Implementation Report

ITU-D strategic, operational and financial plans

January - September 2018





ITU-D strategic, operational financial plans

Implementation Report

January – September 2018

Table of Contents

Overviev	v of ITU-D Strategic and Operational Plan Implementation	1
Five ITU-	-D Objectives	1
Obje	ective 1:	1
1.1	World Telecommunication Development Conference (WTDC)	1
1.2	Regional preparatory meetings (RPMs)	1
1.3	Telecommunication Development Advisory Group (TDAG)	2
1.4	Study Groups	2
Obje	ective 2:	3
2.1	Policy and regulatory frameworks	3
2.2	Telecommunication/ICT networks, including conformance and interoperability and bridging the standardization gap	7
Ohie	ective 3:	14
3.1	Building confidence and security in the use of ICTs	14
3.2	ICT applications and services	16
	ective 4:	17
4.1	Capacity building	18
4.2	Telecommunication/ICT statistics	21
4.3	Digital inclusion of people with specific needs	22
4.4	Concentrated assistance to LDCs, SIDS and LLDCs	26
Obje	ective 5:	27
5.1	ICTs and climate-change adaptation and mitigation	27
5.2	Emergency Telecommunications	29
Impl	ementation level by Objective (Result Based Management perspective*)	32
Highlight	ts of the operational plan implementation	33
Over	rall implementation level	33
Impl	ementation level by objective	33
Budg	get implementation level by regions (in Swiss francs)	34
	ementation level by objectives and regions (number of actions)	34
Bud	get implementation level by objectives	35
Highlight	ts of the financial plan implementation	36
Resu	ılt-based budget statement by objectives	36
Fina	ncial statement for the Telecommunication Development Sector	37
Fina	ncial statement by objectives and outputs	37
Fina	ncial statement for the Telecommunication Development Bureau	38
Leve	l of implementation by objectives	39

List of Tables, Figures and Boxes

Tables	
Table 1	36
Table 2	37
Table 3	37
Table 4	38
Figures	
Chart 1. Implementation level by objective	32
Chart 1	33
Chart 2	34
Chart 3	34
Chart 4: Total	35

Overview of ITU-D Strategic and Operational Plan Implementation

January - September 2018

The following is a summary of results achieved, for the period January to September 2018, 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 September 2018 are as follows:

1.1 World Telecommunication Development Conference (WTDC)

- The next World Telecommunication Development Conference (WTDC) will be held in 2021. The final report of the World Telecommunication Development Conference 2017 (WTDC-17), convened in Buenos Aires, Argentina, from 9 to 20 October 2017, has been made available.
- The BDT Management Retreat was held from 5 to 9 February 2018 in Geneva. Participants analyzed the current state of play in the ICT industry in the light of the outcomes of WTDC-17 and how the ITU Telecommunication Development Bureau (BDT) will fulfil its mandate in a rapidly changing, increasingly complex, and ever-more challenging environment. The key areas discussed during the retreat form the basis for a robust strategy and action plan for BDT to respond to the massive changes occurring in the industry while, at the same time, meeting the great expectations of members.

1.2 Regional preparatory meetings (RPMs)

- The next Regional Preparatory Meetings (RPMs) will be held in 2020 and 2021.
- With the aim of facilitating implementation of regional initiatives, a series of Regional Development Forums took place in 2018 as follows:
 - ITU Regional Development Forum for Africa took place on 19-20 July 2018 in Accra, Ghana.
 - ITU Regional Development Forum for the Arab States was held in Algiers, Algeria from 12-13 February 2018.-
 - ITU Regional Development Forum for the Americas Region, took place on 25 May 2018 in Lima, Peru.
 - ITU Regional Development Forum for the Asia and the Pacific Region took place on 21-22 May 2018 in Bangkok, Thailand.
 - ITU Regional Development Forum for Europe took place on 11 June, 2018 in Prague, Czech Republic.

1.3 Telecommunication Development Advisory Group (TDAG)

The 23rd meeting of the Telecommunication Development Advisory Group (TDAG) took place from 9 to 11 April 2018 at ITU headquarters in Geneva.

The 23rd meeting of TDAG had a broad agenda as it marked the first TDAG meeting after the World Telecommunication Development Conference 2017 (WTDC-17). In particular, this meeting discussed the following topics:

- Outcomes of WTDC-17 and their implications on the work of ITU-D, including TDAG's scope of work, collaboration with the other Sectors and financial implications of the regional initiatives approved by WTDC-17.
- Implementation of the ITU-D Strategic Plan and Operational Plan 2017 and ITU-D four-year rolling Operational Plan 2019-2022.
- ITU-D contribution to the implementation of the WSIS outcomes and 2030 Agenda for Sustainable Development.
- ITU-D Study Group-related matters.
- Regional Development Forums (RDFs).
- Major ITU-D events and initiatives, including Global Symposium for Regulators (GSR), capacity building activities, World Telecommunication/ICT Indicators Symposium (WTIS) and innovation
- Membership, partnership and private sector-related matters.
- Calendar of ITU-D events.

WTDC	Resolutions 1, 5, 17, 24, 30, 33, 37, 50, 59, 61, 81
PP Resolutions	PP Decisions 5, 13
	PP Resolutions 25, 71, 111, 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 first Study Group 1 and 2 meetings for the new 2018-2021 study period from 30 April to 4 May and from 7 to 11 May, respectively. The meetings progressed according to plans with the appointment of 139 new rapporteurs and vice-rapporteurs. They agreed on work plans for all study Questions, and most Questions also had overviews and tables of content for their deliverables.
- The 2018 ITU-D SG1 and SG2 Rapporteur Group meetings were held from 17 September to 11 October 2018. 10 focus sessions/workshops and capacity building sessions were held on different topics.
- To facilitate coordination and further strengthen collaboration between the two ITU-D study
 groups and the study groups in the other sectors, the work on the three mapping tables evolved
 during the SG1 and SG2 Rapporteur Group meetings. In addition, synergies in 2018 have been
 explored between study group topics, and workshops and seminars held in the regions. Positive

examples can be seen from pilots conducted in Hungary (together with a regional seminar 5G Implementation in Europe and CIS), in Mexico (together with the ITU Regional Economic Dialogue on Telecommunications/ICTs for Latin America and the Caribbean) and in Burkina Faso (together with the 2018 Regional Economic Dialogue for Africa).

- ITU Regional Economic Dialogue on Telecommunications/ICTs for Latin America and the Caribbean (RED-AMS), was held on 4-6 September 2018, in Mexico City, Mexico. During the RED the ITU-D Study Group 1 Question 4/1 Experts' Knowledge Exchange meeting was also held, with the aim of discussing and gathering information on regional experiences.
- The two ITU-D study groups agreed to proceed with implementation of the Council 2017 initiated pilot project for participation of SMEs in ITU study groups. To date, seven SMEs have participated in the pilot project with the support of their Administrations.

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	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 September 2018 are as follows:

2.1 Policy and regulatory frameworks

- ITU-D continues to provide high-quality data, research and analysis, and tools to support the ITU membership in defining, elaborating, implementing and reviewing transparent, coherent and forward-looking strategies, policy, legal and regulatory frameworks as well as in moving towards evidence-based decision-making. The annual ITU-D questionnaire to membership has been sent to gather information on regulatory and policy issues and tariff policy issues. The 2017 regulatory and policy data has been published on the ICT Regulatory Tracker, and made available on the ITU website. Contributions have been made with specific regulatory and policy and tariff/economic information and reports submitted to ITU-D Study Groups and published on the ITU website.
- ITU web portals have been published and are updated regularly with new information on topical regulatory and policy and economic issues. They include portals on International Mobile Roaming (IMR) Resources, Quality of Service, the Digital Ecosystem, Infrastructure Development

as well as a Regional Regulatory Associations Portal that brings together regulatory resources and ITU activities on topical issues of interest as well as activities and initiatives by regulatory associations, regional and international organizations and other stakeholders. The portals also highlight key findings from ITU publications, studies, research, ITU Study Groups, and data and analysis from the ITU ICT Eye.

- ITU prepared publications on topical regulatory and market environment issues, including an ITU Report on Setting the stage for 5G: Opportunities and challenges; a Report on Regulatory challenges and opportunities in the new ICT ecosystem; and a series of discussion papers prepared for and presented at GSR-18 on AI for Development.
- The 18th edition of the Global Symposium for Regulators (GSR-18), held in Geneva, Switzerland, from 9 to 12 July attracted over 600 participants, including government ministers, heads of regulatory agencies and C-level industry executives from more than 125 countries. The theme of GSR-18 was "New Regulatory Frontiers". The event culminated with the adoption by ICT regulators of a set of best practice guidelines on new regulatory frontiers to achieve digital transformation. A series of thematic pre-events took place on such topics as the Global Dialogue on Artificial Intelligence, Internet of Things and Cybersecurity Policy and regulatory challenges and opportunities. The pre-event day also included the Regional Regulatory Associations Meeting (RA) and the 9th Private Sector Chief Regulatory Officers (CRO)/ Industry Advisory Group for Development (IAGDI) Meeting.
- Capacity Building Programme on Quadplay: Costing and Pricing of Infrastructure Access for Arab Region was organized in Rabat, Morocco on 9-12 July 2018. The training attracted more than 60 participants from Arab region representing 18 Member States, including Palestine (based on resolution 99), private sector entities, national organizations, and members of Academia.
- ITU-D assisted Sudan and developed national Spectrum Pricing Framework. The framework aims to promote spectrum efficiency usage in Sudan.
- ITU organized a successful Interactive Session for WSIS Action Line C6 (Enabling Environment) on Sharing Collaborative Regulatory Approaches for Digital Transformation, highlighting cooperation at the international, regional and national levels and sharing experiences, best practices and tools for digital transformation.
- ITU-D is implementing a 3-year project to harness the potential of ICTs to strengthen Digital Financial Services (DFS) and Digital Financial Inclusion (DFI) in China, Egypt and Mexico. Within this context, ITU-D raised awareness on the enabling environment for Financial Inclusion in Egypt and Mexico through the preparation of a draft country assessment report on Digital Financial Inclusion and defined priority areas of leveraging ICTs for DFI in China as part of the Financial Inclusion Global Initiative.
- More than 40 Arab and African participants were trained on telecom numbering planning trends, numbering policies and the impact and implication of National Numbering Plan implementation in the regional workshop on Telecom Numbering Planning and Policies for Arab and Africa states organized back-to-back with Regional Study Group Meeting of ITU-T SG2. The workshop was organized on 25 April 2018 in collaboration with TSB and kindly hosted by CIFODECOM of Tunis.
- ITU developed and provided a course in collaboration with the Government of India on the emerging digital landscape and regulatory framework as digital payments, new market participants and products have disrupted the market.
- The following activities were coordinated in relation to the enabling environment for ICT development, regulation & policy for Caribbean countries, including Update of National ICT Plans, Update of Broadband Plans, bSmart Project and Accessibility & Affordability:
 - Under the HIPCAR project (Enhancing Competitiveness in the Caribbean through the Harmonization of ICT Policies, Legislation and Regulatory Procedures), Jamaica sought and received assistance from ITU to provide a sensitization workshop to introduce the

HIPCAR methodology and the HIPCAR model text and to discuss the potential impact of the introduction of Privacy and Data Protection Legislation in Jamaica. Recommendations and amendments were prepared based on the outcomes of the workshop and consultations with the Ministry. A draft of the proposed legislation and Draft Data Protection Act were prepared. Since then, a Data Protection Bill (DPB) was prepared and tabled in the Houses of Parliament. The DPB contemplates the establishment of an Office of the Information Commissioner (OIC) to be responsible of ensuring compliance with the Data Protection Act and the Access to Information Act. An ITU expert is currently working on the OIC.

