

# **Telecommunication Development Sector**

**Implementation report  
January – March 2017**

**Implementation of the:**  
**Strategic plan**  
**Operational plan**  
**Financial plan**



# ITU-D Mission

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

# Goal

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

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

## Objectives

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

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

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

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

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

## Outputs

1.1 WTDC

1.2 Regional Preparatory Meetings (RPMs)

1.3 Telecommunication Development Advisory Group (TDAG)

1.4 Study Groups

2.1 Policy and regulatory frameworks

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

2.3 Innovation and Partnership

3.1 Building confidence and security in the use of ICTs

3.2 ICT applications and services

4.1 Capacity building

4.2 Telecommunication/ICT statistics

4.3 Digital inclusion of people with specific needs

4.4 Concentrated assistance to LDCs, SIDSs and LLDCs

5.1 ICTs and Climate change adaptation and Mitigation

5.2 Emergency telecommunications

## Activities

Creation of tools and guidelines

Handling of special needs

Project management and coordination

Financial, operational and strategic planning, control and reporting

Database and web site management

Documentation (preparation, writing and editing)

Assisting members and related tasks

Research and analysis

Sharing information and related tasks

Preparation and delivery of training

## Overview of ITU-D Strategic and Operational Plan

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



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



### Five ITU-D Objectives

#### Objective 1

*"Foster international cooperation on telecommunication/ICT development issues"*

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

#### 1.1- World Telecommunication Development Conference (WTDC)

The next World Telecommunication Development Conference (WTDC) will take place in Buenos Aires, Argentina, from 9 to 20 October 2017. The preparation of key documents for WTDC-17 has already begun, with efforts under way at the Telecommunication Development Advisory Group (TDAG). At its meeting in March 2016, TDAG reviewed preliminary drafts of three key documents prepared by its Correspondence Group on Strategic Plan, Operational Plan and Declaration, namely:

- ITU-D Contribution to the ITU Strategic Plan for 2020-2023;
- ITU-D Action Plan, and
- WTDC-17 Declaration

TDAG also reviewed the work undertaken by its other two Correspondence Groups on:

- Rules of procedures of ITU-D, and
- Streamlining WTDC Resolutions.

The three documents are online for consultation. ITU members are encouraged to submit written contributions on these drafts by the end of June 2016. On the basis of these contributions, if the need arises, the Chairman of the Correspondence Group will revise the preliminary drafts.

The revised preliminary drafts of the three documents and outcomes of the other two Correspondence Groups will then be provided to all six regional preparatory meetings (RPMs) for any further input.

The proposed theme of WTDC-17 is "ICT for Sustainable Development Goals" (or "ICT4SDGs") and is intended to send a message to the outside world about ITU's alignment to the 2030 Sustainable Development Agenda.

#### 1.2- Regional preparatory meetings (RPMs)

In line with WTDC Resolution 31, the Telecommunication Development Bureau (BDT) is

organizing one regional preparatory meeting per region for WTDC-17.

2 RPMs were held in 2016 preceded by the RDF one day meeting:

- 9-11 November 2016 in the Kyrgyz Republic, for the Commonwealth of Independent States (CIS);
- 6-8 December 2016 in Rwanda, for Africa;
- 3 RPMs were held in February and March 2017 preceded by the RDF one day meeting:
- 30 January-1 February 2017 in Sudan, for the Arab States;
- 22-24 February 2017 in Paraguay, for the Americas;
- 21-23 March 2017 in Indonesia, for Asia and the Pacific.

1 RPM will be held in April:

- 27-28 April 2017 in Lithuania, for Europe.

Each RPM will be preceded by a one-day Regional Development Forum.

### **1.3- Telecommunication Development Advisory Group (TDAG)**

The 21st meeting of the Telecommunication Development Advisory Group (TDAG) took place from 16 to 18 March 2016 at ITU headquarters in Geneva. At this meeting, TDAG launched the preparations for WTDC-17 as outlined above and reviewed:

- Preparations for the seventh ITU World Telecommunication Development Conference (WTDC-17), which will be held in the last quarter of 2017. Plans are well under way to hold six regional preparatory meetings for WTDC-17, along with Regional Development Forums in the last quarter of 2016 and in the first quarter of 2017.
- Implementation of the ITU-D Strategic Plan and Operational Plan 2015, including regional initiatives.
- ITU-D four-year rolling Operational Plan 2017-2020, including a progress report by the TDAG Correspondence Group on the Strategic Plan, Operational Plan and Declaration.
- ITU-D contribution to the implementation of the WSIS Plan of Action, including the United Nations General Assembly Overall Review and the Sustainable Development Goals.
- Working methods, including a progress report by the TDAG Correspondence Group on Rules of Procedure of ITU-D (WTDC Resolution 1).
- Collaboration with the other Sectors, including a progress report on the Inter-Sector Coordination Team on Issues of Mutual Interest.
- ITU-D Study Group-related matters.
- Membership, partnership and innovation-related matters.
- The outcomes of the Radiocommunication Assembly (26-30 November 2015) and the World Radiocommunication Conference (2-27 November 2015) that have implications for ITU-D work.

The following three meetings took place on 15 March 2016, just a day ahead of the TDAG meeting:

- Correspondence Group on Rules of Procedure of the ITU Telecommunication Development Sector ITU-D (WTDC Resolution 1).
- Correspondence Group on the Strategic Plan, Operational Plan and Declaration.
- Inter-Sector Coordination Team on Issues of Mutual Interest.

## 1.4- Study Groups

- The ITU-D Study Groups held their third set of Rapporteur Group meetings for the 2014-2017 study period in January 2017. The SG1 Rapporteur Groups, including the Joint ITU-D/ITU-R Group for WTDC Resolution 9, met in Geneva from 9 to 18 January 2017, followed by the SG2 Rapporteur Group meetings from 18 to 27 January 2017. The Rapporteur Group meetings were an important milestone towards completion of the expected deliverables for all study Questions for the study period. Significant progress was made on the expected deliverables and the groups also brainstormed on possible future direction and related activities of their specific study Questions. These thoughts on the possible future of the study Questions are useful as Members debate and formulate proposals on these matters at Regional Preparatory Meetings (RPMs) and at WTDC-17.
- In conjunction with the Rapporteur Group meeting for Question 3/2 (cybersecurity) an open workshop was held on the topic of "Cybersecurity and risk assessments in practice" on 26 January 2017. Experts gathered to share their knowledge and experience on the practical assessment of cyber risks at the national level, in large organizations, and in critical infrastructure sectors. Supply chain risks and role of standards for managing cyber risks in organizations were also debated.
- The final ITU-D Study Group 1 and 2 meetings for the study cycle took place in Geneva from 27 to 31 March, and from 3 to 7 April 2017, respectively. The SG1 and SG2 meetings agreed to the Final Reports containing the deliverables called for by WTDC-14 for all SG1 and SG2 Questions. The groups also continued discussing the future of the existing study Questions, which in turn serve to inform Member States as they prepare for WTDC-17.
- The SG1 and SG2 meeting dates for the next study period (2018-2021) were also considered.
- Sponsorship opportunities were made available for activities, such as exhibit, side and social events, around all ITU-D SG1 and SG2 meetings, including Rapporteur Group meetings in 2017.

## 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 March 2017 are as follows:

### 2.1- Policy and regulatory frameworks

- The study and report of the Broadband strategy for Burundi has been completed and validated in Yaoundé in the end January 2017 in the ITU Area Office premises in presence of 6 delegates from the administration of Burundi.
- BDT forum on Economics and Finance in ICTs/ Telecommunication for Africa back to back with the TSB-SG3 Regional meeting for Africa held 30th -2nd February, 2017 at Victoria Falls, Zimbabwe attended by 91 participants from 25 countries and 5 institutions namely ATU, SADC, ESMT and UPU.

