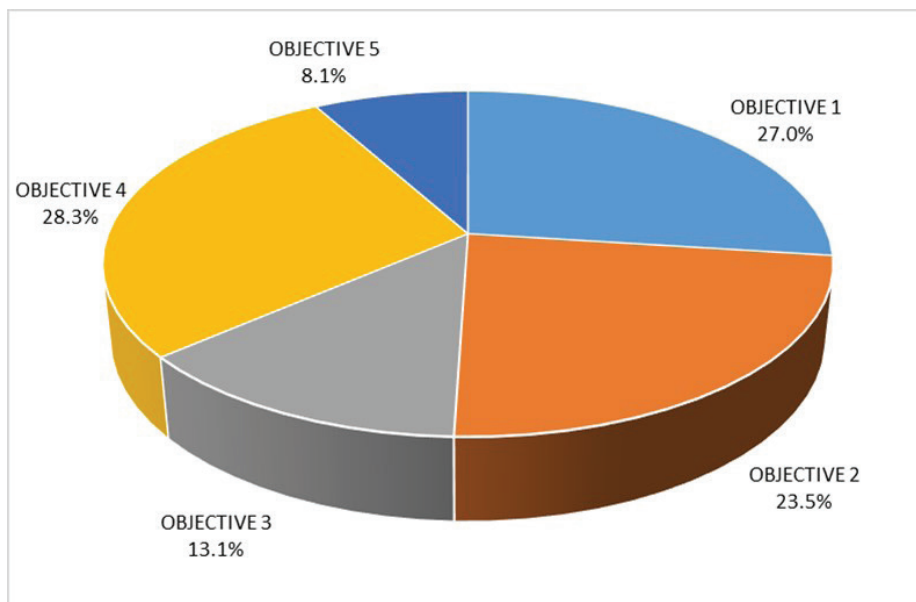
* Based on time allocation of staff members

Highlights of the operational plan implementation

This report highlights the results achieved as regards the implementation of the Operational Plan for the period 1 January to 31 December 2017 for the Telecommunication Development Sector. It also provides information by objectives and regions.

"

The operational plan framework provides a thorough view of the implementation level of the different objectives, outputs and actions

"

As at 31 December 2017, out of a total of 270 actions planned for 2017:

- 260 have been implemented
- 10 have been postponed

Implementation level by objective

Chart 1 below highlights, in terms of number, the status of actions (implemented, postponed) by objective for period 1 January to 31 December 2017.