- A bSmart project is under preparation for ITU to assist the Government of the Bahamas. Through this project, ITU will provide technical support, advice and guidance to contribute to the country's agenda on diversification, improvement of public services, enhanced security, enhancement of the tourism industry, developing an advanced ICT infrastructure and improving the quality of citizen's lives.
- ITU is providing support to Antigua and Barbuda in reviewing the Telecommunications Act and identifying priority supporting Regulations consistent with the Act. Similarly, in collaboration with PAHO, the ITU is assisting Guyana with the development of an e-health national strategy. The draft strategy being prepared will be introduced into the longer process that Guyana and PAHO will conclude in 2019.
- ITU held a regional workshop on 5G, IoT, m-Payment Emerging Technologies, Eco-Systems, and Regulatory Aspects" in St. John's, Antigua and Barbuda, on 17-19 October, 2018.
- A large scale Project Document to assist the Brazilian regulatory body with the review of the telecommunications regulatory framework is under preparation. It foresees to provide ITU recommendations (i) to modernize and update the Brazilian General Law of Telecommunications (LGT); (ii) to change the scope of the concession contracts with telecommunication service providers, aiming at increasing infrastructure investments and the expansion of broadband access networks; (iii) for the creation of a Strategic Plan of digital transformation; (iv) to build confidence and improve regulator's relationship with consumers of telecommunication services; (v) to make the Brazilian regulator a reference in the use of Data & Analytics for decision making, and (vi) provide training courses to improve the performance and management of the workforce necessary to fulfil the responsibilities and the mandate of the regulator. The Project is in its final stage to be approved by national authorities for implementation foreseen in the second quarter of 2019.
- A new Project Document (PRODOC) to assist and guide the MinTIC in Colombia in matters relating to the Administration, maintenance and operation of the registry of country code top level domain names- ccTLD of Colombia.co is under preparation. PRODOC proposal is in the final stage of approval by Colombian authorities. Implementation is foreseen to start in the first quarter of 2019.
- Case Study on the evolution of ICTs considering the economic perspective and the policy and regulatory environment was prepared for Ecuador.
- E-Agriculture forum on developing an e-agriculture strategy for the Americas: A Regional Capacity Development Workshop on national e-Agriculture strategies in the Caribbean took place on 13-17 July 2018.
- Schools on Digital Policies: The School of Digital Policies (EPD) is the result of ITU partnership with Brazilian Getulio Vargas Foundation. Its main objective is to deliver short training on the Internet from the governance standpoint and emphasize the importance of promoting the democratization of ICT access by means of digital public policies. Preparation of instructional material was finalized in July and the course was delivered through the ITU-Academy and its e-learning platform. The pilot course targets professionals of the Brazilian Public Administration, and delivery started in September 2018. The online phase of the course will end in October,

which will be followed by a face-to-face two-day encounter in Rio de Janeiro on 18-19 October 2018. The EPD Initiative will offer courses to the Caribbean sub-region in 2019.

- The ITU Regional Economic Dialogue on Telecommunications/ICTs for Latin America and the Caribbean (RED-AMS) was organized by the ITU Americas Regional Office, together with the BDT/IEE Regulatory and Market Environment Division (RME) in close collaboration with the Federal Telecommunications Institute IFT of Mexico. The RED is a discussion platform for Member States and Sector members in the Latin America and Caribbean region, bringing new and topical regulatory and economic issues, ideas and innovative solutions to the front, responding to the BAP mandate. 176 delegates from 14 countries participated in the Dialogue. The RED brings together representatives from Regulatory Associations, Regional Consumer Associations and Private Sector Associations, such as the Eastern Caribbean Telecommunications Authority (ECTEL), the Telecommunications Regional Technical Commission Central America (COMTELCA), la Procuraduría Federal del Consumidor de México (PROFECO), GSMA, the Asociación Interamericana de Empresas de Telecomunicaciones (ASIET) and others. More information is available at the RED Website: www.itu.int/en/ITU-D/Regional-Presence/Americas/Pages/EVENTS/2018/20570.aspx.
- ITU-D Study Group 1 Question 4/1 Experts' Knowledge Exchange- Economic policies and methods of determining the costs of services related to national telecommunication/ICT networks was held in 6 September in Mexico, back to back with the Regional Economic Dialogue of Telecommunications/ICTs for Latin America and the Caribbean (RED), which had a purpose to collect the regional experience on the topics related to the Terms of Reference of Question 4/1.
- Enhanced in the area of regulatory cooperation for Digital Financial Services in China with bringing in the stakeholders in country implementation for project in China.
- Assisted Brunei Darus-Salam in assessment of national market readiness for future IMT-2020 (5G) networks.
- Assisted Philippines in developing the criteria for selecting a new major player to provide broadband services.
- Raised awareness for around 150 policy makers in China on Big Data through ITU-MIIT Seminar (26-27 June, Nanning, China).
- Three training modules on DFS and Digital Payment has been developed for Government of India though internal expertise in close collaboration between BDT and TSB.
- Assisted Bangladesh Telecommunications Regulatory Commission on reviewing the International Long Distance Telecom Policy and carried out stakeholder consultation with recommendations on streamlining the licensing regime and competition safeguards.
- Discussed regulatory and policy aspects of digital economy at the Regional Workshop on "National Strategies of Digital Transformation" held in Issyk-Kul, Kyrgyzstan and attended by 80 participants from 16 countries, including 2 Heads of Administrations and 1 Head of Regulator.
- AFR Regional Office assisted ARTCA in a meeting organized in Malabo in July to revamp this sub-regional assembly of Regulators of Central Africa. A new chair and action plan have been approved among which the Roaming Project in the CEMAC countries.
- Improved management of top level domain name for Maldives while assisting the Communications Regulatory Authority of Maldives and offering recommendations on "Governing framework for .mv CCTLD for Maldives" in July 2018 in collaboration with Asia Pacific Top Level Domain Association).
- Improved policy and regulatory capacity and skills of 60 participants from 21 countries for Regulators Roundtable and 50 participants from 21 countries for Industry Roundtable through joint ITU-BTRC Asia-Pacific Regulators' Roundtable on "New Regulatory Frontiers to support Digital Economy" on 6-7 August 2018, Dhaka, Bangladesh.

• ITU-D started assistance to Somalia on establishment of an effective ICT Strategy and Policy framework and provide clear and transparent procedures & mechanisms to facilitate ICT policy and sectoral strategy framework. The ICT Strategy and Policy framework is expected to be delivered before end of 2018.

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 Line 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

- Basic National Spectrum Management System is to assist developing countries to establish basic structure of spectrum management system. Currently, projects for Comoros, Bolivia and Kyrgyzstan are ongoing. The results of the assistance will be the work plan for countries for implementing/updating their spectrum management structures and activities.
- An excellent exchange of opinions and feedback between more than 100 delegates coming
 from 13 countries, the speakers and the representatives of the local, regional and international
 companies took place during the Regional Workshop on Emerging Technologies, Algiers,
 Algeria, on 14-15 February 2018. Fruitful discussions addressed the opportunities, benefits
 and challenges of the Emerging Technologies in the development of the ICT applications and
 services and related regulation issues.
- Further developments to Spectrum Management System for Developing Countries (SMS4DC) software is under upgrade process in two parts, including the administrative function and radio communication function. Installation USB is available now for replacing/adding to CD. Eight countries were assisted in operation and installation of the software and on higher resolution map.
- A new SMS4DC training is under organization by PIRRC (Pacific ICT Regulatory Resource Centre) for the new features of the tool and installing higher resolution map.
- As a part of Technical Assistance to Indonesia on The Radio Frequency usage for Small Vessel used for fishing activity, a national workshop was conducted in April 2018 on developing regulations for Maritime wireless communication with 75 participants from over 15 organizations.
- Caribbean Spectrum Management Task Force: 31 January 2 February 2018 for around 30 participants from Caribbean countries provided contributions on the relevant reports of the Task Force (digital broadcasting transition, cross-border frequency coordination, emergency communication, spectrum pricing).

- Spectrum management and digital transition: The ITU is in the process of providing assistance to Guyana in relation to the Spectrum Management Technical Assistance Services as well as Spectrum Management Spectrum Management Training Workshop.
- BDT and BR have completed the exercise on Frequency Coordination for Central America and Caribbean Region which started early last year. The 4th and final meeting took place in September 11-14 in Belize. The achieved average percentages were around 96% for UHF band and 94% for VHF band of assignable digital TV channels, i.e. the percentage of the frequency requirements which are compatible with each other and with operating analogue and other primary services' stations. More detailed information can be found at https://www.itu.int/en/ITU-R/terrestrial/broadcast/Americas/Pages/default.aspx
- IPv6 and IoT (Internet of Things) Expertise Center: The Project document has been signed with MUST (Malaysia University of Science and Technology) to assist developing countries.
- Assistance to Member States is ongoing with the development of a Guide on the implementation of IoT in the Immigration processes for developing countries.
- Broadband Wireless Network for Djibouti was completed for Phase 2, and the maintenance contract finalized and signed by Djibouti Telecom.
- Procurement for the Broadband Wireless Network in Mali is in progress. The international call for Proposals has been done. The technical evaluation is following.
- Analyzing the new access technology "Li-Fi" (Light Fidelity / Optical access Technology) evaluated
 for developing countries in particular on GigaHotspots (out / in Door). Li-Fi uses visible light,
 Ultraviolet and Infrared: The spectrum is very large as compared to the entire radio frequency
 spectrum.
- ITU-D continues to implement and update the ITU Broadband Maps with information obtained from administrations, regulators operators and public sources (http://itu.int/go/Maps). At the time of this reporting, the Map presents information from 434 operator networks and 21,806 nodes worldwide. The research on the transmission links has reached 13,038,382 km of routes, representing 3,507,233 km of networks imported to the Map.
- 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 2018, 3 presentations were delivered for the Action Line C2 Facilitation Meeting.
- Digital broadcasting transition: A digital switch-over database was updated based on information from around 10 countries (see http://www.itu.int/en/ITU-D/Spectrum-Broadcasting/Pages/DSO/Default.aspx).
- Forum on the Conformance and Interoperability (C&I) in Innovation for Youths (25-27 June 2018) and a workshop on Establishing a Mutual Recognition Agreement (MRA) for the Caribbean Countries (28-29 June 2018) were held in Port-of- Spain, Trinidad & Tobago. These events highlighted the importance of C&I for young IoT developers and served as forums for the discussion of the implementation of a MRA for the CARICOM region. Follow-up of the event is ongoing with the Virtual Testing exercise scheduled to take place in November 2018.
- Training on Conformance and Interoperability (C&I) for the Americas Region. Coordination is ongoing with countries of the Americas region to achieve a final design on the activity to be implemented.
- Organized online training through ITU Asia-Pacific Centre of Excellence e-learning Programme on "Internet of Things: Overview and Applications" during 23 April 20 May 2018 building the capacity of 268 participants in China.
- Project to support and cooperate with the Ministry of Communications and Transportation MinTIC (Colombia) in the development of studies, analyses and proposals related to (i) the

diagnosis and updating of National Technical Plans of Radio Broadcasting- PTNRS; (ii) to define the technological strategy for the new AM and FM broadcasting in the Republic of Colombia; (iii) new technologies for broadcasting; (iv) to the proposal of a manual of good practices for assembly of radio stations; (v) to the technical specification of a web tool for management and control of the PTNRS and the radio broadcasting concessionaires; as well as (vi) training and socialization activities.