- International Mobile Roaming (IMR) Cost Model training for the SADC region held on 29th March 2017, in Durban, South Africa attended by 10 SADC Member States and over 60 delegates.
- ITU Regional Forum on Consumer Information, Protection and Rights for Africa 2017 held in Cotonou, Benin, 14-16 March 2017 with 131 participants from 21 countries including the ATU, GSMA and ESMT.
- Expert Group Meeting on Smart Grids held on 28 February 2017 within the framework of the ITU Regional Initiative for Europe on Broadband gathered more than 30 for telecom and energy stakeholders and provided foundations for a study on smart grids to be released in Q2/2017.
- Validation Meeting for the Broadband Universal Access Study and Household Survey for the Kingdom of Lesotho held 23rd March, 2017 in Maseru, Lesotho. The report shall provide policy and strategic guidance for broadband development in the Kingdom.
- The review of the National Broadband Policy and Associated Strategic Implementation Plan for Achieving a Digital Economy for the Republic of Namibia prepared with technical support from the ITU to align it with the new "Guidelines for the structure of a public policy document" release by the Government of Namibia at the end of 2016 was finalized and fully accepted by the Government of Namibia.
- Shared knowledge and best practices on the contribution of ICTs to the UN SDGs 2030 during the ITU/BDT Regional Economic and Financial Forum of Telecommunications/ICTs for Arab States, Nouakchott-Mauritania, 17-18 May 2017 attended by 85 participants from 6 countries.

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

- ITU-D continues to implement and update the ITU Interactive Terrestrial Transmission Maps (<http://itu.int/go/Maps>). The ITU Maps presents critical ICT infrastructure on broadband backbone optical fiber, microwave links, satellite earth stations, and as submarine cables. The Map interface is being renewed to allow new data visualizations and data analytics; a Request for Proposal has been realized for implementing these new features to the ITU-D GIS system. At the time of this reporting, the Map presents information from 395 operator networks and 17,930 nodes worldwide. The research on the transmission links has reached 10,149,605 km of routes, of which 2,501,881 km have been 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 2017 two major events took place: Workshop on mapping infrastructure Gaps; and the Action Line C2 Facilitation Meeting.
- A revision of the report on the Implementation of Evolving Telecommunication/ICT Infrastructure for Developing Countries: Technical, Economic and Policy Aspects was developed and shared with all participants of the ITU-D Study Groups. This revision added to essential telecommunication/ICT infrastructure and their technologies information on IoT standardization process and concepts, spectrum and broadcasting. The report makes reference to more than 200 ITU publications (e.g. ITU-D Study Group Reports, ITU Guidelines, and ITU Recommendations from all Sectors).
- At the beginning of 2017 Spectrum Management Master Plans were provided within the framework of an ITU-Ministry of Science, ICT & Future Planning (MSIP) (Republic of Korea)

project for countries in ASP: Brunei, Bangladesh, Pakistan and Samoa) and in the Caribbean (Grenada and Saint Vincent and the Grenadines).

- Assistance to developing countries on conformity and interoperability are ongoing. A recent C&I Assessment Study is taking place for South America region, and regional training events are being organized for AMS, ASP and AFR together with testing laboratory partners.
- Assistance to Member states on Future Internet Exchange & IPv6-based broadband: Final Improvements for Future Internet Exchanges Publication; Publication Future Internet Exchange.
- Assistance to Member states on IPv6-based broadband (Business Model, SWOT Analysis, Policy and Strategy).
- Implementation of Broadband Wireless Networks to connect Schools and Hospitals in rural and remote areas in Burundi, Burkina Faso, Djibouti (operations) and ongoing in Swaziland, Mali.
- Assistance to Member States on Development of Broadband Access is ongoing for CIS countries: - Web-based software for selecting the most feasible solution for broadband deployment in CIS and Georgia based on information about specific location in CIS and Georgia (city, settlement, etc.).
- A digital switch-over database was updated based on information from around 10 countries (see <http://www.itu.int/en/ITU-D/Spectrum-Broadcasting/Pages/DSO/Default.aspx>).
- Broadband Wireless Network in Africa – DJIBOUTI: Field Installations (final phase) & last shipment completed.
- South-Sudan final document on broadband.
- New Broadband Wireless Connectivity Model taking into consideration the Migration strategy to NGN in Swaziland and discussions with PROC on the way forward for Equipment procurement for Swaziland.
- Broadband Wireless Network in Africa – MALI: Administrative process & Needs Assessment.
- Broadband Wireless Network in Africa - BURKINA FASO: Tender Process for E-Learning.
- The prefeasibility study to enhance ICT infrastructure for East African Community (EAC) to support the EAC-ITU- China Project was initiated for the 3 components: Enhanced Broadband and connectivity infrastructure in East African Community, Regional E- transactions platform for e- government and e-commerce and Centre of Excellence in ICT research and Innovation. A preliminary report was presented to stakeholders including the Ministers of Rwanda, Uganda and the ITU SG during the Transform Africa Summit held in Kigali, Rwanda on 10 May 2017.
- Within the framework of the ITU-Latin-American Development Bank (CAF) a summary report on the digital broadcasting roadmaps have been prepared which includes 12 countries.
- AMS RI 3 on Development of broadband access and adoption of broadband achieved to date the following results: provision of assistance for the development of guidelines for sustainable broadband infrastructure in rural areas, delivery of studies on broadband, capacity building activities, support for the establishment of Community ICT Centers; support to South American countries in terrestrial optical cable systems; and the formulation and development of national broadband policies to implement a broadband technology framework.

- Members' capacity was built on the latest developments in digital terrestrial television, IPv6, and SMS4DC through workshops, trainings, and direct assistance.
- Assisted Djibouti in the feasibility study for the establishment of a Regional Internet Exchange Point (IXP).
- Enhanced Capacity of over 260 delegates from Arab countries in the fields of spectrum management and frequency planning and coordination through the organization of the 3rd Annual MENA Spectrum Management Conference held on 24-25 January 2017 in Dubai, in partnership with Forum Global and TRA United Arab Emirates, which was followed by the ITU workshop on Cross-Border Frequency Management in Arab States on 26 January 2017, in Dubai, UAE.
- Enhanced the skills of 80 delegates from seven Arab countries in the area of Technical, Regulatory and Policy Aspects related to "Broadband Networks in the Era of App Economy". This was during the ITU Arab Forum on Future Networks in partnership with CIFODECOM, Tunis - Tunisia, 21-22 Feb. 2017. 80 delegates from seven Arab countries attended the Forum where challenges and opportunities of the new App Economy were presented and discussed.
- Master Plans for Spectrum Management and Country Assistance in Spectrum Management: LAO P.D.R and Cambodia country report and proposal.
- CoE training on SM, chats and Forums.
- Coordinated the data collection and validation in the process of enhancing the Interactive Terrestrial Transmission Map in Europe, covering infrastructure of more than 90% of European countries.

