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| C:\Users\ponder\AppData\Local\Microsoft\Windows\Temporary Internet Files\Content.Word\BDT-25th_anniversary_2017-Logo_411959-3_transparent.png | **Telecommunication DevelopmentAdvisory Group (TDAG)****22nd Meeting, Geneva, 9-12 May 2017** | C:\Users\murphy\AppData\Local\Microsoft\Windows\Temporary Internet Files\Content.Outlook\PQ94T9LJ\bd_E_25Years_Horizontal-411959 (003).jpg |
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|  | **Document** **TDAG17-22/****4-E** |
|  | **16 March 2017** |
|  | **Original:** **English** |
| **Director, Telecommunication Development Bureau** |
| performance report 2016 |
| **Summary:**The 2016 Performance Report provides the status of implementation of the objectives, outcomes and outputs defined in the ITU-D Operational Plan. It puts emphasis on the results achieved during the implementation of the objectives, outcomes and outputs of the Sector as well as on the outcomes indicators and performance indicators.The full report is available at <https://www.itu.int/en/ITU-D/TIES_Protected/PerfReport2016.pdf>**Action required:**TDAG is invited to note this report and to provide guidance as deemed appropriate.**References:**No. 215EA of the ITU Convention |

**Outline of the Performance Report 2016**

The 2016 Performance Report provides a comparison between outcomes and achievements as well as between expected and achieved results, together with the respective outcome indicators and performance indicators. It also provides the threat and risk assessment for 2016. These are specified for each objective and relevant outputs. The full report is available at <https://www.itu.int/en/ITU-D/TIES_Protected/PerfReport2016.pdf>

The main results achieved by BDT in its objectives during 2016 are outlined below:

**1 Objective 1:** *“Foster international cooperation on telecommunication/ICT development issues”*

* RMP-CIS attracted 104 participants from 9 Member States from the region and 2 Member States from other regions;
* RMP-AFR was attended 147 participants representing 25 Member States and 5 Sector Members of the region, 2 Specialized Agencies of the United Nations and 11 Observer Member States and Sector Members of other regions;
* TDAG16 was attended by 101 participants;
* ITU-D SG1 welcomed close to 220 participants from 65 Member States, while ITU-D SG2 welcomed close to 190 participants from 52 Member States.

1.1 World Telecommunication Development Conference (WTDC)

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| 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.The draft agenda of WTDC-17 was approved by the ITU Council 2016 (in Document C16/56) and obtained the concurrence of a majority of the Member States. The website for WTDC-17 has been developed and launched to support the dissemination of information (including circulars, documents, reports, contributions) to Member States and Sector Members in order to facilitate the promotion of the event.WTDC-17 preparatory process takes duly account of the Results-based Management (RBM) principles in order to ensure linkages between the strategic, financial and operational plans as required by Resolution 72 (Rev. Busan, 2014). |
| *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) |
| *WSIS Action Line* | WSIS Action Lines C1 and C11 |
| *Resolutions:* | PP Decisions 5, 13 PP Resolutions 25, 71, 72, 77, 111, 131, 133, 135, 139, 140, 151, 154, 165, 167, 172 |

1.2 Regional Preparatory meetings (RPMs)

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| The RPMs started in November 2016 with the organization of the RPM for CIS countries in the Kyrgyz Republic; in December 2016 in Rwanda for Africa. The meetings made full use of the regional offices to facilitate the preparatory process at the regional level. The respective websites for RPMs were developed in July 2016 to support the exchange of information (including circulars, documents, reports, contributions) with Member States and Sector Members in order to facilitate the promotion of the events. |
| *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) |
| *WSIS Action Line* | WSIS Action Lines C1 and C11 |
| *Resolutions:* | PP Decisions 5, 13 PP Resolutions 25, 71, 111, 135, 140, 165, 167, 172 |

1.3 Telecommunication Development Advisory Group (TDAG)

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| 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.
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| *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). |
| *WSIS Action Line* | WSIS Action Lines C1 and C11 |
| *Resolutions:* | PP Decisions 5, 13 PP Resolutions 25, 71, 111, 135, 140, 151, 154, 165, 166, 167, 172 |