- Project to contribute to the MinTIC in the development of a diagnosis and audit of the Spectrum Allocation by Objective Selection process in order to strengthen the management, analysis, administration, planning and allocation of the radio spectrum within the framework of the integrated management model of the ICT Ministry.
- Project for technical assistance for the validation and improvement of Spectrum Assignment processes for IMT (International Mobile Telecommunications) bands in Colombia.
- A Caribbean Forum on the Conformance and Interoperability (C&I) in Innovation for Youths and a workshop on establishing a Mutual Recognition Agreement (MRA) for the Caribbean Countries, took place on 25-27 June and 28-29 June 2018, respectively, in Port-of- Spain, Trinidad & Tobago.
- Ongoing study on "Interconnectivity & Reduction of telecommunication service prices and Internet access cost" for South America countries. Ongoing coordination with ASETA and beneficiary countries for the development of the study, which is focused on the sub-region of Andean countries: Colombia, Ecuador, Peru and Bolivia. This study is meant to determine the situation of international interconnectivity and to describe the reasons for the internet access cost in the sub-region. Additionally, it will foster international interconnectivity between the countries. It is expected to be implemented by end of November.
- Support Surinam to define the National IXP model. This activity is organized with the Telecommunicatie Autoriteit Suriname (TAS). During the first three months of 2018, the study was coordinated with national stakeholders. All stakeholder of Suriname have chosen a non-profit model for the National IXP. The final report has been delivered. By the end of November the operators will sign the act to elect the temporary executive committee to start the legal implementation of the National IXP for Suriname. In 2019 they will implement it physically at a local Data Center as the host.
- Support on Cross Border frequency coordination for Central America & Caribbean countries. The 3rd meeting on Frequency Coordination took place in Panama on 7-11 May 2018. BDT and BR have been working with CITEL, COMTELCA and CTU in this endeavor. The fourth and final meeting has been scheduled to take place in September 2018 in Belize. This exercise responded to requests made at events celebrated in the Caribbean and Central America in 2016. Participating countries have established a verbal agreement to consider all the results achieved during the frequency coordination exercise into the future. The iterations and results associated can be found at https://www.itu.int/en/ITU-R/terrestrial/broadcast/Americas/Pages/default.aspx.
- Guidelines for transition from Analogue to Digital Broadcasting in Americas' countries. Coordination started in the first months of 2018 with a potential beneficiary country.
- Cyber-security and Disaster Reduction Programme: Further to the post-implementation review of the project on National CIRT Establishment in Barbados, ITU was requested and has agreed to provide support and assistance with the continuation of the project towards full operationalization of the Barbados National CIRT. The assistance is expected to be completed by 30 December 2018.
- Raised awareness on spectrum policy, spectrum regulation, spectrum pricing methodologies and spectrum management for staff of Sudan's National Telecom and Postal Regulatory Authority during a national training workshop organized in Khartoum on 9-13 of March. The workshop also validated the spectrum-pricing framework.

- Provided platform for the Administrations, Regulators, Broadcasters, and Industry to look at the progress that has been made with the allocation of the 700 and 800 MHz bands across the region and the band plans that are emerging, and then look at the picture in the wider UHF band (including 600MHz).
- Increased capacity and facilitated knowledge exchange in the CIS on Mobile Number Portability, Conformance and Interoperability Testing of Telecom Equipment at the ITU Regional Workshop, held on 1-2 March in Moscow, Russia and attended by 60 participants from 5 countries.
- Discussion paper on the Future of Cable TV has been developed, and the ITU Workshop on The Future of Cable TV was jointly organized by BDT and TSB on 24-25 January 2018 in Geneva, Switzerland.
- The 6th Latin American Telecommunications Congress was co-organized in Varadero, Cuba, with GSMA LA, ASIET and the Development Bank of Latin America on 11-15 June with an attendance of more than 300 participants from 30 different countries, including representative from 17 international organizations and 32 companies. A Forum on Broadband for Rural Areas was organized on June 11th in that framework (http://www.clt.lat/2018/eng/).
- Spectrum management and digital transition for Caribbean countries. ITU direct assistance to Guyana through its National Frequency Management Unit (NFMU) in assessing and reviewing its Spectrum Assignments as part of its reform process.
- Organized "ITU Asia Pacific Centre of Excellence (CoE) Training on Monitoring RF spectrum in modern wireless era" on 16 – 20 April 2018 involving 3 participants from 13 countries and 4 exhibitors.
- More than 170 delegates from the Arab region participated in the 4th Annual Middle East and North Africa Spectrum Management Conference 2018 organized in collaboration with Forum Global, which was followed by the ITU Regional Workshop on the Future Utilization of UHF Band in the Arab Region, Including the 700 MHZ Band, held in Marrakech, Morocco, on 12 April 2018. 70 participants discussed the progress that has been made with the allocation of the 700 and 800MHz bands across the Arab region and the band plans that are emerging, and then look at the picture in the wider UHF band (including 600MHz), and at the likely future shape of the UHF band as a whole across the region.
- As part of the implementation of the "Basic National spectrum management Project", in which Comoros is one of the beneficiaries, the second phase of the assistance run in Moroni on 16-20 April 2018, where a series of training on radio spectrum and a workshop on Analog to Digital Transition (A-D Transition) have been provided to the ANRTIC staff.
- Spectrum Management Assistance Workshop was held on 23 24 July 2018 at Accra Ghana and assisted regional member countries on spectrum monitoring and cross border issues.
- Kyrgyzstan was assisted on the spectrum management for economic and technical side on 6-10 August by two experts, and the final report is under preparation.
- Bolivia was assisted on establishing basic spectrum management system from 17 to 25 May, and the final recommendation was delivered to beneficiary country.
- Workshop in Budapest for Central-Eastern European and CIS countries on 5G implementation, more than 100 participants from around 20 countries (03/07/2018 - 05/07/2018: 5G Implementation in Europe and CIS: Strategies and Policies Enabling New Growth Opportunities, Budapest, Hungary).
- Twinning assistance to Albania from Hungary on spectrum management strategy and procedures.
- 2nd Annual CIS and Central and South-Eastern European Spectrum Management Conference and ITU Regional Workshop "Broadband Development based on 4G and 5G Technologies" (Almaty, Kazakhstan, 17-20 September 2018). More than 50 participants from around 15 countries.
- Raised skillsets of over 50 participants from countries across the Asia-Pacific and Africa and

- built hands-on practical capacity in actual testing environment through visit to the Test Lab of SAICT, Shenzhen under ITU ASP COE Training on Conformity and Interoperability September 10-14, 2018, Shenzhen, China.
- 15 participants from Algeria were trained to C&I Testing Regime and to technical and regulatory requirements for ICT equipment authorization. Different types of C&I Labs, the process for building C&I Lab and cost estimates were presented and discussed.
- Regional Workshop for Europe and CIS on Digital Future powered by 4G/5G was held in Kiev, Ukraine from 14 to 16 May resulting in raised capacity of stakeholders and improved regional and interregional cooperation on 4G/5G, spectrum management and broadcasting. The workshop attracted 100 participants from 12 countries.
- Raised capacity of stakeholders on satellite communication and improved cooperation between satellite operators at the ITU Regional Workshop held in Minsk, Belarus from 22 to 23 May. The workshop was attended by 40 participants from 6 countries.
- Improved cooperation on broadband among policy makers, regulators and the private sector in the CIS region at the ITU Regional Workshop held in Dushanbe, Tajikistan on 29-30 May. The workshop attracted 30 participants from 6 countries.
- Raised capacity of stakeholders and improved cooperation on IoT-related issues at the ITU
 Regional Forum on "Internet of Things, Telecommunication Networks and Big Data as basic
 infrastructure for Digital Economy", which was organized jointly with ITU-T in St. Petersburg,
 Russia on 4-6 June attracting 106 participants from 20 countries. The Forum also resulted in
 concrete project proposals to be implemented within CIS RI5.
- Held Regional Workshop on "Broadband Development based on 4G and 5G Technologies", Almaty, Republic of Kazakhstan, 17-18 September, attended by 93 participants from 18 countries.
- Co-organized 2nd Annual CIS and Central and South-Eastern European Spectrum Management Conference, Almaty, Republic of Kazakhstan, 19-20 September 2018, attended by 179 participants from 20 countries.
- The "5th Annual Latin America Spectrum Management Conference" & a "Workshop on Spectrum and Community Networks" were co-organized with Forum Global. 167 registered participants coming from 16 different countries (12 from Latin America). Both events raised all stakeholders' capacity to understand the importance of managing efficiently spectrum resources. Visibility of community networks increased as a feasible alternative to connect the unconnected.
- 24 managers of ICT incubators and other support structures for entrepreneurs were trained during the Business Incubation Management Training, 30 July–1 August 2018, in Amman, Jordan.

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, 84, 85 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
	Recommendation 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 and resource mobilization enhanced through direct contacts, networking, conference calls and meetings. Between 1January and 31 June 2018, 24 new partnership agreements have been signed with the following breakdown:
 - Thematic: 10 on enabling environment, 4 on infrastructure, 3 on capacity building, 2 on both capacity building and multi-thematic and 1 each on ICT applications, on emergency, and on cybersecurity.
 - Beneficiary regions: 16 Global, 4 in Asia-Pacific, 3 in The Americas and 1 in Europe.
- Sponsorship Opportunities: Since January 2018, 3 sponsorship opportunities have been opened for Study Group meetings, ICT 4 SDGs: ITU-Academia Partnership Platform and GSR-18. They have been posted on the BDT interactive sponsorship opportunities platform/webpage launched in 2017. Out of the 24 new partnership agreements signed, 9 are sponsorship agreements.
- ITU-D membership: Since January 2018, 5 new sector members, 4 Associates and 27 affiliated Academic institutions have joined the work of ITU-D.
- A special Innovation track was held at WSIS Forum in March 2018, with the aim to share global knowledge and opportunities on ways to accelerate digital transformation through Building Digital Innovation Ecosystems, in four focused sessions, with over 300 participants and 39 expert speakers, including a high level panel, and keynote speakers from industry, bilateral and multilateral development agencies, entrepreneurs, innovation experts, etc.
- To accelerate digital transformation in ITU-D membership, technical assistance was provided to Serbia and Bosnia Herzegovina to assess their digital transformation capabilities. As a result, two publications co-created with the concerned countries were launched during WSIS: Digital innovation profiles for Bosnia and Herzegovina, and Serbia. Digital Innovation Profiles (DIP) are part of the BDT's new series of information and communication technology (ICT)-focused innovation ecosystem snapshots, which offer a quick assessment of the existing capacity to accelerate digital transformation and an overview of opportunities and challenges facing the countries' ecosystems. It helps countries accelerate digital entrepreneurship and its digital innovation ecosystem.
- Technical assistance provided to the Republic of Moldova was concluded with the launch of the
 publication on the ICT-centric innovation ecosystem country review Republic of Moldova. This
 publication offers a comprehensive analysis with recommendation on how Moldova can upgrade
 its ICT policies with innovation and digital entrepreneurship policies, and thus accelerating digital
 transformation.
- To share knowledge and enhance membership capabilities to accelerate digital transformation,
 a new publication on the Good practices for developing, driving and accelerating ICT-centric
 innovation ecosystems in Europe was launched at WSIS Forum. This regional report on
 innovation aims to provide an overview of the many good practices in Europe, covering startups,
 government, academia, financing entities and more, towards accelerating digital transformation,
 which may serve as a basis for better policies in countries where gaps have been identified.