### **2.3- Innovation and partnership**

- Partnership in the ICT ecosystem: Partnership and resource mobilization enhanced through direct contacts, networking and meetings. During the first quarter of 2017, 9 new partnership agreements have been signed with various stakeholders: on ICT Applications, infrastructure, e-waste and multi-thematic (2) and on human capacity building (1). Beneficiary regions of these new signed agreements were Global (3), The Americas (2), Africa, Arab States, Asia-Pacific and CIS (1). The BDT internal database on partnership agreements have been enhanced to support BDT resource mobilization efforts and to facilitate identification of potential partners. BDT pays particular attention at nurturing relationship with existing partners and engaging with them in lasting relationship. In addition, BDT also recognizes the importance of widening and diversifying its partners' base through outreaching activities towards nontraditional partners. Therefore, in a convergent ICT ecosystem, entities from other sectors are becoming new BDT partners, such Pierre Fabre Foundation for projects in m-health or International Solid Waste Association for projects related to e-waste.
- Sponsorship Opportunities: In 2017 a new interactive sponsorship platform, available in the six ITU official languages, has been launched for social and side-events activities taking place at the occasion of BDT organized events. During the first quarter of 2017, Opportunities were opened for Study Group meetings and for ITU-D 25th Anniversary, WTDC-17 Side-events and GSR-17 Side-events. This website/portal proposes opportunities to entities to enhance their visibility, promote brands, and showcase ICT products and solutions. Discounts are offered to ITU-D Membership for open events/meetings as well as for multiple sponsored activities. All resources mobilized are used to organized activities sponsored and to implement activities, projects and initiatives, including the regional initiatives, in the framework of the WTDC-14 and WTDC-17 Action Plans.

- Following 7th Private Sector Chief Regulatory Officers' (CRO) and the establishment of the CRO Working Group on Digital Financial Inclusion (CRO WG-DFI) on 14-15 November 2016, Bangkok, Thailand, coordination with identified countries (i.e. Mongolia and Sudan) and relevant stakeholders from the financial and ICT/telecommunications public and private sector entities was kicked-off in 2017. A several CRO WG-DFI e-meetings took place and assessment mission to Mongolia was planned for the 2nd quarter of 2017 for which the outcomes are to be presented at the 8th CRO and CRO WG-DFI meetings to be held during GSR-17 in July 2017.
- Drafting of the Impact Study on ICT④SDGs continued sound progress .The 3rd experts' meeting took place in ITU HQ, Geneva in January 2017, where renowned academicians finalized drafting of their respective chapters, agreed on potential case studies to be included and other aspects related to formatting, exploration of joint publishing arrangements with leading publishers, amongst others. The Study, which will be launched at WTDC-17, will present an in-depth roadmap for sustainable economic growth by exploiting the recent developments in Information and Communication Technology (ICT) and creating an environment that nourishes ICT-centric innovation and generates new employment opportunities.
- A national workshop and Innovation ecosystem stakeholders consultations were held throughout the process of the country reviews for Kenya to help strengthen the ICT centric innovation ecosystems. BDT presented the preliminary outcome of the study in Nairobi on March 24 2017.
- BDT held a national ICT innovation ecosystem stakeholder consultations March 13-17 in Buenos Aires. This technical assistance is being provided to Argentina with aim to strengthen the startup ecosystem and ICT SMEs, improve their competitiveness.
- The first regional innovation forum was held on March 28-29 in Chisinau, Moldova as a joint initiative between EUR and CIS regions. The expected outcome was to share challenges and opportunities, discuss good practices, and offer a platform for twinning, networking and learnings of ongoing and planned country level initiatives on Innovation.

### 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 March 2017 are as follows:

#### 3.1- Building confidence and security in the use of ICTs

- Launched the Gaming Booklet of the Child Online Protection challenge in partnership with the Ministry of Communications and Information Technology which contains a detailed description of the games that are applied during the challenge on 4 March 2017.
- Conducted Child Online Protection Challenge in Port Said, Egypt on 4 March 2017, in partnership with the COP National Committee in Egypt and other stakeholders. More than 60 students learned via gamification about the Internet safety.

- Organized in cooperation with the Arab Regional Cybersecurity Centre (ARCC) the Regional ALERT (Applied Learning for Emergency Response Teams) Cyber Drill — 5th Edition held in Doha, Qatar from 5-9 March 2017. More than 11 countries attended the drill with around 100 participants.
- The Drill was followed by two days training on 8 & 9 March 2017 conducted by Cyber Wellness Center (CWC) of the EC-Council. Participants divided into two tracks: Technical Track covered Web Vulnerabilities modules (SQAP), and Management Track covered Chief Information Security Officer (CISO) modules. Trainings were preceded by pre assessment tests and followed by post assessment tests.
- CIRT Readiness Assessment was performed for Republic of Mali, 20-23 March 2017 with the involvement and awareness building of stakeholders in the country. The assessment will facilitate the planning and implementation of CIRT in Mali.
- Raised awareness and developed guidelines on Child Online Protection (COP).
- Selected countries were assisted in establishing their national CIRTs and regional cybersecurity drills were conducted to test readiness of CIRTs and strengthened optimal coordination between Arab CIRTs.
- In terms of technical and policy frameworks, a regional study was conducted on “Cloud Computing in Arab Countries: Legal and Legislative Aspects, Facts and Horizons” to help define the legal measures that ensure data privacy and secure use of the Internet and its various applications.
- Assisted Sudan in the development of its national child online protection strategy framework in 2017.
- Awareness raised among 100 school students regarding the Internet safety through the organization of the Child Online Protection Challenge in Port Said, Egypt on 4th March 2017, in partnership with the COP National Committee in Egypt and other stakeholders.
- The ITU developed National Cybersecurity strategy (NCS) for Mauritania for the period 2017-2022, preceded by a workshop to assess the current cybersecurity status through consultation with the national stakeholders, with planned work on CIRT implementation with potential funding by both ITU and host.
- Built capacity among the cybersecurity professionals in Djibouti through the Arab Regional Cybersecurity Centre (ARCC) by conducting two weeks’ training that covered the “Web Security Attacks and Solutions” held from 14 to 18 May 2017 and the “Vulnerability Assessment Penetration Testing Training” from 21- 25 May 2017.

### **3.2- ICT applications and services**

- Organized a smart learning capacity building workshop from 26-28 February 2017 in Dubai, UAE hosted by the Mohamed Bin Rashid Smart Learning Programme. 10 countries from the Arab region participated in the workshop. This workshop comes in implementation of the signed cooperation agreement with the TRA and Mohamed Bin Rashid Smart Learning Programme of the UAE.
- Preparatory work and meetings on mDiabete for Senegal with Ministry of Health, Ministry of ICT of Senegal, WHO and mobile telecoms operators for the preparation of the phase 2 of the project completed during the 1st quarter of 2017. At the end of phase 1, the project registered the participation of 55,000+ users in its database.

- Work with Burkina Faso resulted in the decision to implement m-Cervical Cancer programme and preparatory work was undertaken in March 2017 for the launching of the initiative scheduled for April 2017 in Ouagadougou.
- Built capacities of policy-makers regionally in formulating national strategies for smart learning through the implementation of the signed cooperation agreement with the Telecommunication Regulatory Authority of the United Arab Emirates and the Mohamed Bin Rashid Smart Learning Programme. The first capacity building workshop took place in Dubai from 26-28 February 2017 with the participation of 18 participants from 10 countries.