Chart 1

Status of actions by objective

Budget implementation level by regions (in Swiss francs)
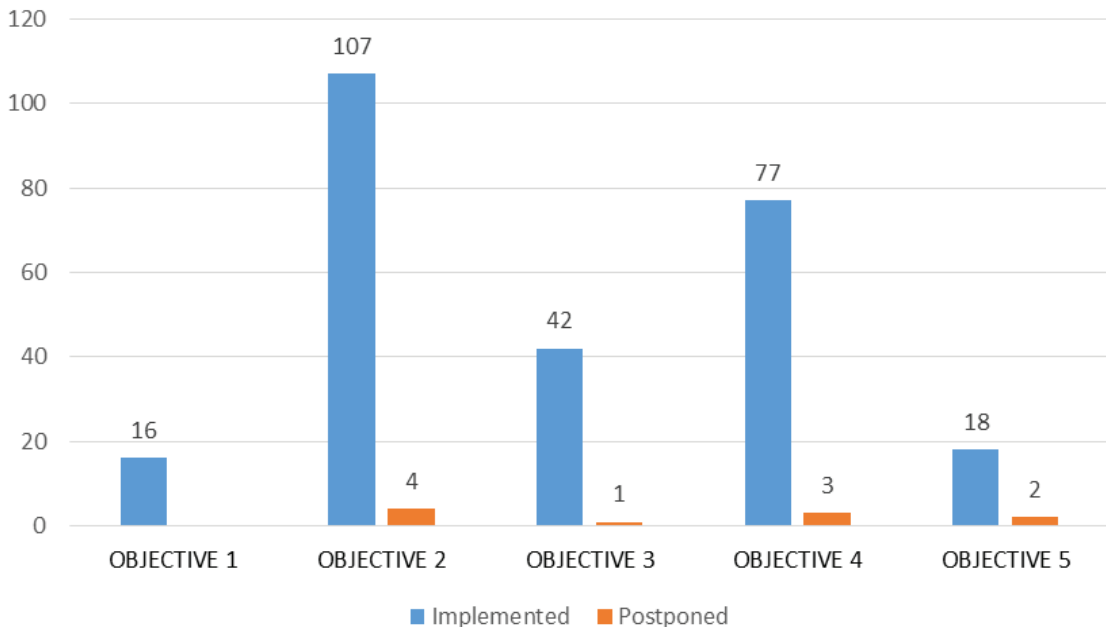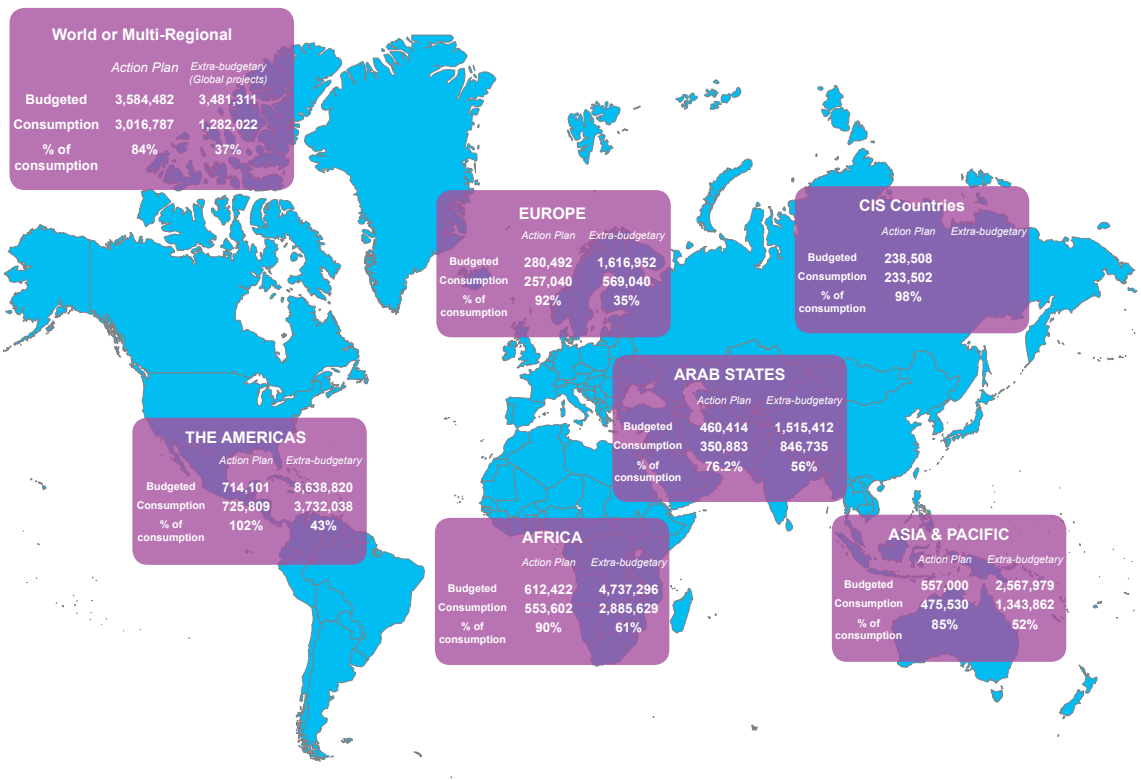
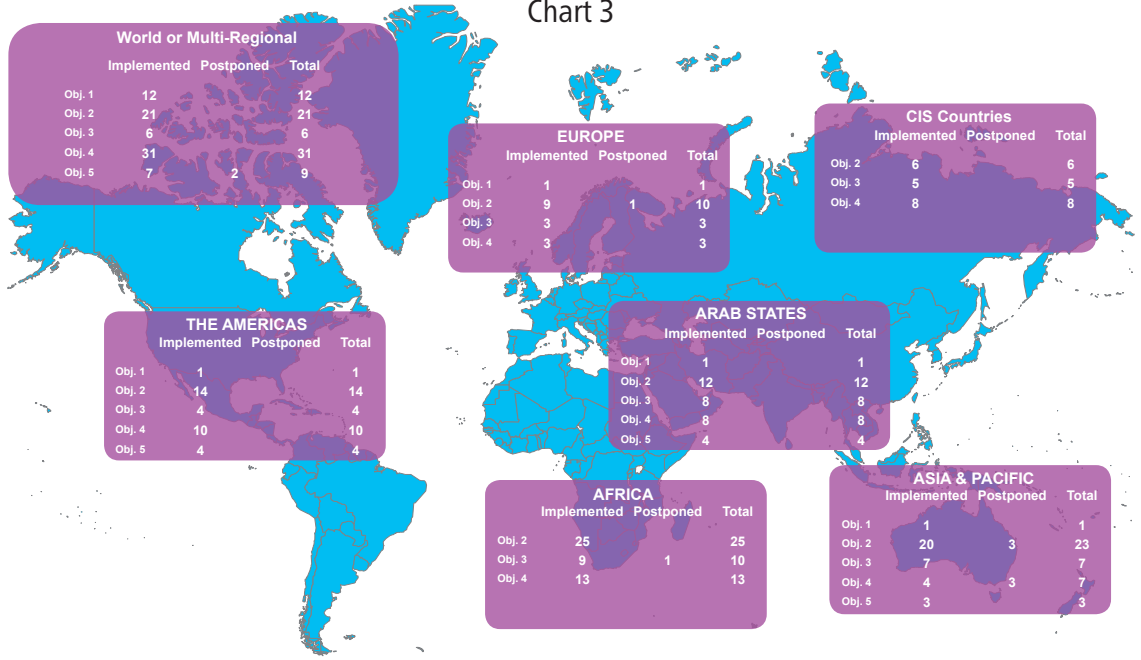Chart 2 below highlights the expenditure level by regions for the period of January to December 2017.