- To accelerate capacity building initiatives on innovation, the publication, "Bridging the digital innovation divide: A toolkit for strengthening ICT-centric ecosystems", was made available in all six official United Nations languages. Thus, ITU-D membership can have access to information in all UN languages about ITU's a scalable and multi-stakeholder driven framework for assessing, making context specific guidelines and recommendations to foster digital entrepreneurship and ICT innovation ecosystems.
- In order to seek to highlight the importance of C&I and to sensitize innovators/developers, and persons who support pre-compliance testing, of IoT product solutions to matters that necessarily precede the commercial deployment of an IoT product solution a Caribbean Forum on the Conformance and Interoperability (C&I) in Innovation for Youths was held on 25-27 June 2018 where more than 16 developers and other participants from seven countries in the region participated.
- WSIS Panel design and delivery: An insight into "ICT-centric economic growth, innovation and job creation" (19 March 2018) within WSIS session on "Building Vibrant ICT Centric Innovation Ecosystems". The event served as a platform to further promote ITU's book on ICT4SDGs, showcase examples of successful PPPs (Public Private Partnerships) and enhanced engagement of Academia in ITU's work.
- In order to continue fostering ITU's involvement with the academic community, the Partnership Platform on ICT 4 SDGs: ICT-enabled Economic Growth, Innovation and Job Creation for Sustainable Development was held at London School of Economics in London, UK, on 22-23 May 2018, with the participation of over 100 leading academicians as well as representatives from the public and the public and private sectors. It provided an opportunity for an interactive dialogue with the stakeholders within the ICT-centric ecosystem and the development community. Moreover, the event provided a forum to share emerging opportunities in the digital world and to discuss how upcoming technologies like artificial intelligence, big data and others can be further studied to contribute to the Sustainable Development Goals (SDGs)
- Assisted the Arab Incubators and Technoparks Network (ARTECNET) to reach an agreement on the following projects to be initiated in the Arab Region:
 - Training Project for Incubator managers and entrepreneurs
 - Soft-landing + Acceleration Program
 - ARTCNET Award for Entrepreneurship
 - Website Development and online platform for the ARTECNET network
- With the aim of building partnerships across UN in the implementation of the ICT4SDG projects, ITU contributed to the Regional Forum on Sustainable Development for UN Economic Commission for Europe Region, 1-3 June, Geneva, Switzerland, where more than 400 delegates were briefed and encouraged to build partnerships with ITU in the implementation of the projects in Europe.

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 September 2018 are as follows:

3.1 Building confidence and security in the use of ICTs

- A coordination meeting was hosted by the World Bank in Washington from 26 to 27 February 2018 in order to set up a road map to finalize the development of the national cyber strategy toolkit that will represent a single resource for any country to gain a clear understanding of the purpose and content of a national cybersecurity strategy and how to develop one. This project is a multistakeholder effort facilitated by ITU and in partnership with the CCI, CTO, GCSP, GCSCC University of Oxford, Deloitte, Microsoft, NATO CCDCOE, Potomac Institute, RAND Europe, UNCTAD and World Bank.
- On 8 March, BDT has launched the 3rd iteration of the Global Cybersecurity Index (GCI) aimed at measuring the commitment of Member States of the ITU to cybersecurity.
- From 14 to 16 March 2018, BDT undertook technical assessments to evaluate the preparedness for the establishment of Computer Incident Response Teams (CIRTs) for Kyrgyzstan and Malawi.
- On 15 March 2018, BDT conducted a high-level simulation of Cyber-related Crisis Scenarios for Top-level Government Officers and critical infrastructure Operators in Mauritius, the purpose of this simulation was to raise awareness among high-level decision makers and familiarize them with the challenges of dealing with cyber-related crisis scenarios that require their involvement.
- Carried out coordination meetings with representatives from Naïf Arab University for Security
 Sciences and the Academy of Scientific Research to discuss how to get the academia more
 involved with cybersecurity and how to develop and integrate academic courses/workshops/
 handbooks on cybersecurity in the academic programs of engineering and computer sciences
 faculties. This is to meet the expected results associated to the Arab regional Initiative on
 Confidence and Security in the Use of Telecommunications/ICTs. Concrete actions will be done
 in the near future.
- Contributed to the conference on Promoting cybersecurity culture in Schools in Tunisia on 20 June 2018, and promoted the ITU Arab Regional study on the "Legal Framework on Child Online Protection: A Guide for Arab Region" and the efforts have been done related to "Awareness-raising tools for Child Online Protection".
- Provided assistance to the Administrations of Kazakhstan and Kyrgyzstan in preparing data for the 3rd iteration of the Global Cybersecurity Index (GCI).
- The regional cybersecurity event on "Cybersecurity from La Plata River" was held at the University of La Plata on 4-8 June 2018. The event included the following parts:
 - Sessions for decision taken level on Critical Infrastructure
 - 30 deep technical trainings on cybersecurity

- One training provided by FIRST
- One Child Online Protection session
- Seven scenarios for the Cyberdrill (hands on exercises)

The event had 117 attendees, representing 10 countries of the region: Argentina, Bahamas, Brazil, Chile, Cuba, Ecuador, El Salvador, Guyana, Paraguay, and Uruguay.

- Technical assessments were carried out from 16 to 20 April 2018 to evaluate the preparedness
 for the establishment of Computer Incident Response Teams (CIRTs) for Samoa in partnership
 with APNIC, Global Cyber Security Centre, Oxford University, Oceania Cybersecurity Center
 , Australia, supported by the Department of Communications and Arts, Australia and raised
 awareness of about 50 participants by delivering hands-on training workshops aimed at building
 and strengthening human capacity in cybersecurity related matters in general and CIRTs in
 particular.
- Technical assessments were carried out on 4-8 June 2018 to evaluate the preparedness of Computer Incident Response Teams (CIRTs) for Tonga in partnership with APNIC, Global Cyber Security Centre, Oxford University, Oceania Cybersecurity Center, Australia, and supported by the Department of Communications and Arts, Australia.
- Raised awareness of 51 participants from 6 countries ITU Asia Pacific Centre of Excellence Training Course on Cybersecurity was delivered on 12-16 May 2018 in Tehran, Iran.
- National IGF forum was organized in Ebolowa, Cameroon, the meeting gathered all bodies and institutions from the country southern region to be acquainted to Internet management and Cybersecurity issues.
- Built capacity of 34 participants in the area of Internet and IPv6 Infrastructure Security in Asia-Pacific region through ITU ASP CoE training.
- Regional Workshop for Europe and CIS on Cybersecurity and Child Online Protection was held
 in Odessa, Ukraine from 4 to 6 April resulting in raised capacity of stakeholders an improved
 regional and interregional cooperation on combatting cybercrime and child online protection.
 The workshop attracted 50 participants from 14 countries.
- Conducted ITU Cyber Drill ALERT for CIS Region (including the training on CIRTs/CSIRTs management on 3-4 September and a series of workshops on current cybersecurity issues and cyber drill exercises on 5-7 September), Baku, Republic of Azerbaijan, attended by 67 participants from 12 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 Line 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 #HackAgainstHunger was organized in collaboration with the Food and Agriculture Organization (FAO) to identify and support innovative solutions, aiming at addressing challenges in regards of food and agriculture. It included 3 local hackathons in Rwanda (Kigali), and in the Caribbean's (one event in Jamaica and another one in Trinidad & Tobago), as well as a Special Track Hackathon in Geneva during the WSIS Forum 2018. 80 participants coming from 33 different countries forming 13 teams have competed to develop innovative digital services to end hunger. Three teams were awarded based on the feasibility and potential impact of their innovation, the overall winner being the Jamaica Team.
- ITU co-organized the Mobile Learning Week 2018 with UNESCO that focused on the challenges and strategies to offer digital skills development opportunities for all. The annual gathering featured a symposium, workshops on innovative projects and policies, strategy labs, as well as a policy forum on national educational initiatives with ministers of education, technology and communications to prepare for the digital economy.
- A project on Digital Identity for Development was launched to assist countries, particularly low
 and middle income countries (LMICs), to deploy digital identity initiatives that can enable valueadded services in most digital economy areas, including financial services, health, agriculture,
 education, etc. The project will take stock of existing digital identity initiatives and develop
 implementation toolkit to provide a Roadmap to deploy digital identity for Foundational or
 Functional Identification.
- A special Track within the AI for Good Summit on using Artificial Intelligence applications as a
 potential game changer to achieve Universal Health Coverage is organized to identify quick-win
 areas and types of AI applications that hold high-potential impact on health outcomes. IT also
 deals with how to address bottlenecks and challenges that prevent society from taking full
 advantage of them.
- M and e-health initiative in the Americas: ITU and PAHO agreed in the Application of the National eHealth Strategy toolkit¹ to Guyana. ITU has finalized the draft vision or the 1st part of the strategy. The whole draft strategy will be finished by November and it will be fed as an ITU contribution into the longer process PAHO and Guyana will continue until July 2019.
- Within CIS RI1, developed content for the specialized multimedia courses focusing on the use of ICTs in healthcare, including telemedicine and courses for IT specialists on the maintenance of medical information systems (jointly with Odessa National Academy of Telecommunications, Ukraine).
- As a part of its role in disaster risk reduction in the Caribbean, the ITU has commissioned the deployment of a mobile multi-hazard Early Warning and Information sharing platform in the region in concert with the regional disaster management agency CDEMA.
- Regional Workshop for CIS and Asia-Pacific on Big Data and Cloud Computing was held in Tashkent, Uzbekistan from 19 to 20 June resulting in raised capacity of stakeholders and improved regional and interregional cooperation on Big Data and Cloud Computing. The workshop attracted 90 participants from 8 countries.
- Assistance was provided to Afghanistan in the development of their E-agriculture strategy in partnership with FAO and national government.
- FAO and ITU published E-agriculture in Action with focus on Drones in Agriculture case studies.
- Raised awareness on digital transformation through ITU booth during the Asia-Pacific Forum for Sustainable Development on ICT for Transformation and Resilience.

¹ The National eHealth Strategy toolkit can be found at https://www.itu-ilibrary.org/science-and-technology/national -ehealth-strategy-toolkit_pub/8069793a-en

Awareness raised on Digital Health through a number of events:

- Two presentations were delivered by ITU during the Geneva Health Forum on how to address digital health fragmentation and to achieve Digital Health Integration on 10 and 11 April.
- Presentation delivered about the ITU and FAO joint effort related to "E-agriculture Strategy-Sustainable ICTs for Agriculture" at the 6th International Conference on Oil Palm and the Environment (ICOPE 2018), Bali (Denpasar), Indonesia.
- In June 2018, ITU co-chaired a session with ASEAN Joint working group meeting. During the session ITU and ASEAN decided to continue working on enhancing the existing collaboration on USO 2.0 and Child Online Protection. It was also decided that more awareness on reporting data for the ITU's IDI would be created.
- ITU co-organized with WHO AFRO and Transform Africa Summit a Digital Health Hub at the Transform Africa Summit, 8-9 May 2018. The Hub featured a number of policy dialogues and best practices for digital health implementation in Africa.
- Another regional e-Agriculture Strategy Development Regional Workshop for the Caribbean is under preparation with FAO to take place in July 2018.
- An e-Agriculture Strategy Development Regional Workshop for the Caribbean was held in Georgetown Guyana in July 2018 in collaboration with FAO and CTU .As an outcome to this Forum ITU, FAO and Compete Caribbean have concluded an agreement to collaborate on a project to develop a Regional e-Agriculture Strategy for the Caribbean and national e-Agriculture Strategies for four (4) countries.
- A needs assessment of Emergency Communication Systems with the objective of implementing a mobile early warning system and communication platform was performed for the following countries; Barbados, Nassau Bahamas, Antigua, St. Lucia, during the period September 18 to October 19, 2018. The Virtual Vision platform as a mechanism for real time, inter-agency, national and regional information sharing, reporting and early warning is being introduced to these countries.