#### **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 March 2017 are as follows:

#### **4.1- Capacity building**

- The 3rd Center of Excellence Steering Committee meeting for the Europe region was held in Copenhagen on 17 January 2017, which approved the work plan and training programme for 2017. In follow up the training catalogue with Training Opportunities by European CoEs was released in March.
- The 5th meeting of the Group on Capacity Building Initiatives (GCBI) was held successfully from 8 to 9 February 2017. Members reviewed ITU’s work on CB during the past year and provided guidance on the way forward.
- The online publication “Capacity Building in a Changing ICT Environment” was released. The first focuses on mobile technologies for skills development and lifelong learning. It features the work of an international team of experts, tackling the issues in an analytical, critical and conceptual fashion.
- A Cooperation Agreement was signed with ARCTEL on the joint implementation of an Accelerated Management Course for Telecommunication Executives. The course aims to deliver high-quality and certified training for managers of the Communication Sector.
- The Report on Capacity Development in Internet Governance (IG) was finalized. It provides a detailed overview and assessment of existing IG capacity development activities globally and regionally and will be the basis for further work of ITU in this field.
- Under the framework of the ITU Academy’s Centers of Excellence network, a total of 10 training courses were delivered between January-March 2017, with a total of 368 participants from all over the world.
- Organized the ITU CoE Training on “PKI, Digital Proofs and Security of Electronic Transactions”, Tunisia, Tunis, 18-20 January, 2017. The training attended by more than 15 participants.
- Organized the ITU CoE Training on “Fundamentals of Fiber and Optical Networks”, Tunis-Tunisia, 30 January - 1 February 2017. The training attended by more than 20 participants.
- Participated in partnership with Experts from BR in the Workshop on 5G organized by ATU from 30 January to 3 February 2017 in Nairobi. The workshop had collaboration from

USAID Vendors private entities that shared their experience with in demystifying the 5 G and in presenting the new technological trends and uses of dedicated software for spectrum management.

- Organized with BR and participated in the Radiocommunication seminar (RRS-17) held in Dakar from 27 to 31 March 2017. More than 120 radiocommunication experts were trained on BR tools for space and terrestrial services.
- Girls in ICT Day event was celebrated in Addis Ababa with the collaboration of UN Women, UNDP Regional office, UNDP Country Office, UNECA and the Africa union Commission with 250 High school girls in Addis Ababa and a visiting delegation of 12 from United Republic of Tanzania. This served to encourage the young girls to see ICT as a career path for them.
- Assistance was provided to African countries of Senegal, Gambia, Cameroun Uganda, Sierra Leone and Zambia in organizing their Girls in the ICT events in 2017.
- Training on Practices for “KPI, Digital proofs and Security of Electronic Transactions” was organized in cooperation with CIFODECOM-Tunis. 14 participants attended the training.
- Training on “Fundamentals of Fiber and Optical Networks” was organized in cooperation with CIFODECOM-Tunis, from 30 Jan- 2 Feb, 2017. 16 trainees were attended the training.
- Partnered with the Asia-Pacific Telecommunity (APT) in organizing the “Preparing for International Conferences, 2017” Training. The training delivered in two phases (On-Line and Face to Face) from 30 Jan to 3 Feb and 27-30 March 2017 respectively. 39 participants from 22 countries completed the online course, and 30 attended the face to face training.
- Training on “Engineering, Installation and Deployment of Optical Networks” was organized in cooperation with CIFODECOM-Tunis during 13-15 April, 2017. More than 11 participants attended the training.
- Training on “Planning and Deployment of 4G/5G” was organized in cooperation with CIFODECOM-Tunis during 16-18 May, 2017. 14 participants attended the training.
- Training on Risk Management for ICT Implementation was organized in cooperation with SUDACAD-Sudan, from 30 April-2 May, 2017. Due to the high demand of this training, a second session was organized during 23-25 May, 2017 with the aim of identifying ICT project and business risks and provide structured process for the management of ICT risks. More than 30 participants attended the training from Arab countries, 10 of them were women.
- Training on IPv6 Certified Network Engineering, was organized in cooperation with SUDACAD-Sudan, from 07-09 May 2017. The training aimed to explore the current and future IP technologies and its infrastructure. More than 15 participants attended the training from Arab countries.
- Training on Business Analysis for ICT projects was organized in cooperation with SUDACAD-Sudan, from 23-25 May, 2017 with the aim of training participants from the Arab region, on the role of ICT application on analyzing the business and enhancing the business environment. The training was attended by more than 20 participants, 7 of them were women.
- Within the framework of the partnership initiative with Telecommunications Regulatory Authority (TRA-UAE), a regional project was signed on human capacity building on IPv6 for Arab LDCs and Palestine. The project started its implementation in 2016 and 2 high and professional training activities were implemented in Dec, 2016 and April, 2017. The project aims to build human and institutional capacity r to improve the technical skills in the development and use of IPv6, as well as assist them to better deploy the IPv6. 28 participants from Arab LDCs and Palestine were trained and became certified IPv6.

- Since 2013, direct assistance was provided to 13 Arab countries in the organization of their Girls in ICT Day celebrations. During these years, Girls in ICT Day celebrations were also organized in Mauritania, Egypt, in collaboration with the Member States and other private companies. These activities in the different governorate in Egypt had the participation of over 700 high school girls.
- A cooperation agreement was signed in April 2017 with the Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) represented by the Employment Promotion Project (EPP) for the organization of "Girls in ICT Day Events" in Egypt until 2019.
- Co-organized a Girls in ICT Day in Aswan on 27 April 2017 in collaboration with GIZ, Continuing Educational Centre (CEC), and International Development Research Centre (IDRC). 60 girls were trained on infographic and Canva principles.

#### **4.2- Telecommunication/ICT statistics**

- The latest edition of the ITU World Telecommunication/ICT Indicators Database and the ITU/World Bank publication "The Little Data Book on Information and Communication Technology 2017" were released in January 2017. The data will enable users to take informed decisions in the field of ICT, based on internationally comparable statistics.
- The Extraordinary Meeting of the EGTI/EGH took place from 1-3 March 2017. On 28 February a meeting of the sub-group and independent consultant also took place. Two input documents (prepared by EGH/EGTI sub-group and Pyramid/Global Data) were discussed during the meeting. The meeting adopted a total of 14 indicators to be included in the IDI compared to the current list of 11 indicators. The results of the new IDI will be published in 2018, to provide sufficient time to undertake statistical tests and to allow sufficient time for countries to gather and report data on the newly included indicators.
- The 2017 short questionnaire data collection was completed. Around 164 countries submitted their response to the WTI Short Questionnaire 2017. 114 countries responded to the ICT Household Short Questionnaire 2017, which is a significant increase from 2016 (67 countries).
- The "ICT Trends and Developments" reports for the Americas region, Asia and the Pacific and Europe were completed as an input to the Regional Preparatory Meetings (RPMs). The reports enabled the ITU membership to assess ICT trends in their regions, as a basis for discussions at the RPMs.

#### **4.3- Digital inclusion of people with specific needs**

Digital Inclusion means ensuring ICT accessibility and the use of ICTs for the social and economic development of people with specific needs. Despite the expanding deployment of ICT/telecommunication networks, many women and girls, persons with disabilities, youth, children and Indigenous Peoples people remain excluded from the Information Society. People with specific needs often face barriers to using ICTs/telecommunication. Persons with disabilities, depending on their disability, may not be able to see screens, hear sound on a phone or input commands to a mouse, computer or touch screen phone. These barriers can be overcome where accessible and affordable ICTs are available. Women, youth and Indigenous Peoples who are not currently online, often require basic and advanced digital literacy training along with an understanding of how to use ICTs for their social and economic empowerment.

Barriers faced by people with specific needs can be removed through effective laws, policies, national broadband plans, regulations and business practices as well as through ICT training and development strategies, which take into account the specific needs of women, girls, Indigenous

Peoples and persons with disabilities to ensure an inclusive Information Society.