Chart 2

World or Multi-Regional

	Action Plan	Extra-budgetary (Global projects)
Budgeted	3,584,482	3,481,311
Consumption	3,016,787	1,282,022
% of consumption	84%	37%

EUROPE

	Action Plan	Extra-budgetary
Budgeted	280,492	1,616,952
Consumption	257,040	569,040
% of consumption	92%	35%

CIS Countries

	Action Plan	Extra-budgetary
Budgeted	238,508	
Consumption	233,502	
% of consumption	98%	

ARAB STATES

	Action Plan	Extra-budgetary
Budgeted	460,414	1,515,412
Consumption	350,883	846,735
% of consumption	76.2%	56%

THE AMERICAS

	Action Plan	Extra-budgetary
Budgeted	714,101	8,638,820
Consumption	725,809	3,732,038
% of consumption	102%	43%

AFRICA

	Action Plan	Extra-budgetary
Budgeted	612,422	4,737,296
Consumption	553,602	2,885,629
% of consumption	90%	61%

ASIA & PACIFIC

	Action Plan	Extra-budgetary
Budgeted	557,000	2,567,979
Consumption	475,530	1,343,862
% of consumption	85%	52%

Implementation level by objectives and regions (number of actions)

Chart 3 below shows, in terms of number, the implementation level of actions by objectives and regions for the period of January to December 2017

Chart 3

World or Multi-Regional

	Implemented	Postponed	Total
Obj. 1	12		12
Obj. 2	21		21
Obj. 3	6		6
Obj. 4	31		31
Obj. 5	7	2	9

EUROPE

	Implemented	Postponed	Total
Obj. 1	1		1
Obj. 2	9	1	10
Obj. 3	3		3
Obj. 4	3		3

CIS Countries

	Implemented	Postponed	Total
Obj. 2	6		6
Obj. 3	5		5
Obj. 4	8		8

THE AMERICAS

	Implemented	Postponed	Total
Obj. 1	1		1
Obj. 2	14		14
Obj. 3	4		4
Obj. 4	10		10
Obj. 5	4		4

ARAB STATES

	Implemented	Postponed	Total
Obj. 1	1		1
Obj. 2	12		12
Obj. 3	8		8
Obj. 4	8		8
Obj. 5	4		4