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 Line 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 September 2018 are as follows:

4.1 Capacity building

- The 6th meeting of the Group on Capacity Building Initiatives (GCBI) was held successfully from 27 to 28 February 2018. The meeting reviewed the strategic capacity building developments that have taken place in the past year, discussed the capacity building-related outcomes of WTDC-17 and provided guidance on the implementation of the recommendations.
- The Central Evaluation and Accreditation Agency (ZEvA), a member of the European Association for Quality Assurance in Higher Education, has awarded the Spectrum Management Training Programme (SMTP) its quality label for higher education and recognition of the SMTP modules as equivalent to Master's degree modules. With this award, the SMTP can be aligned to Master's degree programmes internationally, making it easier for Universities to adopt the programme.
- All modules that make the basic level certificate of the SMTP have been translated into Spanish.
- The capacity building session for WSIS AL C4 was successfully facilitated on 9 March, under the theme "Building ICT skills for social entrepreneurs". The session featured speakers from ILO, government of Mexico and social entrepreneurs. About 50 participants attended the session.
- Co-organized the 2018 mobile learning week with UNESCO under the theme "Skills for a connected world". The event was held in Paris during the week of 26-30 March. Contributions relating to capacity building in the digital economy were made to a number of sessions during the event.
- The Global ICT Capacity Building Symposium (CBS-2018) was successfully conducted in Santo Domingo, Dominican Republic on 18-20 June 2018, under the theme "Developing skills for the digital economy and society." The symposium attracted 331 participants from 36 countries. The outcomes of the symposium are expected to provide strategic guidance to the national and international community on issues of skills development in the field of ICT.
- The development of the ICT and Climate Change Training Programme (ICT&CCTP) has been completed. The Materials are now ready for delivery.
- Training on "Enabling communication for all through ICT accessibility" was converted to selfpaced online mode. The course was launched in August with an enrolment of 70 participants.
- A regional workshop on Internet Governance was organized for the Africa region in Abuja, Nigeria, on 27-28 August 2018. The workshop attracted more than 100 participants.
- The review of the operational processes and procedures (OPP) document of the Centres of Excellence network has been completed. The revised OPP document is available in all six UN official languages.
- The Centres of Excellence network delivered 42 courses, training 1,458 participants since January 2018.
- In collaboration with other partners, 20 courses were implemented between January and September training a total of 857 participants.
- 24 participants have been enrolled for the online master of communications management (eMCM) course between January and February 2018. 3 participants are now working on their dissertations.
- The ITU online indigenous training course on "Communication Innovative Tools for the strengthening of Indigenous Communities of the Americas Region" has received over 600 registrations. ITU accepted enrolment of 150 in each class and will deliver two classes in 2018 only one class was planned for this year. The other 300 were invited to attend the two classes planned for 2019. See more at https://www.itu.int/en/ITU-D/Digital-Inclusion/Indigenous -Peoples/Pages/default-bis.aspxhttps://www.itu.int/en/ITU-D/Digital-Inclusion/Indigenous -Peoples/Pages/default-bis.aspx.

- The ITU-D has also developed instructional material for a Training Program for Indigenous Technicians on Community Networks. This training will be partially delivered online and it is foreseen to have a 2-week hands-on in-site training. Training delivery shall start in the second quarter of 2019.
- Schools on Digital Policies: The School of Digital Policies (EPD) is the result of ITU partnership
 with Brazilian Getulio Vargas Foundation. Its main objective is to deliver short training on the
 Internet, from the governance standpoint and emphasize the importance of promoting the
 democratization of ICT access by means of digital public policies. Civil servants from the Brazilian
 Public Administration and a few representatives from the Private Sector (35 in total) benefitted
 from the course. Final work from participants is expected by December 7. The EPD Initiative will
 offer courses to the Caribbean sub region in 2019.
- Capacity building to support ITU members in the definition of global ICT policy & regulation and business & management of technical issues:
 - Online training courses were delivered within the ITU network of Centres of Excellence within the Americas Region in Communication Protocols for IoTs and Satellite Communication, Optical Networks, LTE and 5G, Spectrum Management, Cybersecurity and Climate Change.
 - Online training courses were delivered within the ITU network of Centres of Excellence for the Africa Region on Emerging Trends in Regulation of ICTs on 5-30 March 2018, on Social Media Content Regulation on 2 – 27 April 2018 and four courses on SMTP OM1 to OM3 from January to June 2018.
 - An online training course on Smart Sustainable Cities was launched and delivered through the ITU Academy platform. This is an ITU initiative implemented in partnership with CITEL/ OAS benefitting 12 countries (Anguilla, Argentina, The Bahamas, Bolivia, Barbados, Egypt, India, Jamaica, St. Vincent and the Grenadines, Suriname, Trinidad and Tobago, and Yemen).
- An online training course in the field of Digital Economy was delivered through the ITU Academy
 platform. This is an ITU initiative implemented in partnership with CITEL/OAS benefitting
 13 countries (Argentina, Bolivia, Chile, Colombia, Costa Rica, Dominican Republic, Ecuador,
 Guatemala, Mexico, Nicaragua, Panama, Peru and Venezuela).
- An online training course on Consumer Protection is under preparation. It will be a self-paced training course to be delivered through the ITU Academy platform. This is a direct assistance requested by the Brazilian Administration (ANATEL).
- An ITU / ITSO Workshop on Satellite Communications was organized in Quito, Ecuador on 10-14 September with 44 participants.
- Under the partnership ITU-ITSO, a face-to-face training course hosted by Ecuador was delivered in the field of Satellite Communication in September 2018.
- ITU launched the Strategic Telecommunication Management Program, which is organized in partnership with UBP and in collaboration with ANTEL, ASETA and COMTELCA. This is continuing education online program comprised of 9 modules, to be delivered under the ITU Academy platform in 2018 and 2019.
- Under the partnership ITU-Rohde&Schwarz, one workshop in Munich, Germany, was held in June 2018 and one will be hold in Singapore, in October 2018. It concerns capacity building workshops on "Implementation of radio monitoring systems according to ITU-R recommendations". A total of 35 participants, primarily from developing countries, would be trained.
- Participants from Arab region were trained on the proper design of FTTx point-to-point and point-to-multipoint passive optical networks (PON) with home-run, centralized, and distributed topologies in a regional CoE Face to Face Training on "FTTx Outside Plant Design" organized in Tunis, Tunisia, 12- 16 March 2018. The training was attended by 9 participants.

- Enhanced skills of participants from Arab region on Business analysis of ICTs in a regional CoE
 online course on Business analysis of ICTs Applications and Services organized in cooperation
 with SUDACAD-Khartoum during 12-22 March 2018. The course was attended by more than 30
 participants.
- Equipped the participants with an advanced understanding of the project management applied to ICT projects in a regional CoE course on Project Management for ICT applications and services organized in cooperation with SUDACAD-Khartoum during 16-18 April 2018. The course was attended by 13 participants.
- Enhanced knowledge and skills on ICTs apps and services business analysis in a regional CoE course on Business analysis for ICT applications and services organized in cooperation with SUDACAD- Khartoum, 23-25 April. The course was attended by more than 30 participants. Due to popular demand for this course, another session was organized and attended by more than 30 participants.
- Trained the participants from Arab region on process involves to identify the risks that might have an impact on the ICTs apps and services projects during a CoE course on Risk Management for ICT Implementation and Services organized in cooperation with SUDACAD in Khartoum on 1-3 May 2018. The course was attended by more than 25 participants.
- Strengthened capacities of the ITU regional membership in the field of technical and policy of Internet governance in a regional CoE course on Internet Governance: Policy and Technical Perspective organized in cooperation with SUDACAD in Khartoum on 15-17 July 2018. The course was attended by more than 30 participants.
- Trained the participants from Arab region on understanding the concept of fiber characterization and the measurement techniques of optical infrastructures in a regional CoE Face to Face Training on "Optical Fiber Characterization" organized in Tunis, Tunisia on 09-13 July 2018. The training was attended by 10 participants.
- Enhanced skills of participants from Arab region on core concepts of SDN and OpenFlow and methods of implementing and configuring SDN environment in a regional CoE course on Software Defined Networking (SDN) and Openflow Protocol Practical Implementation organized in cooperation with SUDACAD in Khartoum on 15-17 July 2018. The course was attended by over 30 participants.
- A needs assessment of Emergency Communication Systems with the objective of implementing
 a mobile early-warning system and communication platform was performed on the 18
 September—19 October 2019 in the following countries: Barbados, Nassau Bahamas, Antigua,
 and St. Lucia. The Virtual Vision platform is a mechanism for real-time, inter-agency, national
 and regional information sharing and reporting and is being introduced to these countries.
- More than 100 participants have built their capacity through the following 4 training programs:
 - The ITU Asia-Pacific Centre of Excellence training on "Mobile Broadband QoS" was held on 1-5 May 2018 at ALTTC, in Ghaziabad, India (26 participants) in partnership with ALTTC and TRAI.
 - The ITU Asia Pacific Centre of Excellence training on "Internet and IPv6 Infrastructure Security" was held on 1-5 May 2018 at ALTTC, in Ghaziabad, India (34 participants) in partnership with MDES (Thailand) and APNIC.
 - Regional Training on The Use of Drones, Satellite Imagery and GIS for Agriculture was held on 4-8 June 2018 at the Asian Institute of Technology, Thailand (36 participants) in partnership with FAO and GIC.
 - ITU Asia- Pacific Centres of Excellence eLearning training on "Internet of Things: Overview and Applications was organized (23 April- 20 May 2018) with ITU and CAICT.

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	WSIS 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

- BDT enhanced information and knowledge of policy-makers and other stakeholders on current telecommunication/ICT trends and developments based on high-quality, internationally comparable telecommunication/ICT statistics and data analysis via the latest edition of the ITU World Telecommunication/ICT Indicators Database, which was released in July 2018. The data will enable users to take informed decisions in the field of ICT, based on internationally comparable statistics.
- BDT increased capacity and skills of producers of telecommunication/ICT statistics to carry out
 data collections at the national level based on international standards and methodologies via
 the following events:
 - Regional Workshop on ICT Statistics for the CIS region held in Almaty, Kazakhstan, on 31 January-1 February 2018. The workshop was organized jointly by the ICT Data and Statistics Division and the ITU Area Office for CIS, in cooperation with the Ministry of Information and Communication of the Republic of Kazakhstan and with the support of the Committee on Statistics of the Ministry of National Economy of the Republic of Kazakhstan. The meeting was attended by 79 participants, including representatives from Azerbaijan, Belarus, India, Kazakhstan, Kyrgyzstan, the Russian Federation, Tajikistan and Uzbekistan. Also representatives from RCC attended the meeting. Seven experts participated remotely, including representatives from Armenia, Moldova and Ukraine.
 - Regional Workshop on ICT Statistics for the Asia-Pacific region held in Manila, Philippines, on 14-16 March 2018. The workshop was organized by the ITU and was hosted by the Department of Information and Communications Technology (DICT) Philippines. It was attended by 91 participants from 10 countries representing national statistics offices, national regulatory authorities and ministries of Fiji, India, Iran, Malaysia, Mongolia, Papua New Guinea, Philippines, Sri Lanka, Thailand and Vanuatu. Representatives from an operator from India also participated.
 - Regional Workshop on ICT Statistics for the Africa region held in Lilongwe, Malawi on 20-21 March 2018. The regional workshop was attended by 69 participants representing 24 countries (Benin, Burkina Faso, Burundi, Botswana, Côte d'Ivoire, DRC, Gambia, Ghana, Malawi, Mali, Mozambique, Niger, Nigeria, Rwanda, Sao Tome e Principe, Senegal, Sierra Leone, South Africa, South Sudan, Tanzania, Togo, Uganda, Zambia and Zimbabwe) and the ITU. The workshop was attended by representatives of communication administrations,

regulators, national statistical offices and other interested stakeholders of the countries of the region. The workshop was organized jointly by the ICT Data and Statistics Division and the ITU Area Office for the Africa, in cooperation with the Ministry of Information and Communication Technologies and the National Statistical Office (NSO) of Malawi with the support of the Malawi Communications Regulatory Authority (MACRA).