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

- 650 ITU Members and stakeholders were made aware or had their capacity built in ICT accessibility policies, strategies, guidelines and good practices. This includes awareness raising during the meetings of ITU-D Study Group Question 7/1; raising awareness on public procurement of accessible ICTs to over 150 participants within the “European Workshop on Accessibility” held on 2-3 February 2017 in Brussels; in Costa Rica on 14 March 2017, around 100 decision makers participated in a political buy-in seminar on the topic of ICT Accessibility related to web accessibility (see details related to development of training below); and ITU also raised awareness on 26 May 2017 to over 200 participants on the “Opportunities to promote Accessible ICTs from a global development perspective” in the event “International week – I am accessible” held by the Government of Spain through Ceapat-Imserso”.
- Guidance was provided to Egypt in 2016 and 2017 to develop a national ICT accessibility policy. ITU Member State Egypt released its national ICT accessibility policy for persons with disabilities at its annual ICT accessibility conference in April 2017. The policy includes recommendations on additions to Egypt’s draft Disability Act as well as its ICT and broadcasting laws and regulations covering web, TV, mobile and public access terminals accessibility along with public procurement of accessible ICTs.
- ITU developed a national training programme on web accessibility composed by two “face-to-face train-the-trainer” courses on “Accessible web content” and “Design and development of accessible websites” in line with the WCAG 2.0 web accessibility standards. The course was delivered in Costa Rica from 13-17 March 2017. This national training programme on web accessibility also included a decision maker’s buy-in seminar (awareness raised among the Regulator, Superintendencia de Telecomunicaciones (SUTEL), Ministry of Science, Technologies and Telecommunications (MINCIT), the Universidad de Costa Rica and its Consejo Nacional para las Personas con Discapacidad (CONAPDIS), as well as a presentation of a self-sustainable model that, as a result of a national certification for these two trainings, will also generate funds for capacity building of persons with disabilities in accessible websites. ITU trained and provided related certification to 44 trainers on “Accessible web content” and to 20 trainers in “Design and development of accessible websites”. These courses were delivered at the Universidad de Costa Rica that will take the lead nationally on this topic and will replicate the courses to ensure that Costa Rica governmental websites are made accessible and available for persons with visual disabilities (PwD) by the end of 2017. The curriculum will be translated into other ITU official languages in 2017.
- Since 2011, when the first International Girls in ICT Day was celebrated, over 9,000 events in 166 countries have taken place, empowering more than 300,000 girls and young women from around the world. ITU Headquarters and all ITU regional offices have organized Girls in ICT Day events. In 2017, some 70,000 girls from 134 countries participated in over 2,100 events; this includes events held in 30 countries in the AFR region, 33 in the AMS region, 12 in the ARB States, 20 in the ASP region, 6 in the CIS and 33 in EUR. The ITU Girls in ICT Portal

received 487,000 page views in the first half of 2017. This compares to a total of 383,552 page views in 2016, and 337,936 page views in 2015. The Girls in ICT Portal houses a toolkit and branding materials for organizers to use in their events. It also includes a map of events worldwide, linked to pages where organizers can post pictures, videos and descriptions of the results of their events.

- Awareness about Girls in ICT Day has been raised among tens of millions worldwide. Not only was Girls in ICT Day covered by BBC World TV in 2017, the #GirlsinICT hashtag reached over 63 million Twitter accounts for 255,057,360 timeline deliveries this year.
- In 2017, the flagship Girls in ICT Day event organized in Geneva was connected with the Girls in ICT Day event organized in Vilnius, Lithuania during RPM-EUR and an event organized by Alfa Telecom in Beirut, Lebanon. These events, and events from around the world, are posted on the Girls in ICT Portal, which also hosts the Girls in ICT Facebook page and #girlsiniict Twitter feed. The Portal is available at [www.itu.int/girlsiniict](http://www.itu.int/girlsiniict).
- ITU-D also raised awareness on how ICTs can promote girls' inclusion and access to education (particularly STEM) and contribute to gender equality and women's empowerment with 40 stakeholders participants during a WSIS workshop on 15 June 2017.
- Established an Internet Access and Training Centre for persons with hearing disabilities in Vitebsk, Belarus in March 2017. The Centre provides five working places..

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

- Raising awareness on the importance of training young people with job-ready digital skills among nearly 200 stakeholders during the June 2017 World Summit for the Information Society (WSIS) Forum "High Level Dialogue on Digital Skills for Decent Jobs for Youth". The session launched the joint ITU-ILO "Digital Skills for Decent Jobs for Youth" campaign to incentivize a range of stakeholders to train 5 million youth worldwide with job-ready digital skills by 2030. The Campaign has been launched under the "Global Initiative on Decent Jobs for Youth", supported by 22 UN agencies. ITU is leading the digital skills thematic area of the Global Initiative on Decent Jobs for Youth which seeks to scale up country action. More information about the campaign is available at [www.itu.int/digitalskills](http://www.itu.int/digitalskills).
- Creating and making available to all ITU members, young job seekers and entrepreneurs an online database of ICT-enabled resources. This database includes links to training opportunities, crowd funding for start-up capital, mentoring networks and job-matching services to enable members and youth to leverage digital opportunities to enhance their employment and entrepreneurship opportunities. See <http://www.itu.int/net4/ITU-D/CDS/sis/Youth/Resources/index.asp>.
- Awareness was raised and best practices shared among ITU members through the weekly publication of innovative digital inclusion practices and strategies on the ITU-D Digital Inclusion news log at: <http://digitalinclusionnewslog.itu.int/>. The Digital Inclusion newslog highlights the latest digital inclusion practices and strategies such as digital literacy, coding training, initiatives to encourage more girls and women to take up ICT studies and careers and ICT accessibility practices for persons with disabilities. 106 digital inclusion programmes and practices were shared on the Digital Inclusion Newslog from January-mid-June 2017, with 4,342 views of the newslog posts during this time period.

#### 4.4- Concentrated assistance to LDCs, SIDS and LLDCs

- To enhance the capacity of LDCs, the report on ICTs, LDCs, and the SDGs is under preparation. The report, which is being produced in cooperation with the UN Office of the High Representative for Least Developed Countries, Landlocked Developing Countries and Small Island Developing States (UN-OHRLLS), will focus on ICT infrastructure and affordability developments (SDG 9, Target 9c). It will be launched in Q4 of 2017.
- Zambia received concentrated assistance in the form of equipment for schools for the blind.
- A presentation to highlight the importance of ICT infrastructure for development in LDCs was made at the Regional Meeting of African LDCs. The meeting was organized from 28 February to 01 March, in Dakar, by the UN Office of the High Representative for the Least Developed Countries, Landlocked Developing Countries and Small Island Developing States (UN-OHRLLS).
- Completed the Strategic Corporate plan for the recently established ICT Commission (ICTC) in Tanzania. The work started in 2016 with the diagnostic of the situation and the respective validated and in 2017 the draft strategic plan was drafted, a stakeholders consultative meeting held in Dar Es Salaam and after inserting the inputs received the final document is in process of being submitted to the ICTC. The Strategic Corporate Plan will help Tanzania to implement a structure ICT development programme.
- .