1.4 Study Groups

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| The ITU-D Study Groups held their second set of Rapporteur Group meetings in April 2016. As a result of the targeted and high quality contributions received for consideration, the eighteen Study Group 1 and 2 Rapporteur Groups progressed well with the drafting of text for their deliverables. The main purpose of these Rapporteur Group meetings was to ensure that good progress is made with the drafting of text for the final deliverables to be presented for approval at the last SG1 and SG2 meetings in from 27 March to 7and April 2017. This 4 January - September 2016 implementation report work included reviewing results from questionnaires and surveys, calls for contributions and assess where additional input is required.To progress the work of two study topics and prepare targeted inputs to the Rapporteur Group meetings, expert meetings were held in Budapest (Hungary) in February 2016 for Question 8/1 (Examination of strategies and methods of migration from analogue to digital terrestrial broadcasting and implementation of new services) and Resolution 9 (Spectrum management for developing countries), together with a Workshop on spectrum management and digital terrestrial television broadcasting. The Q8/1 and Resolution 9 Groups made significant progress on its draft deliverables and were able to gain additional contributions and contents through the holding of the associated workshop.Preparations for a Question 6/1 expert meeting to be held in Chongqing (People’s Republic of China) in conjunction with a workshop on consumer protection in a digital collaborative economy were made. The meetings were held from 9 to 11 November 2016.The ITU-D Study Groups held their third meetings for the 2014-17 study period from 19 to 30 September 2016. The Groups made significant progress on their expected deliverables. SG1 appointed three new Vice-Rapporteurs for Questions 2/1, 5/1 and 8/1 and one new Vice-Chair for Res.9, while SG2 appointed two Co-Rapporteurs for Question 8/2. An emergency telecommunications and disaster relief workshop was held in conjunction with the SG2 meetings on 27 September 2016.For the first time, sponsorship opportunities for activities, such as exhibit, side and social events, around the September 2016 ITU-D Study Group 1 and 2 meetings were made available. Thanks to the sponsors some additional funds for fellowships could be raised.The ITU-D Study Groups held their third meetings for the 2014-17 study period from 19 to 30 September 2016.The expert meeting for Question 6/1 was held in Chongqing, P.R. of China in conjunction with a workshop on consumer protection in a digital collaborative economy. The Q6/1 Group reviewed its draft deliverables with an aim to present a close to final report to the January 2017 Rapporteur Group meeting. They were able to gain additional contributions and content through the holding of the associated workshop. |
| *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) |
| *WSIS Action Line* | WSIS Action Lines C1 and C11 |
| *Resolutions:* | PP Decisions 5, 13PP Resolutions 25, 71, 133, 135, 140, 154, 165, 166, 167, 172 |

**2 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”*

* GSR16 attracted more than 540 participants from 64 countries.
* ICT Regulation Toolkit: 401,411 web page views.
* Online knowledge center: 503,699 web page view.
* Annual GSR websites: 219,047 web page views.
* Trends in Telecommunication Reform 2014 (edition free of charge): 19,300 online downloads.
* Telecommunication Regulation Handbook 134,174 online downloads.
* ITU regulatory and market environment thematic reports: 335,250 downloads.
* ICT-Eye: 398,593 web page views.
* Training on SMS4DC provided to more than 45 participants in two workshops held in Africa and one in Timor-Leste.
* Direct assistance was provided to more than 30 countries in all regions regarding frequency planning; spectrum management master plans; the transition from analogue to digital terrestrial television broadcasting; and other technical issues.

2.1 Policy and regulatory frameworks

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| ITU-D convenes global and regional forums to discuss global trends in regulation for Sector Members and other national and international stakeholders, through organizing the Global Symposium for Regulators (GSR) as well as strategic dialogues on topical policy, legal, regulatory, as well as on economic and financial issues and market developments. GSR is the global annual venue for regulators to share their views and experiences, culminating in the adoption of Best Practice Guidelines. ITU-D provides data, research and analysis and tools (Trends reports, GSR discussion papers, publications, portals, databases) to support its members 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. ITU-D also provides knowledge exchange tools and platforms to enable inclusive dialogue and enhanced cooperation to help countries achieve a more inclusive information society and to raise national and regional awareness about the importance of an enabling environment.ITU-D Improved awareness and built capacity through various trainings, workshops, seminars, forums, and conferences focused on ICT development, broadband infrastructure, applications and services, infrastructure development, spectrum management and related issues, satellite coordination, IPv6 implementation, Internet access, conformity and interoperability, and pricing.ITU-D provided direct assistance to many countries in the fields of Capacity Building in Spectrum Monitoring; harmonized approach to USO with inclusion of Broadband access; Judiciary in ICT Laws interpretation and application; Electronic Licensing and Secondary Legislation; Development of National Broadband Plans; etc. |
| *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) |
| *WSIS Action Line* | WSIS Action Line C6 of the Geneva Plan of Action and §§ 112-119 of the Tunis Agenda for the Information Society |
| *Resolutions:* | PP Decisions 5, 13, PP Resolutions 25, 71, 102, 135, 138, 154, 165 |