- National Workshop on ICT Statistics for Malawi held in Lilongwe, Malawi on 22 March 2018. The telecommunication indicators collected by Malawi Communications Regulatory Authority (MACRA) from operators were discussed in detail, focusing on those indicators where MACRA or the operators have difficulties complying with the methodologies. The IDI results for Malawi were presented, as well as measurement of a number of emerging areas, such as M2M subscriptions, cyber security, children online and E-waste.
- Regional Workshop on ICT Statistics for the Arab States held in Manama, Bahrain on 26–27 March 2018. The workshop was organized jointly by the ICT Data and Statistics Division and the ITU Area Office for the Arab States, in cooperation with the Ministry of Transportation and Telecommunications of Bahrain. The meeting was attended by 27 participants representing eight countries (Bahrain, Djibouti, Egypt, Iraq, Oman, Saudi Arabia, Sudan and the United Arab Emirates), as well as three regional telecommunication operators (Mobile Company, Saudi Telecom and Emirates Telecommunication Corporation Etisalat).
- National ICT indicators workshop for Benin. Held in Cotonou, Benin, on 2-3 May 2018, the
 workshop was attended by 31 participants representing 15 different institutions, including
 representatives of communication administrations, regulators, operators, national statistical
 offices and other interested stakeholders, who are responsible for collecting and producing
 ICT statistics.

WTDC	Resolutions 1, 5, 8, 30, 33, 37, 43, 50, 51, 52, 57, 59, 60						
PP Resolutions	P Decisions 5, 13						
	PP Resolutions 25, 71, 72, 131, 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

Youth

BDT shared innovative strategies with all ITU members on building their national digital skills development strategies by publishing the ITU Digital Skills Toolkit on the ITU Publications website at https://www.itu.int/pub/D-PHCB. Awareness on the Digital Skills Toolkit along with the joint ITU-ILO Digital Skills for Decent Jobs for Youth Campaign to incentive stakeholders to train 5 million young women and men with job-ready digital skills was shared with 950 ITU members and other stakeholders during the WSIS High Level Dialogue on Digital Skills on 21 March, at

Mobile Learning Week in Paris on 26-30 March, jointly organized by ITU and UNESCO, Digital Skills for Everyone: Accelerating Europe's Competitiveness and Inclusive Growth, 5 April 2018, Brussels, Belgium; Enabling Digital Entrepreneurship through Better Connectivity and Skills, E-Commerce Week, 16 April 2018, Geneva, Switzerland; Digital Skills for African Youth, Technical Session 6: Adapting and developing agility through a comprehensive national digital skills for enhanced employability, productivity and innovation capacity, 18-19 April 2018, Tunis, Tunisia; Innovations on Decent Jobs for Youth, 2-3 May 2018, Geneva, Switzerland and the 21st session of the UN Commission on Science and Technology for Development(CSTD), hosted by UNCTAD in Geneva on 15 May.

Gender

- 131 countries organized International Girls in ICT Day events in 2018, encouraging 57,748 girls participating in 2,186 events to take up ICT careers and studies. There were events in 20 countries of the African Region, in 31 countries in the Americas region, 10 in the Arab region, 22 countries in the Asia & Pacific region, 8 countries in the CIS region, and 30 in the Europe region. New countries joining the campaign in 2018 include Mongolia, Solomon Islands, Tajikistan, Timor-Leste and Uzbekistan. ITU Sector Members, Cisco organized events for 4,349 girls and Microsoft for 3,600. Germany, the Netherlands, Italy, Spain, Senegal, Colombia, Guatemala and Chile attracted the largest numbers of girls (listed in order of magnitude.)
- The Girls in ICT Day in the Arab region was promoted and assistance and guidance were provided to organizers from the region when needed. More than 8 events were organized in the region.
- In line with the International Girls in ICT Global Campaign the ITU Americas Regional Office in partnership with UN Women and other local collaborators organized a digital inclusion event for 80 girls attending public schools in Brasilia, Brazil. This event was focused on motivating the girls to embrace technological careers. The event offered workshops on Digital Storytelling, Programming with Scratch and App Inventor and Robotics. During the event ITU and UN Women also organized several conversation groups that discussed issues such as entrepreneurship and financial independence, violence against women, self-defense, self-analyses and empowerment, among other relevant issues. The event was carried out on 23-24 June 2018. The event was a big success and as a result, another TIC TAC event is being organized for the month of November 2018, including UNESCO and other relevant partners. The name TIC TAC stands for: TIC=Information and Communication Technologies (for its acronym in Portuguese); and TAC for transformation, access and knowledge (also considering the first initials of these words in Portuguese).
- Participated remotely in the Girls in ICT Day organized by the University College of Applied Sciences in Gaza, Palestine.
- 25 Girls were trained on digital marketing and social media best practices during the workshop organized under the "Girls in ICT Day" initiative in Aswan, Egypt on 6-7 May 2018, as part of the cooperation agreement signed between ITU-ARO and GIZ Egypt.
- Around 50 events in Asia- Pacific were carried out on Girls in ICT Day on Agritech using ICTs in partnership with MDES (Thailand), FAO, UNESCO and CISCO.
- There have been 360,500 Girls in ICT Day Portal views, with 185,859 reached by the Girls in ICT Day Facebook posts. #GirlsinICT reached over 93 million accounts for an estimated exposure of 379 million timeline deliveries.
- In the first quarter, outreach was conducted with ITU members and other stakeholders to encourage them to organize Girls in ICT Day events as part of the 2018 International Girls in ICT Day Campaign. To incentivize more stakeholders to take action, BDT developed an online map where stakeholders can post information and pictures about their Girls in ICT Day events. BDT conducted a "Put yourself on the map" campaign that proved to be very successful in incentivizing organizers to share information about their activities.

- BDT also raised awareness among students at the Webster University, Geneva in support of International Girls in ICT Day and encouraged young girls during an event organized at Webster University on 6 March to take on a career in ICT during the ITU-D presentation on "Empowering girls though technologies."
- Awareness was raised by developing and publishing ITU News stories and sharing them on the Girls in ICT Portal, reflecting actions that countries like Pakistan and Thailand are taking to train girls and young women with digital skills for their economic empowerment.

ICT accessibility

Awareness raised among over 1,500 ITU Members and stakeholders on ITU-D's activities and events, and key resources made available to support our Members in implementation of ICT accessibility as follows:

- Among over 50 UN representatives and relevant participants on ITU-D activities on ICT accessibility that could apply for persons with age-related disabilities during the seminar "Basics on ageism" organized by UN in cooperation with WHO and ILO on 30 January 2018.
- Among 100 representatives from all UN agencies and related stakeholders, including disabled
 persons organizations, were informed about the activities and resources of BDT that contributed
 to the global implementation of ICT Accessibility under Article 9 of the UN Convention on the
 Rights of Persons with Disabilities during the UN-CRPD (Committee on the Rights of Persons with
 Disabilities) held in Geneva on 14 February. The Committee recognized that ICTs cross-cut through
 all articles of the Convention and that ITU is a key partner in the process of implementation of
 the Convention.
- Among nearly 700 participants from over 70 countries on the importance of implementing ICT
 Accessibility and key resources developed by BDT during the ITU Forum on ICT Accessibility
 organized within the Zero Project Conference in Vienna (Austria) on 21-23 February. At the
 Forum, BDT also announced the First joint ITU-EU Accessible Europe event to take place in
 December 2018 and positioned BDT as a key partner in the implementation process.
- Among key stakeholders in Sudan as part of the assistance to formulate the national ICT Accessibility Policy of Sudan.
- Among over 50 ITU members and other stakeholders participating in the WSIS workshop on 23 March, "Practical applications of ICTs supporting digital inclusion and access to information, services and livelihood for PwDs", were made aware of BDT work and resources to support ITU membership in the implementation process of ICT accessibility in their respective countries and related businesses.
- Among over 500 key thought- leaders, professionals, corporations, service organizations and related representatives of the assistive and accessible technologies market, during an interactive session on "Global Accessibility Policy Up-date" at the 2018 M-Enabling Summit, held on 11-13 June in Washington DC, USA.

Key resources in ICT accessibility developed

- A set of three (3) self-paced online training courses entitled "ICT Accessibility: the key to inclusive communication" were developed. These courses aim to provide a good understanding of ICT accessibility among all relevant stakeholders, in particular focusing on related policies, regulations, technology trends and public procurement rules. This course was developed in response to the outcomes of WTDC-17, in particular the ITU Regional Initiative for Europe that calls for building human capacities in field of ICT accessibility. These free online certificate courses consist of three modules as follows:
 - Module 1: Enabling communication for all though ICT accessibility;
 - Module 2: ICT accessibility policy regulations and public procurement standards;

- Module 3: Achieving ICT accessibility through public procurement.
- Fifteen video tutorials on how to develop and remediate accessible digital documents (General introduction; Word, Pdf, Excel, and PP) were developed in Spanish, English and French and launched during the Study Group on Q7/1 to ITU Members on 28 September.
- Promotional materials (project document, presentation and video) for the ITU-D Programme in web accessibility "Internet for @II" developed.

Training provided in ICT accessibility to 110 ITU members and related stakeholders

- Capacity in ICT Accessibility was strengthened to over 70 ITU Members participants to the Rapporteurs Group of Q7/1 on 28 September.
- In support to ARB Regional Initiative: A train the trainers' course was development and customized for the Arab Region on "Accessible Digital Content and Remediation for the stakeholders delivering digital financial services". The training was delivered to over 40 persons on 16-18 October 2018 in Cairo, Egypt.

Support to Regional Initiatives

- In support to AMS Regional Initiative at the regional event "the 5th Accessible Americas V: ICTs for ALL" that will take place in Jamaica in November 2018. A training session certificate based in "Fundamentals in ICT accessibility" will be provided to the participants;
- In support to EUR Regional Initiative implementation in ICT accessibility, at the 1st Regional event Accessible Europe- ICT for ALL in Austria on the 12-14 December, a discussion on best-practices of public procurement and web accessibility will be undertaken.

Indigenous Peoples

- The curriculum of the existing on-line training course on "Indigenous Radio/Networks" was revised to ensure an overall knowledge of the topic. Enrollment, for a course planned for 100 Indigenous leaders, opened and received over 600 applicants from many countries of the Americas region. Following coordination with Fondo Indigena (FILAC) training delivery plans were revised to accommodate three times the original planned target in 2018.
- A second blended training programme for Indigenous people in the Americas region (online and hands-on/face-to-face training) is being developed, to build the capacity of Indigenous technicians to ensure the self-sustainability of indigenous community-related networks. Instructional material developed and approved during the third quarter of 2018. Course is foreseen to start delivery in the second quarter of 2019.
- Delivery of the online training course on "Communication Innovative Tools for the strengthening of Indigenous Communities of the Americas Region" has received over 600 registrations. ITU accepted 150 in each class and will deliver two classes in 2018. The first class started in July and will end October the second class started on September and will finish in December. See more at (https://www.itu.int/en/ITU-D/Digital-Inclusion/Indigenous-Peoples/Pages/default-bis.aspx)

Digital Inclusion – general

 192 digital inclusion programmes and practices were shared on the Digital Inclusion Newslog during January-September 2018, with 6,585 views of the newslog posts. Awareness was raised and these best practices shared among ITU members through the weekly publication of innovative digital inclusion practices and strategies on the ITU-D Digital Inclusion newslog at: http://digitalinclusionnewslog.itu.int/.

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	Resolution 55, 69				
WSIS Action Line	WSIS 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

- BDT improved the capacity of LDCs, LLDCs, and SIDS, shared guidelines and best practices, and provided policy guidance through the report on ICTs, LDCs, and the SDGs Achieving Universal and Affordable Internet in the LDCs. The report, which was 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). It offers a new, three-dimensional framework which classifies LDCs into three categories based on their overall performance across the areas of access, affordability and skills. This will help countries identify areas that are most pressing and where to direct policy and scarce financial and human resources.
- BDT enhanced capacity and expertise in Bolivia and Paraguay, two landlocked developing countries, by sharing guidelines and best practices, and providing policy guidance, through two separate country case study, one on Bolivia and one on Paraguay: Landlocked developing countries (LLDCs) in the Americas: Connectivity challenges and opportunities".
- To improve access to information and best practices and build capacity, BDT, together with UNCTAD and the e-Trade for All initiative, organized the thematic workshop on ICT access and use in the LDCs, LLDCs and SIDS Opportunities for sustainable development and trade. The event, which was organized during the WSIS-18 Forum, highlighted constraints faced by LDCs, LLDCs and SIDS, and provided insights on how to make effective use of ICTs to foster sustainable development.
- ITU is assisting Jamaica with the establishment of the Office of the Information Commissioner (OIC) which would have responsibility for ensuring compliance with the Data Protection Act and the Access to Information Act.
- The ITU is providing support to Antigua and Barbuda in reviewing the Telecommunications Act and to identify priority supporting Regulations consistent with the Act. Similarly, in collaboration with PAHO, the ITU is assisting Guyana with the development of an e-health national strategy.
- An internal technology assessment revealed that the existing IT infrastructure and platform of Caribbean Telecommunications Union (CTU) are inadequate to sustain the operations of the Secretariat currently and in the future. The BDT provided assistance to the CTU in this regard to enhance the technical infrastructure of the CTU Secretariat through procuring the core network, server and connectivity equipment and associated training and installation support, for the IT network upgrade.