#### **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 March 2017 are as follows:

#### 5.1- ICTs and climate-change adaptation and mitigation

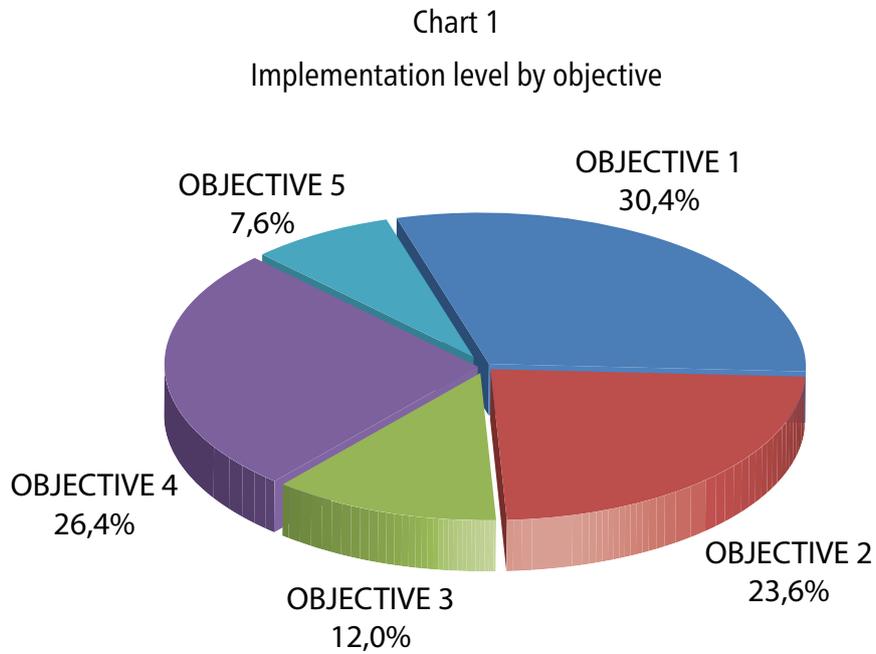
- A handbook on e-waste policies and legislative frameworks for ICT generated e-waste is being developed.
- The publication on best practices on e-waste management, which identifies successful models of e-waste management centers, is under preparation.
- The-waste management policy and regulatory framework for Saint Lucia was finalized.

#### 5.2- Emergency telecommunications

- The organization of the second Multi-stakeholder Forum on the Role of Telecommunications/ ICT in Disaster Management is underway. The Forum will be organized by the ITU Telecommunication Development Bureau (BDT), in cooperation with the Ministry of Information Technologies and Communications (MINTIC) of Colombia and will take place from 29 to 31 August 2017, in Bogotá, Colombia.

**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 March 2017.



\* Based on time allocation of staff members

## Highlights of the operational plan implementation

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



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



### Overall implementation level

As at 31 March 2017, out of a total of 243 actions planned for 2017:

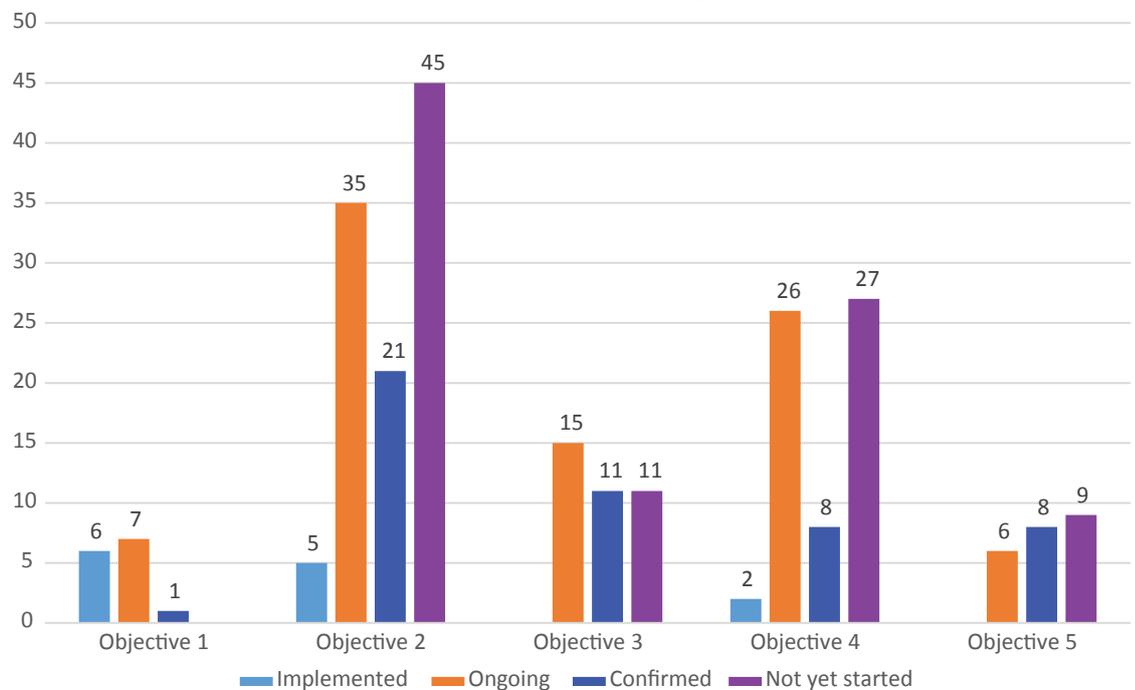
- 13 have been implemented
- 89 are ongoing (the activities have started and funds may have been activated)
- 49 are confirmed (the exact dates of the activities are known but no funds have been activated)
- 92 have not yet started (the budget has been approved but no date has been planned for the activities 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 31 March 2017.

Chart 1

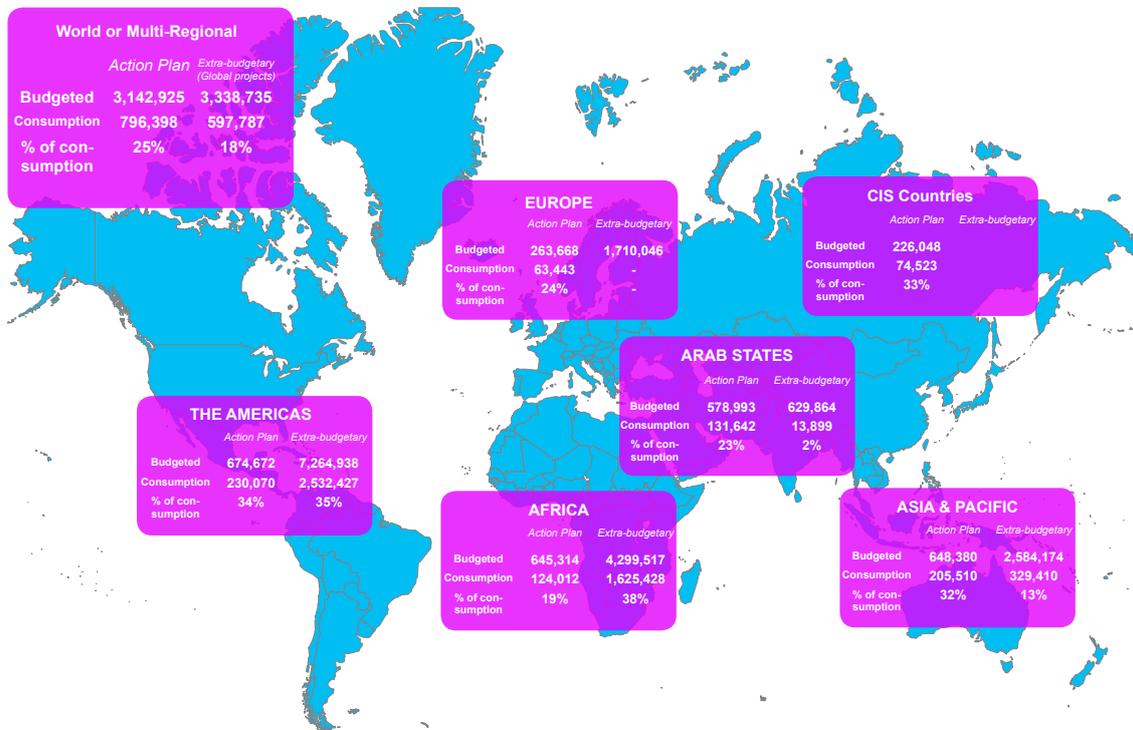
Status of actions by objectives



**Budget implementation level by regions (in Swiss francs)**

Chart 2 below highlights the expenditure level by regions for the period of January to March 2017.