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

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| ITU-D continues to implement and update the ITU Interactive Terrestrial Transmission Maps online. The ITU Interactive Transmission Maps (for broadband backbone optical fiber, microwave links and satellite earth stations as well as submarine cables) have been continuously updated in all regions and made available online. The plan for including IXPs on the ITU Interactive Transmission Maps is ongoing. At the time of this reporting, the Map presents information from 340 operator networks located in 157 countries. The research on the transmission links has reached 8,636,402 km of routes, of which 2,123,090 km have been imported to the Map.A 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. The report introduces essential telecommunication/ICT infrastructure and their technologies as well as economic and policy aspects supporting effective adoption of NGNs. 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).In accordance with WTDC Resolution 47, regional forums and training courses on C&I were conducted in collaboration with TSB and BR, focusing on conformity assessment procedures, type approval testing for mobile terminals, and different C&I testing domains for Africa, Americas, Arab States, Asia-Pacific, and CIS.Regional integration is increasing along with ICT infrastructure development through assessment studies in the regions, including for Arab Maghreb Union (UMA), East African Community (EAC), Comisión Tecnica Regional de Telecomunicaciones (COMTELCA), and the Caribbean Telecommunication Union (CTU), to encourage the establishment of harmonized C&I programmes, notably through the development of Mutual Recognition.The Spectrum Management System for Developing Countries (SMS4DC) is now in use in over 40 countries, and training on SMS4DC was provided to a significant number of countries.Guidelines have been prepared to assist countries in the development of their national table of frequency allocations, their national spectrum management assessments, for tendering for their national spectrum monitoring system and developing spectrum fee regimes.Capacity of ITU members was built on a range of telecommunications/ICT network issues.Direct assistance was provided regarding frequency planning; spectrum management master plans; the transition from analogue to digital terrestrial television broadcasting; and other technical issues. |
| *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) |
| *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. |
| *Resolutions:* | PP Decisions 5, 13PP Resolutions 25, 71, 101, 123, 176, 177, 178, 203 |

2.3 Innovation and partnership

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| To contribute to bridging the growing innovation divide, several innovation dialogues noted below have fostered knowledge and built capacity for ICT-centric innovation at national, regional and global levels, e.g.: * An annual innovation track support during ITU Telecom in 2016, where innovation dialogues were in forum sessions on various challenges facing innovation ecosystems.
* An annual innovation track support during WSIS in 2016, where with Innovation dialogues were organized in on ICT-centric innovation ecosystem. The dialogues served as knowledge and networking platforms for experts and non-experts on the challenges and opportunities for strengthening the innovation capacity of membership and addressing the need for an ITU-D innovation framework.

As a result of extensive consultations and dialogues from various regions and global events, an innovation framework was developed identifying key pillars essential for monitoring, diagnosing, developing and impacting ICT centric innovation ecosystems. The ITU-D innovation framework will serve as a core model for a self-assessment toolkit that membership can use as a basis for developing programs, policy recommendations, initiatives and projects to strengthen their ICT centric innovation ecosystems on local, national, regional, and global levels.The framework and methodology for national reviews of ICT-centric innovation ecosystems was developed through a partnership between ITU, United Nations Conference on Trade and Development (UNCTAD) and United Nations Industrial Development Organization (UNIDO).This framework was the subject of consultation and revision with membership at WSIS 2016 in Geneva with over 75 participants in three sessions.The framework was also validated and revised at the ITU-Organization for Economic Co-operation and Development (OECD) Innovation Dialogue at the OECD Ministerial Event on the Digital Economy, on 23 June 2016 in Cancun, Mexico, led by and interacted with 20 high-level global experts on innovation. ICT-centric innovation country review was conducted for Albania, with over 50 participants from the key stakeholders representing 40 organizations participating through a global innovation project developed and funded by the Republic of Korea. Other country reviews are underway using the same multi-stakeholder consultation methodology for Rwanda and Thailand in 2016. These reviews develop grassroots driven policy and project recommendations, and pilot and develop the methodology in partnership with UNCTAD and UNIDO.Innovation tools, processes which allow using ICT innovative driven processes and methods, have been developed for innovation to help scale results, e.g.: * An innovation platform (innovation.itu.int portal), which aims to promote knowledge sharing and communication between ICT-centric innovation ecosystem stakeholders.
* A co-creation tool (cocreate.itu.int), which aims at facilitating co‐creation for membership. This has been used for several idea management generations within BDT, including recently in co-creating themes for WTDC and soliciting contributions from ITU-D Study Groups through a pilot process examining smart society.
* A design thinking methodology (creativity process) has been developed around delivery of innovation dialogues, assessment, and development of digital innovation frameworks.
* In accordance to the WTDC-14 mandate for internal innovation within ITU, especially ITU-D in particular, a series of activities have been undertaken in order to serve better its members and partners of which the presentation and introduction of co-create tool to enhancing ITU-D Study Groups, from December 2015 through February 2016 respectively, where 27 study group members joined the co-create tool activity.