AFRICA

	Implemented	Postponed	Total
Obj. 2	25		25
Obj. 3	9	1	10
Obj. 4	13		13

ASIA & PACIFIC

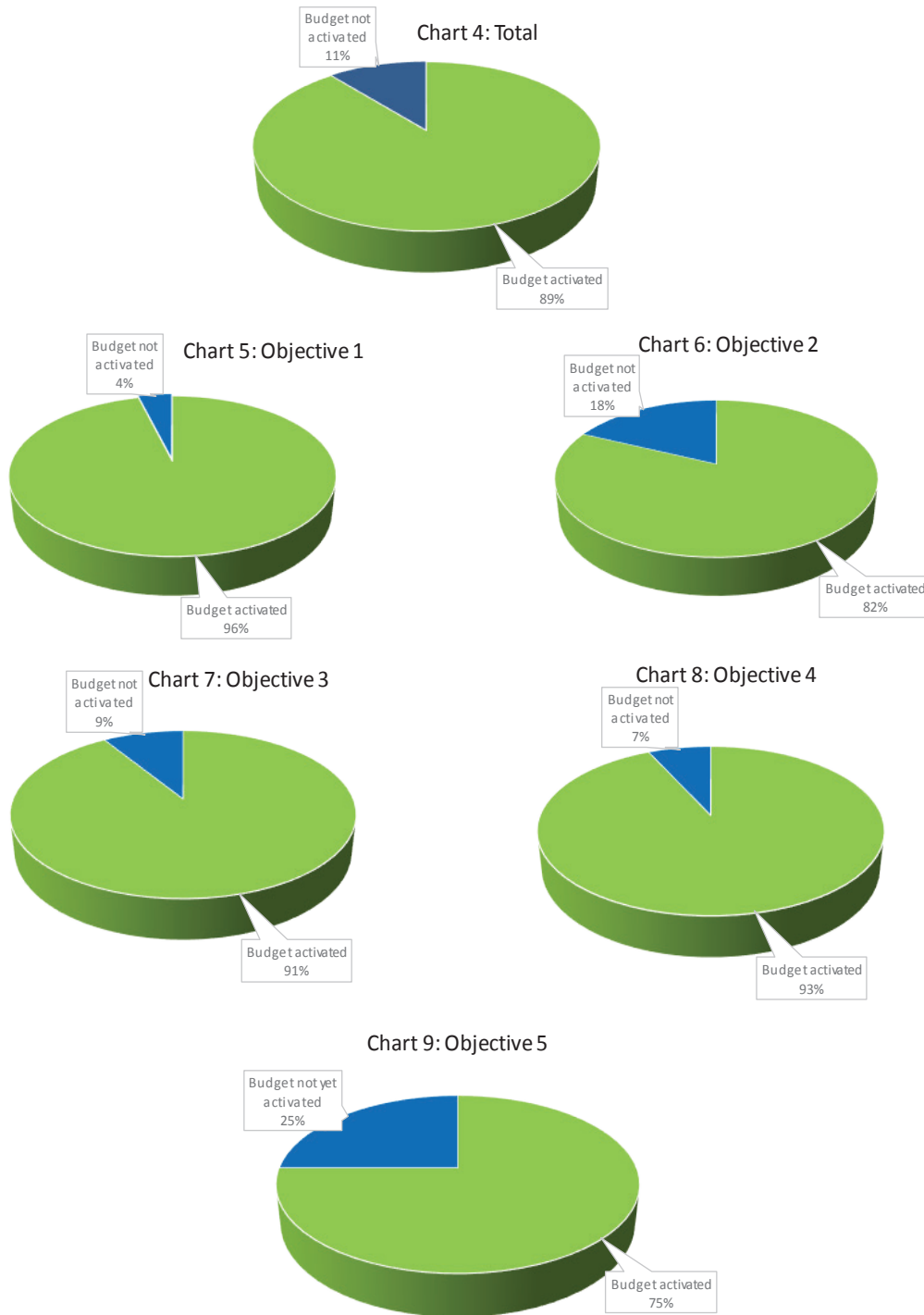|	Implemented	Postponed	Total
Obj. 1	1		1
Obj. 2	20	3	23
Obj. 3	7		7
Obj. 4	4	3	7
Obj. 5	3		3

Budget implementation level by objectives

Chart 4 shows the global budget implementation level and charts 5 to 9 highlight the budget activated[1] for each objective to the end of December 2017.

Chart 4

Chart 4: Total

Budget not activated
11%

Budget activated
89%

Chart 5: Objective 1

Budget not activated
4%

Budget activated
96%

Chart 6: Objective 2

Budget not activated
18%

Budget activated
82%

Chart 7: Objective 3

Budget not activated
9%

Budget activated
91%

Chart 8: Objective 4

Budget not activated
7%

Budget activated
93%

Chart 9: Objective 5

Budget not yet activated
25%

Budget activated
75%

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[1] Budget activated: Amount of the budget of the action spent.

Highlights of the financial plan implementation

This report highlights the expenditure level as at 31 December 2017 for the Telecommunication Development Sector, including the Bureau (BDT). It also provides information by objectives and outputs.