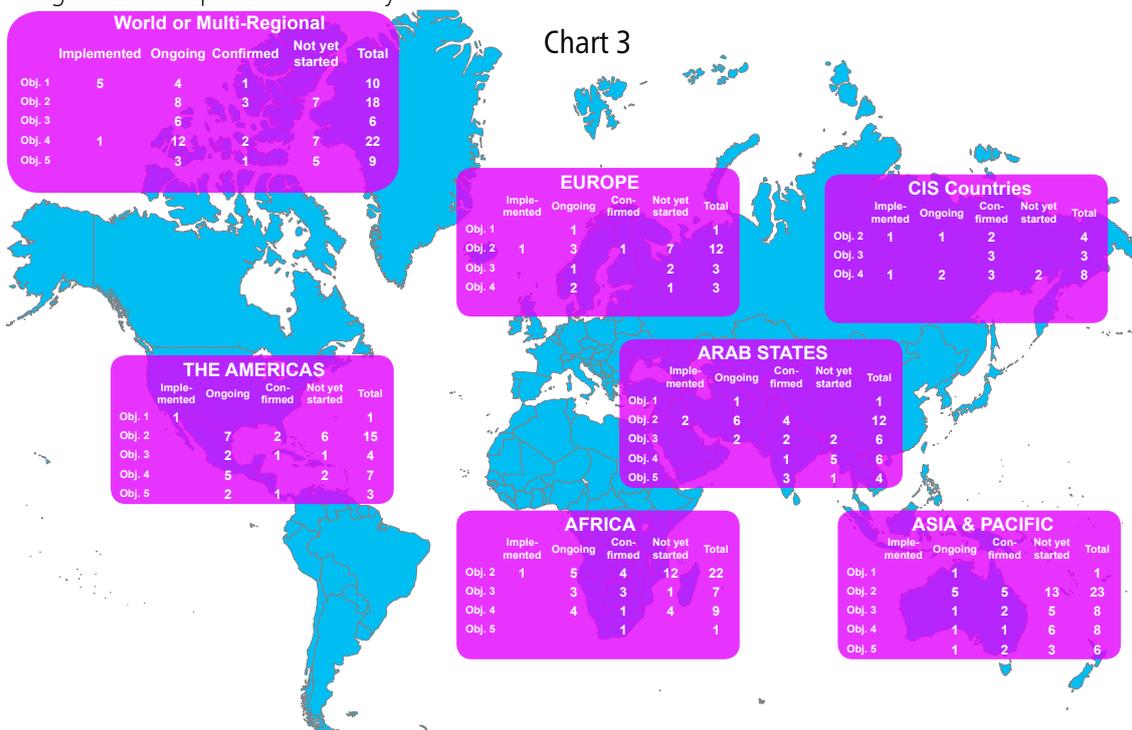
Chart 2



**Implementation level by objectives and regions (number of actions)**

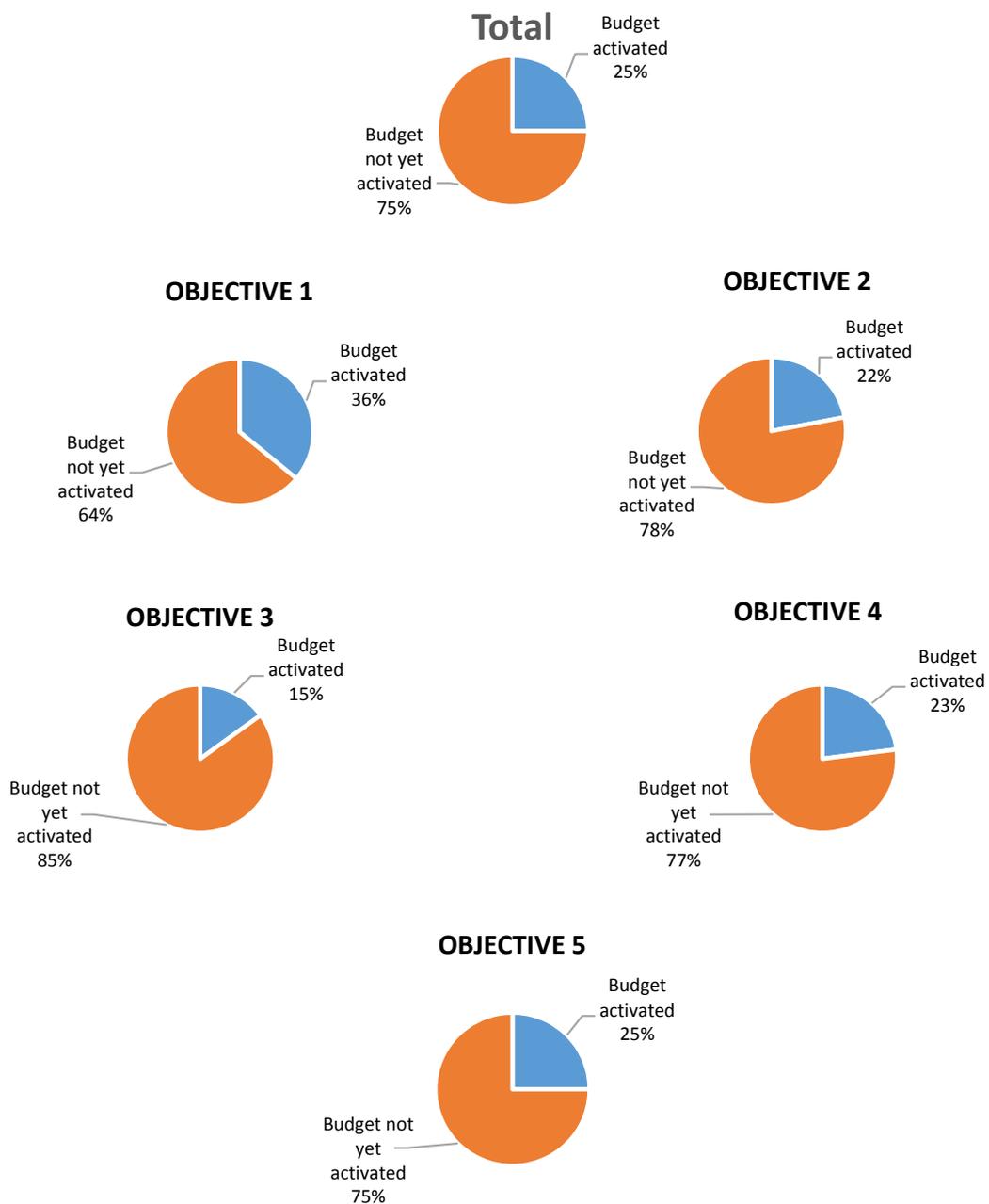
Chart 3 below shows, in terms of number, the implementation level of actions by objectives and regions for the period of January to March 2017.

Chart 3



**Budget implementation level by objectives**

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



1 Budget activated: Amount of the budget of the action (ongoing and implemented) which has been committed and/or spent.

## Highlights of the financial plan implementation

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

### Result-based budget statement by objectives

Table 1 below provides the expenditure level by objectives in a Result Based Budget perspective as at 31 March 2017 (based on planned allocation).