The 6th CRO meeting was conducted in Sharm-el-Sheikh, Egypt, on 11 May 2016 as a pre-event of GSR-16 where 20 participants reaffirmed the need for a selected portfolio of agreed proposals to be shared and piloted with interested regulators. In addition, the Industry Leaders’ Debate was held on 14 May 2016, in parallel with the regulators’ track during the last day of GSR-16. The debate brought together over 30 participants from the private sector and debated the impact of open innovation and new business models on collaborative regulation and on the importance of regulatory key performance indicators. The 7th CRO meeting will be held in Bangkok, Thailand, on 13 November 2016 as part of the pre-event of ITU Telecom and is expected to focus on concrete case studies and project proposals for future elaboration. Partnerships with Academia to promote the development of telecommunications/ICTs, in particular in bringing new technologies and fostering ICT innovation, was and is being fostered, including through the development of studies and platforms for increased engagement with academic members:  |
| *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) |
| *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. |
| *Resolutions:* | PP Decisions 5, 13PP Resolutions 25, 71, 72, 172 |

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

* Three regional drills have been organized in Africa, America and Arab region, with the total participation of 37 countries;
* Assisted countries in establishing cybersecurity related capabilities, through project implementation (4 projects in 2016) and technical assistance (15 countries assisted on CIRTs, National Strategies, COP);
* Two regional workshops were organized for eHealth and eAgriculture strategies. Five countries were assisted in developing e-Agriculture strategies in Asia-Pacific region and two others were assisted for eHealth strategies in Africa;
* mHealth projects were launched in 7 countries;
* Two High-levels events conducted with WHO and UNESCO with more than 20 ICT and Health ministers and 500 people participating;
* Regional event on e-Agriculture organized with FAO with 120 participants from Asia Pacific region;
* Three ICT for Development handbooks/toolkits were published in 2016 for mHealth and e-Agriculture.

3.1 Building confidence and security in the use of ICTs

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| The work on the Global Cybersecurity Index (GCI) has resulted in helping countries identify areas for improvement, motivating action to improve cybersecurity, raising the level of cybersecurity worldwide, helping to identify and promote best practices, and has fostered a global culture of cybersecurity. As a result of its cybersecurity activities, ITU has strengthened the capacity of Member States to incorporate and implement cybersecurity policies and strategies into nation-wide plans and build organizational capacity. We are on the journey to reduce if not remove the cybersecurity divide.Government priority programme (GPP) related to the creation of an enabling environment conducive to an effective development of child online safety and security was designed. In the framework of development of technical skills for Incident Responders, improved capacity and skills of technical staff from 20 government agencies in the area of cyber incidence.BDT organized several events and trainings of which:* ITU workshop for the CIS countries on "Integrated Aspects of Infocommunication Cybersecurity "
* Regional cybersecurity summit and symposium
* Workshop on CIRT services and set-up process for African countries
* Third Regional Cyber Security Drill for Africa region to enhance coordination to fight against cyber incidents
* Regional Cyber Drill ALERT (Applied Learning for Emergency Response Teams) Fourth edition for Arab Region
* Cybersecurity Week from the Center of the World and Fourth Cyberdrill Applied Learning for Emergency Response Teams for the America Region
* Caribbean School Cyber Security Awareness Programme which is designed to assist the Ministries of Education to promote the safe use of ICT, anti-cyber bullying and general cyber security awareness in secondary schools in the Caribbean

BDT provided technical assistance as follows:* Technical assistance to African and Arab countries in the development of their respective COP strategic framework
* Technical assistance to African and Arab countries in the implementation of their respective COP Action plans
* Assistance to selected African and Arab countries on building national cybersecurity strategy
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| *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 |
| *WSIS Action Line* | WSIS Action Line C5 |
| *Resolutions:* | PP Decisions 5, 13PP Resolutions 25, 71, 72, 130, 172, 179, 181 |

3.2 ICT applications and services

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| The capacity of ITU Member States to develop national e-strategies to foster an enabling environment for upscaling ICT applications was built through:For e-Health:* A High-Level joint ITU-World Health Organization (WHO) “Digital Health Policy Dialog” held in Geneva on 23-24 May 2016 which shared experiences and identified strategies among 250 participants, including five ICT and five Health ministers on how policies and cross-sectoral collaboration between the health and ICT sectors could foster innovation to improve the quality, equity and accessibility of health services.
* Technical Assistance provided to some African countries to develop and validate their national e-Health Strategy.
* A “Toolkit and Implementation Guidelines for a Digital Health Platform” was developed to guide decision makers and health planners in designing and implementing a national "digital health platform".