Result-based budget statement by objectives

Table 1 below provides the expenditure level by objectives in a Result Based Budget perspective as at 31 December 2017.

" The financial framework within which ITU-D operates requires rigorous forecast and management of the resources available "

Table 1
(in thousands of Swiss francs)

Strategic objectives	Budget	Actual	Balance	Level of implementation 12/2017
Objectives of ITU-D				
D-1 Foster international cooperation on telecommunication/ICT development issues	7,877	7,745	132	98.3%
D-2 Foster an enabling environment for ICT development and foster the development of	6,856	6,842	14	99.8%
D-3 Enhance confidence and security in the use of telecommunications/ICTs, and roll-out of relevant applications and services	3,822	3,520	302	92.1%
D-4 Build human and institutional capacity, provide data and statistics, promote digital inclusion and provide concentrated assistance to countries in special need	8,257	7,560	696	91.6%
D-5 Enhance environmental protection, climate-change mitigation and adaptation, and disaster-management efforts	2,363	2,066	297	87.4%
Costs of ITU-D Strategic Goal	**29,175**	**27,733**	**1,442**	**95.1%**

Financial statement for the Telecommunication Development Sector

Table 2 below shows by section the ITU-D expenditures as at 31 December 2017. As at 31 December 2017, expenditures amounted to CHF 27.7 million or 95.1 % of the ITU-D budget for 2017.

Table 2
(in thousands of Swiss francs)

		Budget	Expenditures as at 31/12/2017	Balance	Level of implementation
Section 3	World Telecommunication Development Conference	1,026	980	46	95.5%
Section 4	Regional Telecommunication Development Conference	317	316	1	99.7%
Section 5	Telecommunication Development Advisory Group	125	108	17	86.4%
Section 6	Study Group	349	339	10	97.1%
Section 7	Activities and programmes	4,363	3,759	604	86.2%
Section 9	Bureau	22,995	22,231	764	96.7%
TOTAL		29,175	27,733	1,442	95.1%

* Reflects the RPMs budget to be held in 2017.

Financial statement by objectives and outputs

Table 3 below shows the expenditures by ITU-D objectives and outputs as at 31 December 2017.

Table 3
(in thousands of Swiss francs)

		Budget	Expenditures	Balance	Level of implementation 12/2017	Level of implementation 12/2016
Objective 1	Foster Int. cooperation on Tel./ICT Dev. Issues					
	WTDC	1,026	980	46	95.5%	n/a
	RPM	317	316	1	99.7%	78.5%
	TDAG	125	108	17	86.4%	96.0%
	STG	349	339	10	97.1%	93.7%
	Subtotal Objective 1	1,817	1,743	74	95.9%	89.9%
Objective 2	Foster an enabling env. for ICT dev.	1,966	1,618	348	82.3%	84.6%
Objective 3	Enhance confidence and security	670	607	63	90.6%	89.0%
Objective 4	institutional capacity	1,372	1,269	103	92.5%	114.3%
Objective 5	protection, climate-change	355	265	90	74.6%	160.6%
Activities and prog.	Subtotal Objective 2 to 5	4,363	3,759	604	86.2%	100.8%
Total ITU-D activities	Objective 1 to 5	6,180	5,502	678	89.0%	99.4%

Financial statement for the Telecommunication Development Bureau

Table 4 below highlights by category of expenditure the expenditures for the Telecommunications Development Bureau as at 31 December 2017. As at 31 December 2017, expenditures amounted to CHF 22.2 million or 96.7% of the Bureau budget.

Table 4
(in thousands of Swiss francs)

		Budget	Expenditures	Balance	Level of implementation 12/2017	Level of implementation 12/2016
	Categories					
1	Staff costs	16,681	15,633	1,048	93.7%	97.2%
2	Other-staff costs	4,898	5,740	-842	117.2%	109.6%
3	Mission expenses	530	353	177	66.6%	98.3%
4	Contractual serv.	110	-42	152	-38.2%	94.5%
5	Rental & mainten.	95	51	44	53.7%	61.1%
6	Purchase of equipmnt	54	83	-29	153.7%	364.8%
7	Acquisition, furnit.	410	179	231	43.7%	44.0%
8	Utilities & services	130	146	-16	112.3%	113.1%
9	Auditing, inter-agenc.	87	88	-1	101.1%	81.6%
	TOTAL	22,995	22,231	764	96.7%	99.6%

Level of implementation by objectives

The chart below shows the budget and expenditures for ITU-D activities by objectives as at the end of December 2017.