Table 1  
(in thousands of Swiss francs)

Strategic objectives	Budget	Actual	Balance	Level of implementation 03/2017
<b>Objectives of ITU-D</b>				
D-1 Foster international cooperation on telecommunication/ICT development issues	7,848	1,888	5,960	24.1%
D-2 Foster an enabling environment for ICT development and foster the development of	6,652	1,467	5,185	22.1%
D-3 Enhance confidence and security in the use of telecommunications/ICTs, and roll-out of relevant applications and services	3,880	745	3,136	19.2%
D-4 Build human and institutional capacity, provide data and statistics, promote digital inclusion and provide concentrated assistance to countries in special need	8,257	1,644	6,612	19.9%
D-5 Enhance environmental protection, climate-change mitigation and adaptation, and disaster-management efforts	2,538	475	2,063	18.7%
<b>Costs of ITU-D Strategic Goal</b>	<b>29,175</b>	<b>6,219</b>	<b>22,956</b>	<b>21.3%</b>

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

### Financial statement for the Telecommunication Development Sector

Table 2 below shows by section the ITU-D expenditures as at 31 March 2017 and the 2017 year end expenditure projections. As at 31 March 2017, expenditures amounted to CHF 6.2 million or 21.2 % of the ITU-D budget for 2017.

Table 2  
(in thousands of Swiss francs)

		Budget	Expenditures as at 31/03/2017	Balance	Level of implementation	Projection as at 31/12/2017
Section 3	World Telecommunication Development Conference	1,026	39	987	3.8%	1,026
Section 4	Regional Telecommunication Development Conference	317	259	58	81.7%	317
Section 5	Telecommunication Development Advisory Group	125	0	125	0.0%	125
Section 6	Study Group	349	187	162	53.6%	349
Section 7	Activities and programmes	4,363	518	3,845	11.9%	4,363
Section 9	Bureau	22,995	5,216	17,779	22.7%	22,995
<b>TOTAL</b>		<b>29,175</b>	<b>6,219</b>	<b>22,956</b>	<b>21.3%</b>	<b>29,175</b>

\* Reflects the RPMs budget to be held in 2017.

### Financial statement by objectives and outputs

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

**Table 3**  
(in thousands of Swiss francs)

		Budget	Expenditures	Balance	Level of implementation 03/2017	Level of implementation 03/2016
Objective 1	Foster Int. cooperation on Tel./ICT Dev. Issues					
	<b>WTDC</b>	<b>1,026</b>	<b>39</b>	987	3.8%	n/a
	<b>RPM</b>	<b>317</b>	<b>259</b>	58	81.7%	0%
	<b>TDAG</b>	<b>125</b>	0	125	0.0%	67.2%
	<b>STG</b>	<b>349</b>	187	162	53.6%	-1.1%
	<b>Subtotal Objective 1</b>	<b>1,817</b>	<b>485</b>	<b>1,332</b>	<b>26.7%</b>	<b>12.2%</b>
Objective 2	Foster an enabling env. for ICT dev.	<b>1,966</b>	278	1,688	14.1%	11.8%
Objective 3	Enhance confidence and security	<b>670</b>	51	619	7.6%	15.3%
Objective 4	Build human and institutional capacity	<b>1,372</b>	168	1,204	12.2%	9.8%
Objective 5	Enhance env. protection, climate-change	<b>355</b>	21	334	5.9%	45.1%
<b>Activities and prog.</b>	<b>Subtotal Objective 2 to 5</b>	<b>4,363</b>	<b>518</b>	<b>3,845</b>	<b>11.9%</b>	<b>14.5%</b>
<b>Total ITU-D activities</b>	<b>Objective 1 to 5</b>	<b>6,180</b>	<b>1,003</b>	<b>5,177</b>	<b>16.2%</b>	<b>14.2%</b>

### Financial statement for the Telecommunication Development Bureau

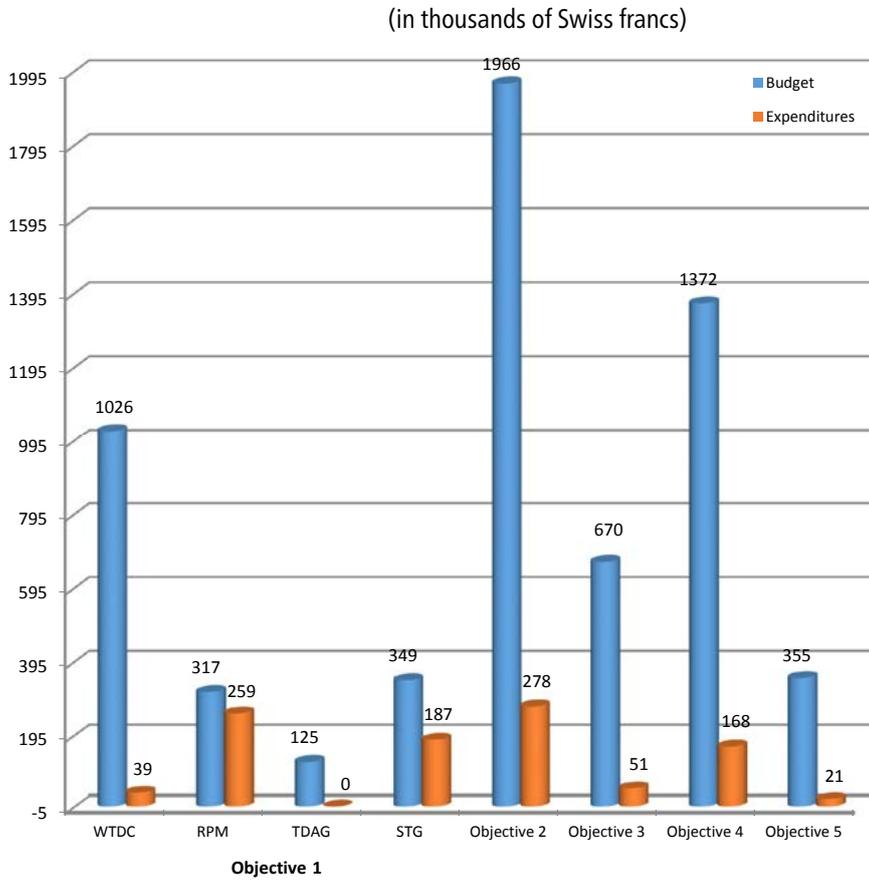
Table 4 below highlights by category of expenditure the expenditures for the Telecommunications Development Bureau as at 31 March 2017. As at 31 March 2017, expenditures amounted to CHF 5.2 million or 22.7% of the Bureau budget.

**Table 4**  
(in thousands of Swiss francs)

	Budget	Expenditures	Balance	Level of implementation 03/2017	Level of implementation 03/2016
<i>Categories</i>					
<b>1 Staff costs</b>	16,681	4,021	12,660	<b>24.1%</b>	23.9%
<b>2 Other-staff costs</b>	4,898	1,033	3,865	<b>21.1%</b>	23.3%
<b>3 Mission expenses</b>	530	68	462	<b>12.8%</b>	32.1%
<b>4 Contractual serv.</b>	110	8	102	<b>7.3%</b>	40.9%
<b>5 Rental &amp; mainten.</b>	95	7	88	<b>7.4%</b>	7.4%
<b>6 Purchase of equipmnt</b>	54	12	42	<b>22.2%</b>	20.4%
<b>7 Acquisition, furnit.</b>	410	20	390	<b>4.9%</b>	13.3%
<b>8 Utilities &amp; services</b>	130	25	105	<b>19.2%</b>	19.2%
<b>9 Auditing, inter-agenc.</b>	87	22	65	<b>25.3%</b>	11.5%
<b>TOTAL</b>	<b>22,995</b>	<b>5,216</b>	<b>17,779</b>	<b>22.7%</b>	23.9%

**Level of implementation by objectives**

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



## From Strategy to Execution

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

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

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

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

### Strategic

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

### Operational

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

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

### Financial

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

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