For e-Agriculture:* A joint ITU-FAO e-Agriculture Strategy Guide was published to provide countries with a framework to develop their national e-agriculture strategies. E-agriculture strategies will help to rationalize both financial and human resources, and address ICT opportunities for the agricultural sector in a more holistic and efficient manner.
* The Joint ITU-FAO e-Agriculture Solutions Forum, held in Bangkok on 29 August - 31 September shared e-Agriculture solutions that benefit agriculture stakeholders and established an Experts Group among e-Agriculture solution providers. In addition, the capacity of more than 120 participants from 29 countries was built on developing e-Agriculture strategies in a training held following the Forum on 1-2 September.

For e-Learning:* A joint UNESCO-ITU “Policy Forum on Mobile Learning” held on 11 March 2016 built the capacity of 250 participants including 4 ministers and 2 vice-ministers of ICTs and 2 ministers and 3 vice-ministers of education on how new, more affordable digital devices can help address urgent educational challenges and meet the needs of students, teachers and administrators.
* A joint ITU-UNESCO Policy Note on Mobile Learning was published in 3 languages (English, French and Spanish) which made policy recommendations on the way forward. The Policy Note is available at: http://www.itu.int/en/ITU-D/Initiatives/m-Powering/Pages/ITU\_UNESCO\_MLW\_PolicyForum.aspx

The capacity of countries to leverage ICT/mobile applications to improve the delivery of value added services was improved through the public-private deployment of innovative ICT applications that provide effective solutions for a variety of challenges for sustainable development:* Three different mDiabetes programme were launched in Senegal, India and Egypt in collaboration between the Ministry of Health and the Ministry of ICT to help diabetic patients to safely manage their illness and reduce the number of emergency hospitalizations. Currently 100,000 users are subscribed in India, and 52,000 and 50,000 users are subscribed respectively in Senegal and Egypt, all of whom receive regular messages about diabetes prevention and control.
* Three mSmokingCessation programmes were launched in India, Tunisia and the Philippines to use mobile applications to assist smokers to quit smoking. Close to 2,000,000 users are subscribed in India, with the launch of the pilot phase already begun for Tunisia and Philippines.
* Guidelines on the use of mobile applications for smoking cessation, diabetes prevention and control and cervical cancer were developed in collaboration with WHO.
* Built the human and institutional capacity of 7 Afghan participants on mobile application development to address the existing gaps and lack of skilled professionals in mobile application development in Islamabad, Pakistan, from 16-26 February 2016.

Awareness was raised among ITU members and advocacy conducted on ICT for development best practices. Specific regional events and trainings were organized of which:* Workshop on The Most Popular Mobile Applications: Implementation and Development in the CIS countries
* Training of Mobile Application development and mobile mediated solutions workshops for instructors
* ITU-TRAI Regional Seminar on Consumer Protection
* Digital Transformation Forum
* ITU Experts Group Meeting on Mobile Identity
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| *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 |
| *WSIS Action Line* | WSIS Action Line C7 of the Geneva Plan of Action |
| *Resolutions:* | PP Decisions 5, 13PP Resolutions 25, 71, 72, 139, 140, 183, 202 |

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

* 45 training courses were conducted in all regions in 2016
* 1025 participants have been trained in total

Global ICT Human Capacity Building Symposium was successfully conducted attracting 440 participants from 46 countries

4.1 Capacity building

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| Thirty-two Centres of excellence were selected and each signed a cooperation agreement with ITU. Steering committees with representatives of the selected institutions were established for each region, to manage the implementation of the CoE strategy. The Centres of Excellence strengthened capacities in Member States by conducting training programmes in policy and regulation, broadband access, cyber security, conformance and interoperability, spectrum management, digital broadcasting, ICT applications and services, emergency telecommunications, internet governance, e-waste and climate change mitigation and adaptation. ITU continued to strengthen capacities in Member States, by developing standardized training material, which were made available through the Centres of Excellence, as well as other cooperating partners from academia. The development of training materials in the area of quality of service was conducted in 2016. Training material on the topic of ICT and climate change is currently being developed A training programme on international internet governance is planned for 2016-17. Activities under this output 4.1 contributed to increasing cooperation between ITU and relevant partners in the field of capacity building. In April 2016, a cooperation agreement was signed with the African Advanced Level Telecommunications Institute (AFRALTI) for the delivery of another SMTP. In May 2016, ITU improved the quality of service and upgraded the ITU academy platform, which has enhanced user experience. The upgrade resulted in new features and functionalities being added to the platform, which include, among other functions, secure online course payments through the use of debit and credit cards; enhanced features for generation of invoices for payments through wire transfer; and automatic generation of certificates at the end of a training course.ITU enhanced the dialogue between key stakeholders by organizing the global ICT Capacity Building Symposium (CBS) in Kenya from 6-8 September 2016. The Symposium was preceded by two pre-events, on “Capacity building in Internet Governance” and “Regulators as Enablers and Consumers of Capacity Building” and attracted more than 400 participants. The Symposium focused on new skills requirements in a digital era, and brought together high-level officials, CEOs of private sector companies and training providers such as Universities and Centres of Excellence. The outcomes of the Symposium will provide strategic guidance to the national and international community, including ITU, on capacity building in the field of ICT, and on strengthening collaboration among the global ICT capacity building community. This will directly contribute to the achievement of the SDGs across all development sectors. For universities and other training providers, the Symposium has provided a forum to gauge the needs of the market in terms of training and capacity building in the field of ICT, and helped them shape their future training and delivery programmes. Specific regional events and trainings were organized of which:* Train for Trainers for Connected Schools in Kyrgyzstan
* Workshop for the CIS countries dedicated to the International Girls in ICT Day
* Regional Workshop ITU Accessible Americas III: Information and Communication for ALL
* On-line indigenous training course
* Annual regional capacity building workshop on Child Online Protection for sub-Saharan African countries
* ITU/ITSO Arab Regional Training on VSAT and Satellite Systems: Broadband Services over Satellite
* ICTP Workshop on New Frontiers in Internet of Things
* Telecom Policy and Regulation Training for Government Officials
* ITU Training Programme on Certified IPv6 Network Engineering - Level 1 (CNE6 Level 1) for Arab LDCs
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| *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), 18 |
| *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. |
| *Resolutions:* | PP Decisions 5, 13PP Resolutions 25, 71, 72, 137, 139, 140, 172, 176, 188, 189, 197, 199, 202 |