- BDT built national expertise in Sudan by developing the country's new Spectrum Pricing Policy Framework, and by training 15 staff from the Telecom and Postal Regulatory Authority (TPRA) on this new framework.
- BDT developed a Spectrum Pricing Policy Framework for Sudan to optimize and standardize the use of spectrum as national scarce resources. The framework was validated during a national training workshop for Sudan organized in Khartoum on 9-13 of March.
- BDT started developing ICTs Strategy and Policy Framework for Somalia. The goal of this assistance is to establish an effective ICT Strategy and Policy framework and provide clear and transparent procedures & mechanisms to facilitate ICT policy and sectoral strategy framework in Somalia. The product is expected to be delivered by mid-December 2018.
- BDT highlighted the importance and potential of ICT infrastructure to foster trade, in particular through e-commerce, in the LLDCs by contributing to the Ministerial Meeting of Landlocked Developing Countries on Trade and Transport in Kazakhstan, on May 17-18 2018.
- BDT awarded between 360 and 380 fellowships to participants from the Least Developed Countries.

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	WSIS 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 September 2018 are as follows:

5.1 ICTs and climate-change adaptation and mitigation

• The Global E-waste Monitor 2017, which was published by the Global E-waste Statistics Partnership (ITU, UNU, ISWA), has been translated into all six official ITU languages.

- BDT built capacity on e-waste during a one-day training workshop on E-waste statistics, during the ITU Green Standards Week. The training, which was attended by 80 participants, was organized in collaboration with the Global Partnership on E-waste Statistics. It focused on providing an overview of the current statistics on e-waste and the methods of producing electronic waste statistics at a national level to help more countries generate e-waste data.
- BDT built capacity on Electromagnetic Fields (EMF) considerations in sustainable environment including its measurements methods and related policy in a regional ITU Forum & Training on "With ICTs everywhere How safe is EMF?" organized part of the ITU Green Standard Week "GSW" events and kindly hosted by Universal Communications Service Access Fund (UCSAF) and Tanzania Communications Regulatory Authority (TCRA). The forum was held on 10 April 2018. The Forum on EMF attended by more than 80 participants.
- BDT raised awareness about the global e-waste challenge and built synergies with UN and private-sector partners by organizing a high-level dialogue session on "Building the E-waste Coalition" during the WSIS Forum 2018 during the WSIS Forum 2018 it organized a high-level dialogue session on "Building the E-waste Coalition". This event was organized as part of ITU's role in the Environment Management Group (EMG) and together with UN Environment. A letter of Intent was signed by all the Heads of the participating UN entities to consider concrete action and wide coordination and collaboration on tackling e-waste.
- As part of the process to build an E-waste Coalition, all UN agencies that signed the Letter of
 Intent during the WSIS Forum 2018, the World Business Council for Sustainable Development
 (WBCSD), and under the overall leadership of the World Economic Forum (WEF) are preparing
 a joint report on the vision towards the circular economy, with a focus on e-waste. This report
 will increase awareness about the need to address the e-waste challenge and provide selected
 policy guidance to the public and private sector.
- BDT built capacity and raised awareness on the topic of climate change, disaster management
 and the role of ICTs by organizing a session on "E-Environment: Multi-hazard Early Warning
 Systems and the Role of ICTs". This event, which took place during the World Summit on the
 Information Society Forum 2018, was organized jointly with WMO. It highlighted the critical
 role that ICTs play as an integral component of multi-hazard early warning systems (MHEWS)
 to monitor the environment and to effectively disseminate alerting messages of different type
 of hazards to those at risk.
- BDT published the Handbook for the development of a policy framework on ICT/e-waste to help build capacity and guide countries in developing e-waste policies. This handbook provides guidance on the key aspects to be taken into account when designing, implementing and improving a legal, regulatory and policy framework on ICT/e-waste. The proposed framework will facilitate the management of ICT/e-waste based on the concepts of sustainable development, green ICT and the circular economy.
- BDT published the Developing an E-waste National Policy and Regulatory Framework for Malawi,
 which outlines a national policy and regulatory framework, including a strategy and action
 plan for electrical and electronic waste (e-waste) management in Malawi. BDT is finalizing the
 establishment of the e-waste pilot plan project that is jointly developed by BDT and Universidad
 Nacional de La Plata in Argentina. The project is in its final phase of implementation and the
 e-waste pilot plant will soon be operational.
- As a part of its role in disaster risk reduction in the Caribbean, the ITU has commissioned the deployment of a mobile multi-hazard Early Warning and Information sharing platform in the region in concert with the regional disaster management agency CDEMA. As a first step, a needs assessment of Emergency Communication Systems with the objective of implementing a mobile early warning system and communication platform was performed for the following countries: Barbados, Nassau Bahamas, Antigua, St. Lucia, during from September 18 to October 19, 2018. The Virtual Vision platform is a mechanism for real time, inter-agency, national and regional information sharing, reporting and early warning is being introduced to these countries.

- BDT has finalized the implementation of the e-waste Pilot Plant Project that was jointly developed with University of La Plata in Argentina. The aim of the project was to establish a Pilot Plant that will provide concrete responses to the E-Waste problems in cities in line with the Sustainable Development Goals. As part of the implementation review, BDT finalized the development of the promotional video on the implementation of this pilot plant and the development of a report on Successful Electronic Waste Management Initiatives, which provides information of different e-waste management initiatives in 6 different countries around the world.
- ITU Arab Regional Office has finalized the project document and cooperation agreement on regional e-waste monitor project to be signed with UNU. The objective of this project is to collect and improve e-waste statistics in the Arab Region. The project will improve data availability and quality, availability of policies and regulations and awareness through a capacity building workshops and a Regional E-Waste Monitor for the Arab Region. It will also communicate the data on e-waste to policy makers, the media, and other relevant stakeholders.
- The ITU is preparing the details for an Emergency Telecommunications Workshop in The Commonwealth of Dominica. The Workshop will be held on 4-6 December, 2018.
- Enhanced cooperation through participation in 50th session of ESCAP/WMO Typhoon committee in Vietnam in February 2018.

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

- BDT built disaster preparedness in Zambia by completing the implementation of two early warning systems (EWS) in Mbeta Island and Kasaya Village in Zambia. The systems are being used to provide early warnings to population on flooding and mudslides. BDT completed the development of a promotional video on the implementation of these two Early Warning
- Systems (EWS).
- BDT strengthened the ability of countries to coordinate disaster relieve efforts and cope with
 the immediate effects of disasters by providing emergency telecommunication equipment to
 Tonga and Papua New Guinea. Emergency disaster response to Tonga followed the destruction
 caused by Tropical Cyclone Gita that hit the island in February. BDT also assisted Papua New
 Guinea after the devastation caused by a 7.5 magnitude earthquake that struck in February.
- BDT built capacity and raised awareness on the topic of climate change, disaster management
 and the role of ICTs by organizing a session on "E-Environment: Multi-hazard Early Warning
 Systems and the Role of ICTs". This event, which took place during the World Summit on the
 Information Society Forum 2018, was organized jointly with WMO. It highlighted the critical
 role that ICTs play as an integral component of multi-hazard early warning systems (MHEWS) to
 monitor the environment and to effectively disseminate alerting messages of different type of

hazards to those at risk. Participants had the opportunity to highlight some concrete solutions and discuss the importance of MHEWS checklist for a better collaboration among various stakeholders, including disaster risk management agencies, meteorological and geological services, ICT regulators, NGOs, UN entities and private ICT operators.

- BDT is finalizing the development of the Global Guidelines for Developing National Emergency Telecommunication Plans (NETPs). This will be a guiding document for Member States. BDT is finalizing the development of the NETPs and implementation frameworks for Samoa, Vanuatu, and Guatemala and also preparing technical assistance in the development of NETPs for Solomon Islands and Papua New Guinea.
- A panel session on Early Warning Systems was organized jointly with the ITU-D Study Group 2
 Question 5/2 on "Utilizing telecommunications/ICTs for disaster risk reduction and management".
 This session took place on 8 May 2018 and focused on disaster prediction and detection,
 emergency alerting, and safety confirmation and evacuation guidance.
- A workshop on disaster drills and emerging technologies on disaster management was organized by the ITU-D Study Group 2 Question 5/2 on "Utilizing telecommunications/ICTs for disaster risk reduction and management". This session took place on 3 October 2018.
- Emergency Communications for Central America countries, including communications equipment and the development of NEPTs. ITU is currently implementing the project "Proyecto piloto para el uso de las TIC para situaciones de emergencia y desastres en la región de las Américas" to assist and support Central American countries (Costa Rica, Dominican Republic, El Salvador, Guatemala, Honduras, Nicaragua y and Panamá) in improving their capabilities of emergency telecommunications and to improve response to emergencies and disasters. Beneficiary countries have received an emergency tool kit that will allow their integration into a regional network of emergency Winlink-based telecommunications. ITU in cooperation with IARU and FMRE are in the process of the launch of operations of the national nodes. On 10 September, the node HROCOP in Honduras started operations. Preparations are underway to launch operations in Costa Rica and Dominican Republic in early October.
- The International Telecommunication Union (ITU), Caribbean Telecommunication Union (CTU), the Inter-American Communication Commission (CITEL), and the Regional Technical Communication Commission of Central America (COMTELCA) signed a Letter of Intent (LOI) to establish an Agreement on "The use of ICTs for emergency and disaster situations in the Americas region".
- In this context, this project is designed to assist and support the beneficiary countries in improving their emergency telecommunication capacities and their emergency and disaster response. Under this project, the ITU Member States will receive an emergency toolkit allowing them to integrate a regional emergency telecommunication network based on Winlink. On September 10, the first Winlink Node (RMS: Remote Message Server) in Central America was installed in Honduras.
- ITU is undertaking a study on "Assessment of Emergency Telecommunication plans and systems in the Caribbean Region for broadcasters." This is a follow up from the study done earlier for telecommunications in the region. All these activities are congruent to the Emergency Telecommunications WINLINK Project that is under implementation for the Caribbean (see above).
- The III Regional Workshop: Technologies to mitigate effects of Natural Disasters was organized on 1-2 August in Quito, Ecuador. The event was attended by more than 200 participants.
- BDT attended The Caribbean Broadcasting Union (CBU) 49th Annual General Assembly in Kingston, Jamaica on 13-15 August 2018, and made presentation on the work and support of ITU on disaster management initiatives using ICTs and other initiatives.