(in thousands of Swiss francs)
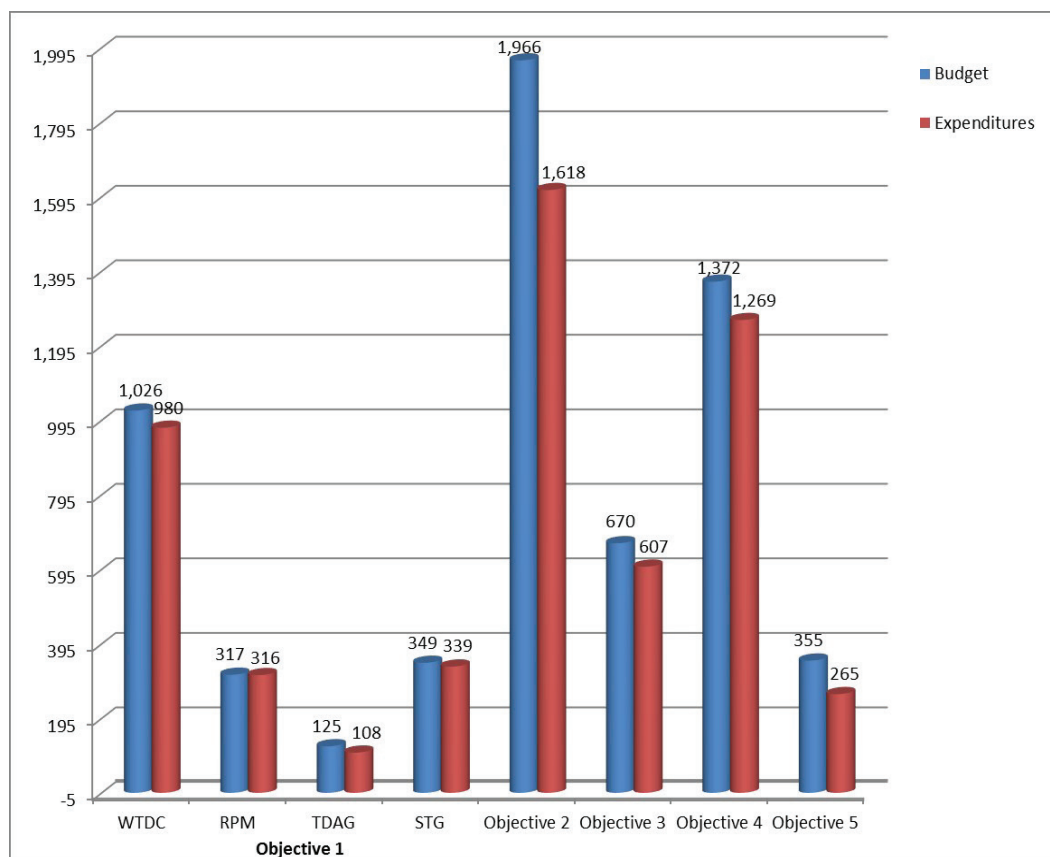
From Strategy to Execution

The progressive improvements of the Union's budgetary and financial structure reached a significant turning point with the introduction of the result-based budgeting and result based management.

In addition, the introduction of the re-structured operational plan of the Telecommunication Development Sector enhanced the integration between strategic planning, operational planning and financial planning.

The primary purpose of this performance report is to provide a quarterly assessment of the implementation of the BDT strategic, financial and operational plans using several facets and dimensions.

This report provides an assessment of the implementation of the strategic, operational and financial plan.

Strategic

The quarterly assessment of the strategic plan implementation provides a means for monitoring the implementation of the mission, objectives, outputs and priorities of the Telecommunication Development Sector.

Operational

The quarterly review of the operational plan puts emphasis on the outputs of the Sector as well as on the actions and activities undertaken by the Telecommunication Development Bureau (BDT) in connection with the implementation of these outputs.

It provides information regarding the implementation level of the outputs and actions as well as other pertinent operational data.

Financial

The financial quarterly reports highlight the financial elements of both the strategic and the operational plan.

It provides an overview of the budgetary performance for the period as well as the annual year end expenditure forecast which in turn may allow management to adjust its plans in order to achieve optimal budget performance and implementation of activities.