4.2 Telecommunication/ICT statistics

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| BDT hosts the world’s most comprehensive collection of ICT data and statistics in various thematic areas, including ICT infrastructure, access and usage, policy and regulation, and cost and tariff policy issues. The work of ITU under this output has resulted in the enhanced availability and dissemination of internationally comparable, timely ICT statistical databases.A number of statistical products were released to enhance the information and knowledge of policy-makers and other stakeholders on current telecommunication/ICT trends and developments based on high-quality, internationally comparable statistics: the ICT Facts and Figures 2016; the World Telecommunication/ICT Indicators database 2016; and the Yearbook of Statistics 2016.ITU’s flagship publication, Measuring the Information Society Report has enhanced the knowledge of policy makers, investors and business people about current ICT market trends allowing them to take evidence-based decisions and by providing an accurate analysis of telecommunication/ICT development worldwide. The 2016 edition of the Report was released in November 2016 (during WTIS 2016). By organizing the annual World Telecommunication/ICT Indicators Symposium (WTIS), which is the main global forum to discuss ICT statistics, ITU has enhanced the dialogue between ICT data producers and users and the awareness and capacity of countries to produce telecommunication/ICT statistics. The 2016 WTIS was be held from 21-23 November 2016 in Botswana.ITU’s activities under this output contributed towards increased cooperation, and improved methodologies and international standards on ICT statistics through the work of the Expert Group on Telecommunication/ICT Indicators (EGTI) and the Expert Group on ICT Household Indicators (EGH). The two Expert Groups met in October 2016, in Geneva. The meetings were attended by around 120 participants, from more than 50 countries, as well as regional and international organizations, private sector, academia and civil society. The meetings agreed on a number of decisions concerning the future work on ICT statistics, which were presented to, and adopted at, the 12th and 13th World Telecommunication/ICT Indicators Symposium.Activities under this output also contributed towards the monitoring of international development goals by providing input to the annual Millennium Development Goals (MDGs) indicators report and the MDG gap report concerning ICT developments, as well as the Partnership on Measuring ICT for Development proposal for ICT indicators for the SDG indicators framework. As a result of these activities, the latest version of the SDG indicators framework adopted by the UN Statistical Commission in March 2016 includes 7 ICT indicators, covering 6 targets under Goals 4, 5, 9, and 17.Increased capacity and skills of producers of ICT statistics to carry out data collections, produce and analyze international comparable ICT indicators, was achieved through a number of capacity building activities: A multi-country training workshop for national focal points on ICT Indicators was held from 15-18 March 2016 in Nay Pyi Taw, Myanmar, attended by 35 delegates from Indonesia, Lao PDR, Myanmar, Timor Leste and Vietnam. Country assistance/training on developing a national ICT indicators and statistical framework was provided to Albania, Angola, Comoros, Gabon, Myanmar and Pakistan. |
| *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 |
| *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 |
| *Resolutions:* |  |