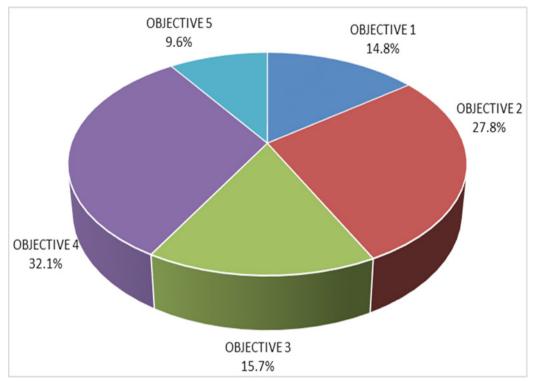
- BDT continues to contribute to the International Network on Multi-Hazard Early Warning Systems (IN-MHEWS), through its participation in regular meetings focused on the coordination and organization on the International Conference on MHEWS in 2019.
- The BDT has supported the deployment of a mobile multi-hazard Early Warning and information sharing platform in the Caribbean region in coordination with the Caribbean Disaster Emergency Management Agency (CDEMA) (to ensure suitability and relevance to the needs of region). This platform allows the public and stakeholder agencies to submit reports and share information in real-time concerning hazards and disasters. All information is routed to the Disaster Management Office (DMO) and its staff via the application's control panel. Once approved by DMO staff, Alert Notifications, Early Warning Sirens and heat map content are then released to the public via the mobile application.
- BDT is planning participation and contribution at the Global Platform for Disaster Risk Reduction 2019 (GP2019) conference organized by UNISDR and hosted by the Government of Switzerland to be held in Geneva (CICG) on 13-17 May 2019. BDT along with other international partners, contributes to the organization of the International Conference on Multi-Hazard Early Warning Systems that will be held during the GP2019 led by WMO and in partnership with ITU, WFP, UN-SPIDER, UNISDR, World Bank, European Commission, UNDP, and others.
- ITU Arab regional Office started developing a Model Policy and Regulatory Frameworks on use of Telecom/ICTs in Emergency and Disaster Management in Arab Region. The objective of this Model Policy and Regulatory Frameworks is to strengthen the capacity of ICTs policy and regulatory institutions and enhance regional collaboration and knowledge sharing on use of Telecom/ICTs in Emergency and Disaster Management. The report is expected to be delivered by end of 2018.
- A Multi-stakeholder Forum on the Role of Telecommunication/ICTs for Disaster Management
 and Risk Reduction for the Caribbean Islands will take place on 4-6 December 2018 in Roseau,
 Dominica. The Forum is aimed at paving the way for enhancing the use of ICTs for disaster
 management in the region and addressing key questions related to the best use of ICTs for
 disaster risk reduction and management. It will also serve as a platform to exchange new
 experiences and best practices in the use of modern technologies for monitoring and early
 warning.

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	Resolution 646, 647
WCIT	Resolution 2
WSIS Action Line	Action Line 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 September 2018.

Chart 1. Implementation level by objective



^{*} Based on time allocation of staff members

Highlights of the operational plan implementation

January – September 2018

This report highlights the results achieved as regards the implementation of the Operational Plan for the period 1 January to 30 September 2018 for the Telecommunication Development Sector. It also provides information by objectives and regions.

Overall implementation level

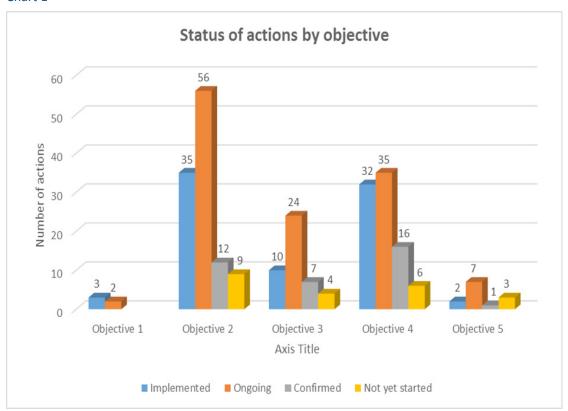
As at 30 September 2018, out of a total of 264 actions planned for 2018:

- 82 actions have been implemented
- 124 actions are ongoing (the activities have started and funds may have been activated)
- 36 actions are confirmed (the exact dates of the activities are known and funds may have been activated)
- 22 actions have not yet started (the budget has been approved but no date has been planned for the activities and no funds have been activated)

Implementation level by objective

Chart 1 below highlights, in terms of number, the status of actions (implemented, ongoing, confirmed, not yet started) by objective for period 1 January to 30 September 2018.

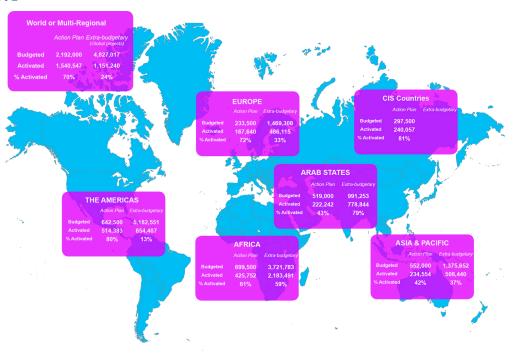
Chart 1



Budget implementation level by regions (in Swiss francs)

Chart 2 below highlights the expenditure level by regions for the period of January to September 2018.

Chart 2



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 September 2018.

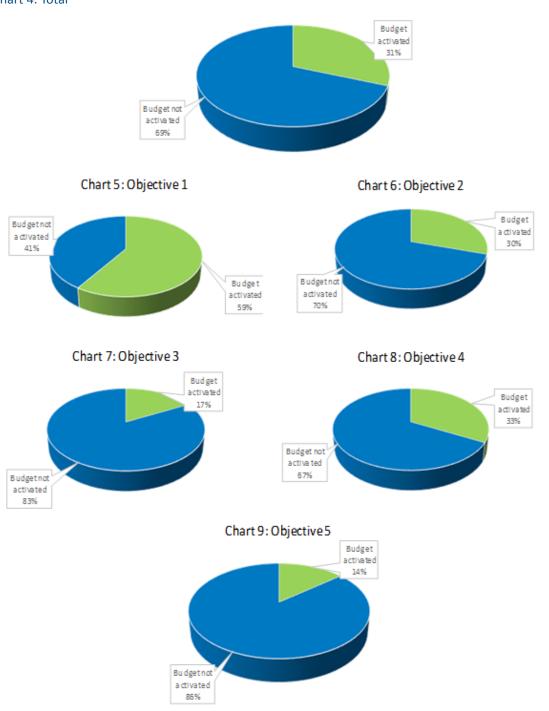
Chart 3



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 September 2018.

Chart 4: Total



 $^{^{\, 1}}$ $\,$ Budget activated: Amount of the budget of the action which has been committed and/or spent.

Highlights of the financial plan implementation

January – September 2018

This report highlights the expenditure level as at 30 September 2018 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 30 September 2018.

Table 1
(in thousands of Swiss francs)

Strategic objectives	Budget	Actual	Balance	Level of implementation 09/2018	
Objectives of ITU-D					
D-1 Foster international cooperation on telecommunication/ICT development issues	4,120	2,754	1,366	66.9%	
D-2 Foster an enabling environment for ICT development and foster the development of	7,738	5,490	2,248	70.9%	
D-3 Enhance confidence and security in the use of telecommunications/ICTs, and roll-out of relevant applications and services	4,370	2,786	1,584	63.8%	
D-4 Build human and institutional capacity, provide data and statistics, promote digital inclusion and provide concentrated assistance to countries in special need	8,935	5,861	3,074	65.6%	
D-5 Enhance environmental protection, climate-change mitigation and adaptation, and disaster-management efforts	2,672	1,653	1,019	61.9%	
Costs of ITU-D Strategic Goal	27,835	18,544	9,291	66.6%	

Financial statement for the Telecommunication Development Sector

Table 2 below shows by section the ITU-D expenditures as at 30 September 2018. As at 30 September 2018, expenditures amounted to CHF 18.5 million or 66.6 % of the ITU-D budget for 2018.

Table 2

(in thousands of Swiss francs)

		Approved Budget	Budget with transfers	Expenditures as at 30/09/2018	Balance	Level of implementation
Section 5	Telecommunication Development Advisory Group	107	107	99	8	92.5%
Section 6	Study Group	349	429	284	145	66.2%
Section 7	Activities and programmes	4,600	4,600	2,140	2,460	46.5%
Section 9	Bureau	22,779	22,699	16,021	6,678	70.6%
TOTAL		27,835	27,835	18,544	9,291	66.6%

Financial statement by objectives and outputs

Table 3 below shows the expenditures by ITU-D objectives and outputs as at 30 September 2018.

Table 3

(in thousands of Swiss francs)

		Approved Budget *	Budget with transfers	Expenditures	Balance	Level of implementation 09/2018	Level of implementation 09/2017
Objective 1	Foster Int. cooperation on Tel./ICT Dev. Issues						
	WTDC					n/a	26.2%
	RPM					n/a	100.6%
	TDAG	107	107	99	8	92.5%	86.4%
	STG	349	429	284	145	66.2%	95.7%
	Subtotal Objective 1	456	536	383	153	71.5%	56.7%
Objective 2	Foster an enabling env. for ICT dev.	1,899	1,957	1,036	921	52.9%	52.8%
Objective 3	Enhance confidence and security	788	826	271	555	32.8%	47.2%
Objective 4	institutional capacity	1,553	1,472	718	754	48.8%	53.6%
Objective 5	protection, climate- change	360	345	115	230	33.3%	27.3%
Activities and prog.	Subtotal Objective 2 to 5	4,600	4,600	2,140	2,460	46.5%	50.1%
Total ITU-D activities	Objective 1 to 5	5,056	5,136	2,523	2,613	49.1%	52.1%

 $[\]ensuremath{^{*}}$ The breakdown Objective 2 to 5 is from the OPS as initially approved

Financial statement for the Telecommunication Development Bureau

Table 4 below highlights by category of expenditure the expenditures for the Telecommunications Development Bureau as at 30 September 2018. As at 30 September 2018, expenditures amounted to CHF 16.0 million or 70.6% of the Bureau budget.

Table 4

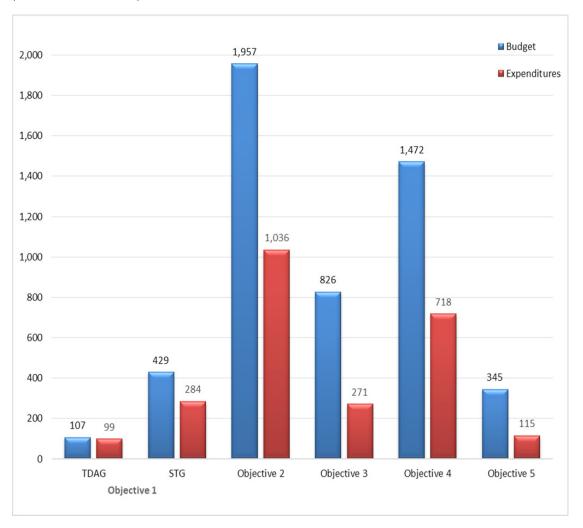
(in thousands of Swiss francs)

		Approved Budget	Budget with transfers	Expenditures	Balance	Level of implementation 09/2018	Level of implementation 09/2017
	Categories						
1	Staff costs	16,300	16,220	11,676	4,544	72.0%	70.3%
2	Other-staff costs	5,366	5,366	3,636	1,730	67.8%	73.4%
3	Mission expenses	450	450	410	40	91.1%	50.9%
4	Contractual serv.	119	119	105	14	88.2%	24.5%
5	Rental & mainten.	69	69	19	50	27.5%	32.6%
6	Purchase of equipmnt	78	78	36	42	46.2%	120.4%
7	Acquisition, furnit.	144	144	49	95	34.0%	26.3%
8	Utilities & services	144	144	63	81	43.8%	74.6%
9	Auditing, inter-agenc.	109	109	27	82	24.8%	58.6%
	TOTAL	22,779	22,699	16,021	6,678	70.6%	69.4%

Level of implementation by objectives

The chart below shows the budget and expenditures for ITU-D activities by objectives as at the end of September 2018.

(In thousands of Swiss francs)



International
Telecommunication
Union
Place des Nations
CH-1211 Geneva 20
Switzerland