4.3 Digital inclusion of people with specific needs

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| 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:* 161 participants were trained on the Model ICT Accessibility Policy Report at the Rapporteurs Group meeting in 2016.
* Recognizing the importance of public procurement in ensuring that accessible ICTs are widely available to persons with disabilities, BDT developed an extensive set of online training materials on “Public procurement of accessible ICT products and services”, which were delivered in an online training course through the ITU Academy and also during the Accessible Americas III: Information and Communication for ALL carried out in Mexico City, Mexico.
* The Model ICT Accessibility Policy Report is now available in all 6 official ITU languages to facilitate its use by countries around the globe. It was published in Arabic, French, and Spanish and accessible English e-book versions in 2015 and in Chinese and Russian in 2016 and shared with members and disabled persons’ organizations around the world including the World Federation of the Deaf and the Pacific Disability Forum and is used both to raise awareness on the types of ICT accessibility policies that ITU Members can adopt and to build their capacity to adopt and implement such policies.
* Guidance was provided in 2016 to the Organismo Supervisor de Inversión Privada en Telecomunicaciones (OSIPTEL), to promote a web accessibility policy in Peru and to Egypt in 2016 to develop a national ICT accessibility policy.

International Girls in ICT celebrations in Bangkok (28 Apr), Manila (26 Apr) and Yogjakarta (28 Apr) were successful in raising awareness as well as to promote technology-related courses and studies to girls and young women.Since 2011, International Girls in ICT Day has been celebrated in 160 countries around the world with more than 7,200 events and participation of over 240,000 girls and young women. In 2016, there were Girls in ICT celebrations in 138 countries, with 66,000 girls participating in 1900 events. Many organizers provided hands-on workshops to teach coding, mobile app development and other digital skills. Tanzania used its Universal Access Fund to support mobile app development, pitching contests and 240,000 girls empowered (2011-2016); 66,000+ girls in 1,900 events in 138 countries in 2016; 160 countries since 2011; 493,371 Girls in ICT Portal page views in 2016; 117,586 sessions of which 78.5% (92,296) were from new visitors & 39% (45,968) were on mobile devices; #GirlsinICT hashtag reached 54,3M Twitter accounts in 2016 vs 25.8M in 2015. Average reach of Girls in ICT Facebook page: 864/post in 2016 with a total of 3,539 likes (1,554 new likes in 2016). Model ICT Accessibility Policy Report (MIAPR) available in 6 ITU official languages & accessible e-book format. Policy training developed & delivered and awareness raised among some 700 participants and an audience of almost 4,000 through web streaming, in 10 meetings: ITU-D Question 7/1 Rapporteur's and September Study Group meetings; "Inclusive Education and ICTs for All" UN Geneva, Committee on Rights of PwD Geneva; WSIS public procurement of accessible ICTs session; M-Enabling Summit; APEC Model ICT Accessibility Policy report shared with some 700 participants and almost 4'000 audience though web streaming in 10 meetings Training on web accessibility and audio visual media accessibility developed and delivered at Rapporteur's Group meeting to 66 Members and within Accessible Americas III to 188 participants and to over 4'000 audience streaming. Web Accessibility policy advice provided to Peru. - 9,688 page views of ITU-D/Digital Inclusion/persons with disabilities page in 2016."Coding bootcamps, a Strategy for Youth Employment" report released at WSIS and provided to the UN Global Initiative on Decent Jobs for Youth. Training materials developed & delivered to nearly 50 participants from 20+ State Universities and Colleges in the Philippines to support them to launch their own bootcamp + promotional film developed to raise awareness. 3,244 views of the Youth Database in 2016 19,423 page views of ITU/D Digital Inclusion/Youth and Children web page.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 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 PwD. In 2016: 262 posts published 9,680 views of the Newslog 74,649 views of ITU Digital Inclusion website.Internet Access Centers were created in Bishkek, Kyrgyz Republic, Chisinau, Republic of Moldova, Minsk, Republic of Belarus and in Yakutsk, Republic of Sakha (Russian Federation) and provided several Train for Trainers with PwD, presentation of the projects for Officials from countries.Direct assistance has been provided to African countries in the organization of Girls in ICT Day celebrations in addition to the organization of an African regional competition and conference. |
| *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) |
| *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 |
| *Resolutions:* | PP Decisions 5, 13PP Resolutions 25, 30, 32, 33, 34, 36, 37, 64, 70, 71, 131, 139, 140, 175, 184, 198, 202 |

4.4 Concentrated assistance to LDCs, SIDS and LLDCs

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| ITU has increased the awareness of the importance of ICTs for sustainable development, provided concentrated assistance as well as enhanced capacity to LDCs, LLDCs and SIDS, in all ICT related activities, initiatives, programmes and projects. These activities include market regulatory reforms, emergency telecommunications and disaster response, gender equality, ICT infrastructure and spectrum management, and climate change adaptation. This has resulted in increased awareness and better capacity to deal with topics of mentioned above.Since WTDC-14, ITU has provided emergency disaster response, strengthened capacity, and improved communications for disaster relief in a total of 15 countries (including developing countries, LDCs, SIDS, and LLDC). It supported countries that were affected by disasters, to re-establish their communication networks in its aftermath, by delivering direct assistance through the provision of equipment and infrastructure damage assessments, and in reconstructing and rehabilitating telecommunication infrastructure. During these deployments, more than 150 users were trained in the use of satellite telecommunication equipment, during 10 capacity building workshops. ITU is also increasing the capacity of LDCs to address disasters by developing and establishing early warning systems. ITU increased the awareness of the importance of ICTs for development and by integrating ICTs within the larger development debate. ITU contributed references to ICTs in the toolkit developed to mainstream the implementation of the Istanbul Programme of Action for the Least Developed Countries. It has also provided inputs for the full implementation of the establishment of a Technology Bank for the LDCs (by January 2017).ITU increased the capacity of countries in special need, to launch a number of new and innovative projects, by providing seed money for the development of infrastructure, including in rural areas, and to build human resources development/management. |
| *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) |
| *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 |
| *Resolutions:* | PP Decisions 5, 13PP Resolutions 25, 30, 32, 33, 34, 36, 70, 71, 123, 124, 125, 126, 127, 135, 159, 160, 161, 172, 193, 202 |

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

* Five (5) countries received emergency telecommunication assistance in response to disasters;
* Nine (9) countries received capacity building in the area of emergency telecommunications;

The 2nd Global Forum on Emergency Telecommunications (GET-2016): SAVING LIVES was successfully conducted, attracting over 500 participants from 70 countries.

5.1 ICTs and climate-change adaptation and mitigation

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| ITU contributed to the adaptation and mitigation of climate change by setting up clean power generation systems through the “Development of Satellite Communications Capacity and Emergency Communications Solutions for the Pacific Island” Project. This project helped to reduce GHG emissions by setting up solar power based systems for powering some 20 computer centers, using clean power generation systems.ITU increased the knowledge of Member States on the use of telecommunications/ICTs for climate change adaptation and the importance of green ICT strategies through workshops, which were carried out in those 15 countries that received ICT equipment and training in the aftermath of disasters. ITU Regional Forum on Use of ICTs for Transition to Smart and Sustainable Development for Arab states: The event was successfully organized in terms of number of participants attended the Forum (around 120), the high quality of presentations presented during the Forum (around 30), the discussion and skilled of ITU experts – a detailed report of the Forum showing the main outcomes of the event with recommendations will be posted on the Froum’s website.A regional workshop on technology to mitigate earthquakes and tsunamis effects and EWBS prototype demonstration on tsunamis emergency alert was organized.ITU contributed to the development of an environmentally friendly early-warning system by setting up solar-powered sirens and control centres in eastern Uganda. This has helped the country to deploy a sustainable solution to climate change and increased risks of flooding. |
| *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 |
| *WSIS Action Line* | Action Line C7 (e-environment) of the Geneva Action Plan is closely linked to Output D.5.1. |
| *Resolutions:* | PP Decisions: 5, 13, PP Resolutions: 25, 71, 172, 182 |

5.2 Emergency Telecommunications

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| ITU has facilitated emergency disaster response, strengthened capacity, and improved communications for disaster relief. It helped 15 Member States that were affected by disasters, to re-establish communication networks in the aftermath of a disaster, by delivering direct assistance through the provision of equipment and infrastructure damage assessments and in reconstructing and rehabilitating telecommunication infrastructure. During these deployments, more than 350 users were trained in the use of satellite telecommunication equipment, during 15 capacity building workshops.By organizing the 2nd Global Forum on Emergency Telecommunications (GET-2016): SAVING LIVES", which took place in Kuwait City, Kuwait, from 26-28 January 2016, ITU has increased the awareness and capacity of countries to take advantage of ICTs for emergency telecommunication and enhanced the dialogue between disaster-management experts, including governments, the private sector, international organizations and non-governmental organizations, including humanitarian organizations. The Forum was attended by more than 500 participants from ITU Members States, industry, UN agencies, NGOs, academia and humanitarian organizations. The event highlighted the important role of telecommunication/ICTs in the implementation of the Sendai Framework, and made concrete recommendations on how to use ICTs to support countries to attain the agreed Sustainable Development Goals (SDGs).ITU also organized activities to enhance capacities on Emergency communications, Climate Change, Smart Sustainable Cities, e-waste and related to National Computer Incident Response Teams (CIRTs). |
| *Contributing to SDG Targets:* | SDGs: 3 (target 3.9), 5 (target 5b), 11 (targets 11b), 13 (targets 13.1, 13.2 and 13.3), 14, 15 |
| *WSIS Action Line* | Action Line C7 |
| *Resolutions:* | PP Decisions: 5, 13, PP Resolutions: 25, 37, 71, 98, 136, 140, 182, 202 |

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